

TITLE PAGE

**APPLICATION OF ACCOUNTING RATIOS IN MEASURING SOLVENCY OF
SMALL SCALE INDUSTRIES IN THE MANUFACTURING SECTOR OF CROSS
RIVER STATE, NIGERIA**

BY

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APPROVAL PAGE

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DEDICATION

This research work is dedicated to my parents - Late (Chief) and Mrs. Mathew Mfam Obem for the parental role they played in my educational pursuit; and my Boss - Hon. John Enoch Owan-Enoh, Member representing Obubra/Etung Federal Constituency and Chairman House Committee on Finance, House of Representatives, Abuja in recognition of his support and encouragement for my post-graduate studies; being his Legislative Aide.

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Mfam, Kyrian Ibi

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Abstract

This research study is aimed at determining the Accounting ratios applied in measuring solvency of Small Scale Industries in the Manufacturing Sector of Cross River State. This research purpose was motivated by the preponderance of Small Industries failure in Cross River State due to poor business financial conditions. The design adopted is descriptive survey. The study was guided by seven research questions and seven hypotheses. The instruments used were questionnaire and an interview schedule. Population for the study comprised 667 respondents made up of 345, 163 and 159 Accounting staff working in Palm Oil, Wood; and Bread Baking Factories, respectively. The entire population was studied. Data collected were analyzed using mean and standard deviation for research questions and ANOVA for hypotheses. The major findings are as follows: (1) Processes relating to accounting ratios applied by Small Scale Industries are: computing the value of total current assets and current liabilities, conducting analysis of debtors to ascertain doubtful balances, ascertaining equity capital from total capital, determining gross and net profits, computing cost of goods sold; and determining the value of average inventory for the year end. (2) Accounting ratios and processes not applied are: current ratio, quick ratio, interest coverage ratio, capital employed to net worth ratio, return on capital employed ratio, operating expenses ratio, net assets turnover ratio, current assets turnover ratio, comparing ratios of current year to previous year's ratios obtained by the business organization, comparing ratios of current year to previous year's ratios with that of similar business(es) in the same industry. These findings have far reaching implications even in education. Since accounting staff do not apply ratios, it implies that management should engage the staff on training and retraining to upgrade their capacity in handling accounting ratios. Based on the findings, the following recommendations were made: (a) only qualified and competent accounting staff should be employed in small scale industries, accounting ratios should be applied by management of Small Scale Industries to improve the financial situation and operational efficiency of Small Scale Industries; and Agencies and Ministries in-charge of small scale industries should be committed to the success of the system and at the same time be concerned on the mental development of staff through training and retraining programmes.

CHAPTER I INTRODUCTION

Background of the Study

Accounting is a service activity. It is a statement of economic dealings captured in digits and letters according to predetermined book-keeping standard. Garbut in Okechukwu, Eneje and Okafor (2004) defined accounting as a discipline concerned with the recording, analyzing and forecasting of income and wealth of business and other entities. Ekwere (2005) opined that accounting has as its primary objective, to ascertain economic effects and communication of the economic result to the external decision makers. Accounting provides a platform for the analysis and interpretation of financial information in a manner that would be useful and meaningful to users of the said information. This is normally achieved using ratios and other accounting tools (Igben, 2004).

Ratios form the bases of financial performance measurement. Aborode (2004) explained that accounting ratio is a proportion or fraction or percentage expressing the relationship between one item in a set of financial statements and another item in the same financial statements. Agara (2005) noted that ratios are indices derived from expressing the relationship between financial data. In financial statement analysis, a ratio is used as a bench mark for evaluating the financial position and performance of a firm. To this end, Longe and Kazeem (2006) asserted that accounting ratios are used in the interpretation of financial statement(s) and they provide means by which various items in the final accounts are compared to other items. In accounting, ratios are used to measure performance, efficiency and effectiveness (Aborode, 2004).

Institute of Chartered Accountants of Nigeria (ICAN) (2006) asserted that, interpretation of accounts involves giving meaning to the various ratios with a view to ascertain the financial strengths and weaknesses of the firm. Interpretation is for the purpose of assessing the financial position and commercial soundness of the business organization to which those variables relate. Aborode (2004) concluded that accounting ratios are the most powerful of all tools used in the analysis and interpretation of financial statements with the view to determine solvency.

Wood and Sangster (2002a) contended that, solvency is the state of being able to pay debts without having to sell assets. Ekwere (2005) opined that a solvent business is that which has the ability to pay its own debts when due. Accountants go a long way to ascertain a business's short term and long-term solvency. In the short-run (short-term solvency) accountants attempt to determine a business's ability to pay debts when due within a relatively short period, say an accounting year (Ikpe, 2006). This is achieved through the application of liquidity ratios. Liquidity ratios are ratios that try to assess the liquidity position of a business to determine ability to pay current debts when due (Adams, 2002). Some ratios in this category are: current ratio, quick (acid- test) ratio, and cash ratio.

Current ratio compares current assets to current liabilities and is intended to indicate whether there are sufficient short-term assets to meet the short-term liabilities (Gerstenberg, 2002). Current ratio shows to what extent creditors can be paid from short-term assets, which could be converted to cash within a year.

Further, quick ratio (acid test or liquidity ratio) expresses the ability of a business to pay its short-term financial obligations now – that is, on demand (Essien, 2004). Dewing (2003) contended that quick ratio shows the extent to which creditors can be paid from liquid or near liquid assets. On the other hand, cash ratio compares cash and bank balances to current liabilities and is intended to indicate whether cash and bank balances can be used to offset

current liabilities (Agara, 2005). It shows the extent to which short-term creditors can be paid from available cash/bank balances.

Commenting on the relevance of liquidity ratios, Asaolu (2005) stressed that accounting is used, not just to calculate profitability, but also to provide information that indicates whether or not the business will be able to pay its creditors, expenses, loans falling due, etc. at the correct time. Asaolu further noted that, failure to ensure that these payments are covered effectively could mean that the business will have to be closed down. In considering the liquidity of a business, both its own ability to pay its debt when due and the ability of its debtors to pay the amount they owe to the business are of great importance (Anthony, 2002). Besides these accounting ratios that focus on short term solvency of a business, there are other ratios used by accountants to measure the gearing power (stability or leverage) or to predict the stability of a business. As the name implies, gearing or stability ratios are usually employed to predict the stability of business overtime. In accounting, it is often said that the extent to which a business is financed by loan capital is gearing. Gearing ratios show the proportion of debt and equity in financing a business's assets (Martin, Petty, Keown and Scott, 2005). Some ratios under gearing include: debt ratio, debt/equity ratio, interest coverage ratio, capital employed to net worth ratio, income gearing ratio, among others. Lewellen (2003) opined that debt ratio compares liabilities to assets and is concerned with whether the company has sufficient assets to meet all its liabilities when due. That is, it compares debt capital to capital employed. Debt/equity ratio is different from debt ratio in that, it is a measure of the solvency of a business and indicates the extent of cover for external liabilities (Igben, 2004). Weston (2005) added that debt/equity ratio shows what proportion of the owners contribution is covered by debt funds i.e. the relationship describes the lenders proportion of each naira of the owner's contribution. Omorokpe (2006) summarized that when debt ratio and debt/equity ratio are high, they indicate that the company is having a stability problem.

Interest coverage ratio is also a measure of a company's stability and indicates how many times operating profit will be able to cover interest payments (Archer and D'Ambrosio, 2004). Wood and Sangster (2002a) emphasized that interest cover ratio shows whether enough profits are being earned to meet interest payments when due. Furthermore, Asaolu (2005) upheld that capital employed to net worth ratio is another way of expressing the relationship between debts and owner's funds. Asaolu stressed that the ratio shows how much funds are being contributed together by lenders and owners for each naira of owner's contribution. The ratio compares capital employed to net worth (or net assets to net worth). Gearing (stability) ratios are longer term in nature, being concerned more with the strategic rather than with the operational level of corporate decision-making (Hertz, 2002).

Another class of ratio outside liquidity and gearing ratios is profitability ratios which show how a business venture creates additional wealth using available resources. Some of these ratios are: return on capital employed, gross profit margin, net profit margin, operating expenses ratio, and return on equity ratio, etc.

Return on capital employed shows the overall profitability of a business. Meltzer (2004) reported that, it shows the efficiency of management in utilization of the resources placed at its disposal. Similarly, return on equity ratio, as explained by Agara (2005) is one of the most important ratios in financial analysis and it indicates how well the firm has used the resources of owners. It compares profit after tax to the net worth of the business. Again, Olatunji (2002) contended that gross profit ratio expresses gross profit as a percentage of sales. That is, sales less cost of sales divided by sales. The gross profit margin or ratio reflects the efficiency with which management of a business produces each unit of product and the

efficiency in utilizing raw materials and other input for production (Gitman, Forrester, and Forrester 2005).

Like the gross profit margin, the net profit margin indicates the ability to manage production cost, selling cost and the administrative cost in order to make a profit (Essien, 2004).

Furthermore, the operational efficiency of management of a firm can be determined with the help of operating expenses ratio (Omorokpe, 2006). This ratio compares operating expenses to sales.

In addition to the determination of liquidity, stability and profitability of a business, accountants also determine how the daily activities of business are conducted. By so doing, they compute activity ratios. Activity (efficiency) ratios measure the firm's efficiency in utilizing its assets to generate cash flow, i.e. how efficient the firm converts assets to cash (Merrett and Sykes, 2003). There are a good number of ratios in this category including stock turnover ratio, debtors turnover, creditors turnover, debtor days, creditor days, debtors collection period, creditors payment period, etc.

Olatunji (2002) explained that stock (inventory) turnover ratio is used to measure the number of times stocks are replaced during a given period. Weaver (2003) asserted that a high inventory turnover is indicative of good inventory management. Similarly, Igben (2004) recorded that debtors turnover ratio expresses the number of times trade debtors are turned over during the reporting period. Further, Aborode (2006) stated that debtors collection period (DCP) being another form of efficiency (activity) ratio measures the average number of days for which trade debts remain uncollected. Aborode added that for the creditor's payment period (CPP) ratio, average trade creditors are compared to credit purchases. The creditor's payment period ratio measures the average number of days for which trade creditors remain unpaid.

Brigham (2005) pointed that asset turnover is a measure of how effectively the assets are being used to generate sales. Wood and Sangster (2002b) upheld that where a company's assets turnover is significantly lower than that of its competitors, it suggest there may be over investment in assets which could, in turn, make the company vulnerable to takeover by a company interested in selling off any surplus assets while otherwise retaining the business in its current form.

Capitalization of small scale industries is often small consisting mostly of equity capital (Wood and Sangster, 2002a). The injection of borrowed capital in small scale business increases the challenge of profit maximization in order to cover interest expenses and other items that would usually have claim on profit. To this end, not all accounting ratios can be applied in measuring solvency and operational efficiency of small scale industries. However, ratios that could be used for the sake of measuring the liquidity and efficiency of small scale industries include but not limited to: current ratio, acid test ratio, cash ratio, debt ratio, debt-equity ratio, interest coverage ratio, return on capital employed ratio, gross profit and net profit ratios, expenses ratios, stock turnover ratio, debtors turnover ratio, creditors turnover ratio, debtors collection period, creditors payment period, etc. The ratios discussed in the preceding paragraphs can be used to analyze the performance of small scale industries; with a view to determining their liquidity status.

The National Council of Industry (2001) defined small scale industries in line with scale of operation as follows: small scale industry is an industry with capital investment of over ₦1.5m but not more than ₦50m, excluding land but including working capital with work force that ranges from 11 to 100 employees.

Small scale industries classify their financial statements as confidential and therefore very difficult to be accessed by anybody external to the organization. These books of account are

also restricted from members of staff who are not in the account department and who have nothing official to do with the financial statements. This is because, unlike the big companies which the Companies and Allied Matters Act (CAMA) of 1990 requires that they publish their financial statements for public consumption at the end of every accounting period, small scale businesses do not have a legislation that compels them to do so. This makes the accessibility of their financial statements difficult.

Financial statements of small scale industries are normally prepared by their accounting staff employed in accounts section of the organization. These staff are clerks with no in-depth knowledge of accounting concepts and conventions. They are usually employed due to management inability to pay for the services of trained accountants. This situation can best be described as: when the desirable is not affordable, the affordable becomes desirable.

Obi (2002) noted that small business act as a motivating factor for people to get into bigger businesses. In spite of the fact that small scale industries are the engine for economic growth as reported by Adenekan (2008), Chau (2000) acknowledged that small scale industries face liquidity crunch. This is the situation evident among Palm oil, Wood and bread factories in Cross River State from 1998 to 2008. It is reported that within this period under review, 15 Palm oil factories, 8 Wood factories and 35 Bread factories folded up due to insufficient financial resources to meet daily operational demands (Ministry of Trade and Investment, 2008). Some of these operational challenges include but not limited to high cost of raw materials, high cost of transportation, high interest expenses, high cost of equipment and facilities, double taxation, etc.

Szczepaniec (2005) contended that liquidity problem in small scale industry may slow off economic exchange; increase business expenses; hamper investment process and current business operation and may result in bankruptcy and job losses. Szczepaniec further maintained that, one third of small scale industries go through temporary liquidity problems. This may be as a result of the problems peculiar to the manufacturing industries in developing economies such as harsh investment environment.

Anyaele (2003) contended that an industry is a collection of firms with different management and operations and different lines of production while manufacturing industries are those industries involved in the transformation of raw materials into finished goods (both consumer and producer goods). Ande (2005) pointed that a manufacturing industry operates at the secondary production level adding that, they are industries that can convert raw materials to produce finished goods. The processes of manufacturing are complex and require good record keeping practice to account for every stage of production.

Without good accounting records, information to be used in measuring the solvency of small scale businesses cannot be obtained and where this happens operators will run their small scale businesses without having to know whether or not they are exposed to the risk of insolvency or illiquidity. Ndiyo (2005) explained that measurement is the assignment of numeral to objects or events according to rules. The rules defining the assignment of an appropriate value determine the level of measurement. In accounting therefore, data collected are normally organized according to the process and outcome of a particular economic activity such as trading or investment.

To provide accounting data that enhances the measurement of the solvency of a business, management prepares financial statements from source documents covering their business activities in line with accounting concepts and conventions. Some of the financial statements/accounts that could be kept to explain the financial activities of small scale businesses in the manufacturing industry include i manufacturing, trading, profit and loss account, balance sheet, cash flow statement, cash book and other subsidiary books.

Longe and Kazeem (2006) asserted that, manufacturing accounts are prepared to determine the cost of goods manufactured during the financial year and to determine the amount of any profit on the manufacturing process. Manufacturing account is prepared for organizations that are into manufacturing, and the basic aim of the account is to ascertain the cost of production and the profit made from the sales of the manufactured goods. On the other hand, balance sheet also provides a good measure of information applied in measuring solvency. Balance sheet is a statement drawn up at the end of each financial period setting forth the various assets, liabilities and capital of the organization in a well arranged form (Olatunji, 2002). Again the measure of cash inflow and out flow in a business is determined by a cash flow statement. Igben (2004) maintained that a statement of cash flows is one setting out, for a business enterprise, the cash receipts and their sources, on the one hand, and cash payments and for what purposes they were made, on the other hand, during the reporting period. In the same vein, Aborode (2006) opined that the value added statement shows the allocation of that wealth among employees, government, providers of finance, and that retained for future creation of more wealth.

The importance of these accounting records can best be appreciated on the merit of their respective functions. Adache (2006) opined that record keeping is a good accounting practice that small scale business operators should embrace. It has the merit of providing vital information that can be employed to track the performance of a business at any point in time by way of ratio analysis. With the application of accounting ratios, a small scale business that is about to run into a liquidity problem, that need re-capitalization or that is at the verge of becoming insolvent, can be dictated and given a remedial accounting action. Proper application of accounting ratios enhances the survival, growth and sustenance of small scale industries (Anaka, 2000).

Statement of the Problem

Insolvency as a business risk causes closure of commercial and industrial ventures; whether big or small business, new or old ones alike (Wood and Sangster, 2002b). It is shown that in Cross River State, between 1998 and 2008, 15 Palm oil factories, 8 Wood factories and 35 Bread factories folded up due to insufficient financial resources to meet daily operational demands (Ministry of Trade and Investment, 2008). Where this is not checked, there is no guarantee that in the nearest future, more of these small scale industries would not close down.

Lack of analysis and interpretation of financial statements causes preponderance of business failure (Ohanu, 2004). This is because, where management of a business fails to analyze and interpret financial data, insolvency and operational inefficiency of the business entity may not be detected; where they exist and the business stands the risk of folding-up.

Not applying accounting ratios in small scale industries could result in several consequences such as business failure and a slow-down or total shut-down in the productive capacity of Palm oil factories, Wood factories and Bread factories in Cross River State. This could cause scarcity of these products and increase the rate of dependence on other States that produce similar commodities at the expense of Cross River State's economy. It could also lead to reduction of Government's income from taxation, needed for infrastructural development. Bankruptcy and job losses may also arise from the collapse of small scale industries caused by lack of application of accounting ratios; leading to cyclical or mass unemployment in Cross River State. Where people are rendered unemployed due to business failure, there is a tendency that they would engage themselves in vices that could negatively impact on the inhabitants of the State.

Therefore, this study was designed to determine the extent to which small scale industries apply accounting ratios in interpreting financial statements in the light of measuring liquidity (short-term solvency), and predicting stability (long-term solvency); to circumvent the dangers of business failure.

Purpose of the Study

The major purpose of this study was to determine the extent of application of accounting ratios in measuring solvency of small scale industries in the manufacturing sector of Cross River State. Specifically, the study sought to:

- (1) Determine the extent of application of liquidity ratios in measuring short-term solvency of small scale industries in the manufacturing sector.
- (2) Determine the extent of application of gearing (stability) ratios in measuring long-term solvency of small scale industries in the manufacturing sector.
- (3) Determine the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector.
- (4) Determine the extent of application of activity (efficiency) ratios in measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow.
- (5) Determine the extent of application of cash flow statement in reporting cash flow of small scale industries in the manufacturing sector.
- (6) Determine the bookkeeping procedures followed and accounting records kept by small scale industries in the manufacturing sector.
- (7) Determine the problems associated with application of accounting ratios in small scale industries.

Significance of the Study

The failure of business at any scale (micro, small, medium and large) is associated mainly with management incompetence of their operators (Ajoma, 2005). One of such managerial incompetence is demonstrated on the nature of cash management by small scale industries operators which in most cases lead to illiquidity (Davis, 2002). Chau (2000) contended that the ultimate solution to the liquidity problems of small scale industries lies in long term measures that help to gradually change the business culture of small scale industries operators. Based on this assertion, it is hoped that the benefit that shall accrue from this study will be multifarious and to a large extent, beneficial to the following: Nigerian Association of Small and Medium Scale Enterprise (NASME), Nigerian Association of Small Scale Industrialists (NASSI), Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), present and potential operators, State and Federal Ministries of Commerce and Industry, and the public at large.

The findings and recommendations of this study will be of immense benefit to the Nigerian Association of Small and Medium Scale Enterprises, Small and Medium Enterprises Development Agency of Nigeria and the Nigerian Association of Small Scale Industrialists. Being corporate organizations, the result of this work will serve as an invaluable resource pack they can depend on during the organization of seminars and capacity building workshops as measures for training and re-training.

The findings of the study if implemented will be of help to existing and potential small and medium scale enterprise operators in Cross River State. The study will create awareness, showcase principles and knowledge of improved procedures of measuring the solvency of small scale industries in order to facilitate their survival, growth, and sustenance. The result of this study will in addition assist the operators or proprietors of small scale industries to adjust their accounting systems in line with concepts and conventions presently invoke. The

operators will see the need to improve upon the procedures adopted in applying accounting ratios to determine the type of liquidity problems their businesses are facing or about to face; which the study will highlight. The proper application of relevant accounting ratios will enhance increased productivity and this will result to high efficiency and profitability. State and Federal Ministries of Commerce and Industries (Ministry of Trade and Investment in Cross River State) will not be left out from the findings and benefits of this study. As policy markers in commerce and industrial sectors, they will find the study useful since it would make them establish or improve the capacity building programmes for small scale industry operators. Based on the findings of this study, adequate policy guidelines would be published by State and Federal Ministries of Commerce and Industries in favour of the operators; in the domain of accounting standards and practices. The enhanced productivity which will result from efficiency and effectiveness in the interpretation and analysis of financial statements of small scale industries will yield higher revenue profile. Hence, they will become a good source of government revenue through taxation.

The general public will also greatly benefit from the findings of this study. The Public will be assured of available locally made products at reduced prices, employment generation etc. due to the continuity of small scale industries in business as a result of being able to overcome the problem of insolvency; as they apply the findings and recommendations of this study. Similarly, improved accounting procedures would enhance the growth of small scale industries and the public will be motivated by this growth, to start their small scale industries. This will promote self-reliance of individuals, alleviate poverty, reduce unemployment, and abate crime rate and moral decadence in the society.

Finally, scholars interested in the predictive power of accounting ratios and the like, will find this study useful as a reference material and a springboard for improving or making more contributions in the accounting practices of small scale industries.

Research Questions

The following research questions were formulated to guide the study:

- (1) To what extent are liquidity ratios applied in measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State?
- (2) To what extent are gearing (stability) ratios applied in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State?
- (3) To what extent are profitability ratios applied in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State?
- (4) To what extent are activity (efficiency) ratios applied in measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State?
- (5) To what extent is cash flow statement applied in reporting cash flow of small scale industries in the manufacturing sector of Cross River State?
- (6) What are the bookkeeping procedures followed and accounting records kept by small scale industries in the manufacturing sector of Cross River?
- (7) What are the problems associated with the application of accounting ratios in Small Scale Industries?

Null Hypotheses

The following null hypotheses based on the research questions were formulated for the study and tested at 0.05 level of significance:

- Ho₁ - There is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of

- liquidity ratios in measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State.
- Ho₂ - There is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of gearing ratios in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State.
- Ho₃ - There is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.
- Ho₄ - There is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of activity ratios in measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State.
- Ho₅ - There is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of cash flow statement in reporting cash flow of small scale industries in the manufacturing sector of Cross River State.
- Ho₆ - There is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the bookkeeping procedures followed and accounting records kept by small scale industries in the manufacturing sector of Cross River.
- Ho₇ - There is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the problems associated with application of accounting ratios by small scale industries in the manufacturing sector of Cross River State.

Delimitation of the Study

This study was delimited to the determination of the extent of application of current ratio, acid test ratio, cash ratio, debt ratio, debt-equity ratio, interest coverage ratio, return on capital employed ratio, gross profit and net profit ratios, expenses ratios, stock turnover ratio, debtors turnover ratio, creditors turnover ratio, debtors collection period, creditors payment period by small scale industries in the manufacturing sector since not all ratios can be applied in measuring solvency of small scale industries due to the limited scope of their operations and sources of finance.

Moreover, the delimitation of this study to small scale industries in the manufacturing sector was due to the homogeneity of financial statements they are likely to prepare being in the same industrial sector. In addition, Palm oil, Bread baking and Wood processing factories are used for this study because they constitute the highest population of small scale industries in the State. Igben (2004) contended that for a meaningful inter-firm comparison, firms of similar sizes, of the same industry and location would provide a better basis for decision-making. This also accounts for the delimitation of this study to Cross River State since the industries enjoy similar business incentives from Government.

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter is concerned with the review of related literature on the accounting ratios applied in measuring the solvency of small and medium scale enterprises in the manufacturing industry. The review is in accordance with the purpose of the study and is organized under the following sub-headings:

1. Conceptual Framework
2. Theoretical Framework
 - Liquidity ratios applied in measuring short-term solvency of Business Enterprises
 - Gearing ratios applied in measuring long-term solvency of Business Enterprises
 - Profitability Ratios applied in measuring performance and effectiveness of Business Enterprises
 - Activity ratios applied in measuring efficiency with which Business Enterprises utilize assets to generate cash flow
 - Cash flow statement applied in reporting cash flow of Business Enterprises
 - Bookkeeping procedures and accounting records kept by Business Enterprises
 - Problems associated with application of accounting ratios in Business Enterprises
 - Manufacturing Industry
3. Review of Related Empirical Studies
4. Summary of Literature Review.

Conceptual Framework

The conceptual framework of this study centres on Accounting, Accounting Ratios, Solvency, Small Scale Industry; and Manufacturing Industry.

1. Accounting is concerned with the recording, classifying, creating, summarizing and communicating of financial information to interested parties and interpreting to help in making specific business decisions. Olatunji (2002) explained that accounting includes the design of the financial information system, preparation of financial statements, development of forecast and their analyses and interpretation of accounting information to assist decision makers in making informed decisions. Wood and Sangster (2002a) defined accounting as an act concerned with recording data; classifying and summarizing data; and communicating what has been learned from the data. Akintelure and Oguobi (2003) maintained that

accounting is the recording, classifying and summarizing of financial transactions or event in terms of money and reporting the result of management and other users of accounting information.

Okechukwu, Eneje and Okafor (2004) asserted that accounting is the process of measuring, recording, classifying, summarizing and communicating financial information that is used in making economic decision to interested persons or parties. Accordingly, Essien (2004) explained that accounting is the process of measurement, analysis and classification of financial transactions, computation of ratios and sums, presentation and communication of the information obtained in appropriate form to the user groups, for the purpose of financial decision making.

Ekwere (2005) conceptualized accounting as information processing system that provides quantitative information, primarily financial in nature, about economic activities that are intended for rationale decision making. Ekwere added that accounting is regarded as a service entity because it provides financial information to every area of an organization. Ekwere (2005) maintained that the general objectives of financial accounting include: provision of reliable financial information about economic resources and obligations of an organization; providing information about changes in economic resources and obligations; providing information that assist in estimating the earning potential of an enterprise, providing reliable information in assessing management abilities; proving the external and internal users with information for predicting, comparing and evaluating an organization's earning power, etc. Asaolu (2005) succinctly noted that accounting is the art of accurate book-keeping or recording of transactions. Ikpe (2006) opined that accounting is traditionally conceived as a profession or the work of keeping or checking financial accounts. To Ikpe, accounting entails collecting, classifying, presenting, interpreting and communicating information on economic activities relating to events and transactions, in money terms, of an enterprise.

Omorokpe (2006) upheld that accounting is the process of measuring, interpreting, and communicating financial information to enable others inside and outside the organization to make informed decisions. Accounting is the language of business. By measurement, the accountant observes, gather and record financial transactions of the accounting entity.

Ikpe (2006) contended that accounting is the process of collecting, recording, presenting and analyzing/interpreting financial information. These definitions reveal that accounting has three phases thus: collection/recording phase, presentation phase and analysis/interpretation phase. Under the data collection/recording phase, relevant details or accounting transactions relating to the business are captured in the source documents at the event of their occurrence. When the accounting details are so captured, the information on the source documents are recorded in the relevant books of account. In the second phase of accounting, the information so recorded is organized in an understandable manner, to facilitate its analysis and interpretation and presented to those who are in need of the financial report. The last phase has to do with the giving of meaning to the financial statement so prepared to enable interested parties make informed decisions concerning the business entity.

Considering the assertions of the various authors regarding the definition of accounting, the final stage of accounting process is analysis and interpretation of financial information in a manner that would be useful and meaningful to the users of the information.

Udi and Omorokpe (2006) reported that accounting can be classified into three main divisions namely cost accounting, management accounting and financial accounting. Essien (2004) asserted that cost accounting is the branch of accounting concerned with estimation

and ascertainment of the resources of production or service. Udi and Omorokpe (2006) viewed cost accounting as the art of pricing the enterprises inventories so that the stated accounting purpose can be achieved. Udi and Omorokpe further noted that, it also refers to the aspect of management accounting which is concerned with the establishment of Budgets and standard costs and actual costs of operations, processes, departments or products, and the analysis of variances, profitability or the social use of funds. Agara (2005) contended that, the Chartered Institute of Management Accountants (CIMA) defined management accounting as an integral part of management concerned with identifying, presenting and interpreting information used for formulating strategy through setting objectives and plans of achieving the objectives, planning and controlling activities through budgeting and budgetary control; and decision making by taking optimal action to minimize costs and increase value of the company. Agara also noted that management accounting is concerned with optimizing the use of resources through setting standards, effective supervision and motivation of the workforce towards achieving maximum production, disclosure to shareholders and others external to the entity by publishing corporate financial reports, holding press conferences, disclosure to employees through management accounting reports, routine report, and analyses; and safeguarding assets through control of operations and use of assets. In the same vein, Igben (2000) contended that financial accounting can be defined as the process of collecting, recording, presenting and analyzing/ interpreting financial information for the users of financial statements. Essien (2004) added that financial accounting is the branch of accounting which provides information to decision-makers outside the firm. Omorokpe (2006) emphasized that financial accounting is concerned with the recording of business transactions, facts, and events in monetary terms and the subsequent provision of interested parties.

Adams (2002) opined that the traditional function of accounting is to record business transaction, prepare an operating or income statement (income and expenditure or profit and loss account), which are subject to accounting conventions and limitations and to draw up a financial position statement (Balance sheet); at the end of a given period. Adams further noted that, on the basis that what happened in the past should be a guide to the future, previous year's published financial statements are analyzed and evaluated in order to form an opinion on the trend, which will in turn assist in deducing future results.

Olatunji (2002) observed that, modern day accounting functions go further to analyze, evaluate and interpret financial statements for decision making. To interpret means to put the meaning of a financial statement into simple terms or into perspective for the benefit of users. Interpretation of accounts entails broadly the understanding the term (language) of financial statements, appreciating the relationship between one accounting figure and another in financial statements, grasping the significance of the related figures in terms of whether they indicate a satisfactory state of affairs or not, making deductions; and preparing a report summarizing the deductions (Adams, 2002).

Interpretation of accounts must be undertaken by those conversant with the language while the accounts must be drawn up in a form, which enables a full appreciation of the facts to be deduced. Any account can be interpreted in such a way as to reveal the financial strength and weakness of a business and the causes which have contributed thereto (Ekwere, 2005).

Ekwere (2005) asserted that financial accounting has as its primary objective, the measurement of economic effect and communication of the economic results to the external decision makers. Other general objectives of financial accounting as given by Ekwere are to provide reliable financial information about economic resources and obligations of an organization, to provide information about changes in economic resources and obligations;

and to provide information that assist in estimating the earning potential of an enterprise. Ekwere further noted that, other objectives are to provide reliable information in assessing management ability, to provide the external and internal users with information for predicting, comparing and evaluating an organizational earning power; and to disclose information that is relevant to statement users. The general objectives of financial accounting aid in improving accounting principles by relating the content of the information to underlying activities of business organization and to the interest and needs of users of the information.

Agreeing with Essien (2004) and Ekwere (2005); Longe and Kazeem (2006) stated that accounting is important in that, it provides information for decision-making, provides permanent records for all transactions, helps to determine the profitability of a business concern, provides records for tax purposes, helps in preventing fraudulent activities, provides means by which the finances of a business are controlled, provides information on income and expenditure; and provides information on assets and liabilities.

Omorokpe (2006) explained that the functions of financial accounting can be outlined under two broad headings: (a) to record transactions and thereby - establish the identity and extent of debtors and creditors, value assets; and relate income to expenditure, (b) to provide summary statements in the form of accounts - to comply with legislation requiring companies for example, to publish accounts in a prescribed manner and to disclose specified information, to meet the requirements of the Inland/or Internal Revenue Board for the purpose of assessing tax, to provide information for the owners or members; and to facilitate analysis by potential investors and lenders, to provide information for management, Adams (2002) gave a more detailed purpose of accounting as follows: to ascertain the propriety of the transactions and their conformity with established rules. This means that, the historical accounting information should depict the extent of compliance with the various rules and regulation applicable to the organization. It also showed whether the transactions are proper in relation to the object clause of the organization, as any business outside the object clause is considered ultra-vires. Accounting also gives evidence of financial accountability by ascertaining how transparent management is in relation to financial probity. That is, management has a liability to reveal, justify and explain what they did with the funds entrusted to them. Have they utilized the money in the best interest of the general public or they have utilized it in the best interest of their pockets. Adams (2002) opined that accounting serves as a basis for planning. It is crystal clear that the future is laddered with series of uncertainty. Without adequate planning, a business organization may not be able to forge ahead effectively. Planning is therefore of utmost importance to every business organization in order to reduce the uncertainty associated with the future. The historical accounting record of the past events can be used to postulate into the future (Essien, 2004). Accounting serves as a basis for controlling. If the various business activities are not adequately controlled, it could lead to problem in the future, as the main object of planning may not be realized. Ajoma (2005) stated that controlling is one of the key managerial functions, which must be critically examined. When there are adequate control measures, management is not likely to deviate too much from plans. It is therefore very important that all activities should be controlled to achieve targets/objectives. Accounting serves as a basis for decision-making. At all levels of business activities, decision-making is very crucial (Agara, 2005). Failure to take adequate and informed decision at the right time could lead to business failure and or incalculable losses to the organization (Aborode, 2006). The various accounting information, which are historical events of the past, provide a platform for such decision-making in the future. Accounting serves as a basis for appraisal of management

performance. The importance of appraisal cannot be over estimated, through appraisal, lapses will be covered which may warrant urgent attention to management (Igben, 2004). Through appraisal, financial viability, profitability, efficiency and liquidity could be ascertained and used for future decision-making.

Financial accounting statements enable the various users to make well informed decisions. As a result, accounting reports are usually prepared to provide information on the specific need of the various users. Akintelure and Oguobi (2003), noted that the manager of an enterprise needs financial report to evaluate the performance in terms of profitability and to know the details of assets. The employees of an enterprise need the financial statement to know their job security and for wage negotiation. The shareholders are the providers of capital. So they need to measure the performance of their organization in terms of profitability, determination of share price and return on investment. Creditors have a stake in the organization. Therefore, they need financial statement to determine the Organization's liquidity profile and its ability to settle debts when due (Akintelure and Oguobi, 2003). Financial Institutions like Banks, Insurance Companies, etc. need an Organization's financial statement to determine its ability to repay loans and overdrafts, the value of collateral securities and the value of assets to be financed or insured. Tax Authorities need an organization's financial statement in order to determine the amount of tax payable by the organization. The general public needs financial statement to appraise the performance of an enterprise for investment and social responsibility purposes. Auditors usually form their independent opinion on the financial statement of their clients. So, they need the financial statement for examination and preparation of audit report (Akintelure and Oguobi, 2003). Except financial statements are analyzed with the aid of accounting ratios and/or other accounting tools, the information contained in them may serve little or no purpose.

2. Omorokpe (2006) conceptualized accounting ratio as a relationship between financial figures, expressed as ratios. To be meaningful, certain figures must be related to other specially selected figures or group of figures. Accounting ratios provide the analyst with a very useful tool for gleaming information from a firm's financial statements. However, the particular ratio or ratios selected for use by the analyst will depend upon the reason for performing the analysis. Longe and Kazeem (2006) succinctly defined ratio as the relationship that exists between two figures. Longe and Kazeem further explained that, accounting ratios are used in the interpretation of financial statements and they provide means by which various items in the final accounts are compared to other similar items. Agara (2005) explained that when analyses are based on financial statements, ratios are systematically produced from both internal and external financial reports so as to summarize key relationships and results for the purpose of expressing opinion on the performance of the business. Pandey (2005) stated that, ratio analysis is a powerful tool of financial analysis and is defined as the indicated quotient of two mathematical expressions; and as the relationship between two or more things.

ICAN (2006) noted that the absolute accounting figures reported in the financial statements do not provide meaningful understanding of the performance and financial position of the firm. An accounting figure conveys meaning when it is related to some other relevant information. Therefore, the relationship between two accounting figures, expressed mathematically, is known as a financial ratio (or simply as a ratio). Ratios help to summarize large quantities of financial performance. Gupta (2006) reported that, ratio analysis involves comparison of useful interpretation of the financial statements. A single ratio in itself does not indicate favourable or unfavourable condition. It should be compared with some standard. Standards of comparison may consist of: past ratios i ratios calculated from the

past financial statements of the same firm; competitors' ratios - ratios of some selected firms, especially the most aggressive and successful competitor, at the same point in time; industry ratios - ratios of the industry to which the firm belongs; and projected ratios - ratios developed using the projected or pro-forma financial statements of the same firm (Pandy, 2005).

The ratio analysis is the most powerful tool to the financial analyst. Many diverse groups of people are interested in analyzing the financial information to indicate the operating and financial efficiency and growth of the firm. These people use ratios to determine those financial characteristics of the firm in which they are interested. With the help of ratios, one can determine the ability of the firm to meet its current obligations, the extent to which the firm has used its long-term solvency by borrowing funds, the efficiency with which the firm is utilizing its assets in generating sales revenue; and the overall operating efficiency and performance of the firm (Weston, 2001).

Basically, ratios are used for various purposes as shown. As stated previously, a short-term creditor will be interested in the current financial position of the firm, while a long-term creditor will pay more attention on the solvency of the firm. The long-term creditor will also be interested in the profitability of the firm. Alphin and Casler (2005) argued that, the equity shareholders are generally concerned with their return and may bother about the firm's financial condition only when their earnings are depressed. In fact, it has to be realized that the short-term and long-term financial position and the profitability of the firm are tested in every kind of financial analysis, but the emphasis is more on liquidity. If a short-term creditor analyses only the current position and finds it satisfactory, he/she cannot be certain about the safety of his/her claim if the firm's long-term financial position or profitability is unfavourable (Afemikhe, 2003). The satisfactory current position would become adverse in future if the current resources are consumed by the unfavourable long-term financial condition. Similarly, Pandy (2005) the 'good' long-term financial position is no guarantee for the long-term creditors' claims if the current position or the profitability of the firm is 'bad'. In credit analysis, the analyst will usually select a few important ratios. He may use the current ratio or quick - asset ratio to judge the firm's liquidity or debt - paying ability; debt equity ratio to determine the stake of the owners in the business and the firm's capacity to survive in the long run and any one of the profitability ratios, for example, return on capital employed, to determine the firm's earning prospects (Altman, 2005). If the profitability is high, the current ratio is low and the debt/equity ratio is high (unreasonable); the extension of credit may be approved to the firm because a profitable company will grow and have improvement in its current ratio and other ratios (Anthony and Reece, 2002).

The ratio analysis is also useful in security analyst. The major focus in security analysis is on the long-term profitability. Pandy (2005) noted that profitability is dependent on a number of factors and, therefore, the security analyst also analyses other ratios. He would certainly be concerned with the efficiency with which the firm utilizes its assets and the financial risk to which the firm is exposed. Therefore, besides analyzing the profitability ratios meticulously, he will also analyze activity ratios and leverage ratios. The detailed analysis of the earning power is important for security analysis.

The ratios of a firm by themselves do not reveal anything. For meaningful interpretation, the ratios of a firm should be compared with the ratios of similar firms and industry. This comparison will reveal whether the firm is significantly out of line with its competitors, if it is significantly out of line, the firm should undertake a detailed analysis to spot out the trouble areas (Anderson and Boyd-Harman, 2005).

The ratio analysis will reveal the financial condition of the firm more reliably when trends in ratios overtime are analyzed. Buchanan and Flowers (2004) explained that ratios at a point in time can mislead the analyst, because they may be high or low for some exceptional circumstances that point in time. An impressive present financial position may really be eroding over time, while a weak position may be improving at a rapid rate over time. Thus, the trend analysis of the ratios adds considerable significance to the financial analysis because it studies ratios of several years and isolates the exceptional instances occurring in one or two periods. Archer (2004) stated that, although the trend analysis of the company's ratios itself is informative, but it is more informative to compare the trends in the company's ratios with the trends in industry ratios. This comparison indicates how well the company has been operating over time relative to its competitors and may also help to explain the trends in the company's ratios. For example, if the company's return on capital employed (net assets) shows a declining trend, the comparison can reveal whether this decline is characteristic of the firm only or there is a general declining trend in the industry.

Management has to protect the interest of all concerned parties, creditors, owners, and others. Brigham and Gapenski (2003) contended that, they have to ensure some minimum operating efficiency and keep the risk of the firm at a minimum level. Their survival depends upon their operating performance. From time to time, management uses ratio analysis to determine the firm's financial strengths and weaknesses, and accordingly takes actions to improve the firm's position. Management is in a better position to analyze the firm's financial position as it has access to internal information, which is not available to the credit analyst or the security analyst (Brigham, 2005).

Butters (2003) asserted that, the essence of the financial soundness of a company lies in balancing its goals, commercial strategy, product & market choices and resultant financial needs. The company should have financial capability and flexibility to pursue its commercial strategy. Ratio analysis is a very useful analytical technique to raise pertinent questions on a number of managerial issues (Beaver, 2002). It provides bases or clues to investigate such issues in detail. While assessing the financial health of the company with the help of ratio analysis, answers to the following questions relating to the company's profitability, assets utilization, liquidity, financing and strategies capabilities may be sought. Hence, for profitability analysis, the following questions may be addressed. How profitable is the company? What accounting policies and practices are followed by the company? Are they stable? Is the profitability (RONA) of the company high/low/average? Is it due to: profit margin, assets utilization, non-operating income, window dressing, change in accounting policy; and inflationary conditions? Is the return on equity (ROE) high/low/average? Is it due to return on investment, financing mix; and capitalization of reserves? What is the trend in profitability? Is it improving because of better utilization of resources or curtailment of expenses of strategic importance? What is the impact of cyclical factors on profitability trend? and can the company sustain its impressive profitability or improve its profitability given the competitive and other environmental situations? (Pandy, 2005).

For assets utilization, answers to the following questions are used for decision making. How effectively does a company utilize its assets in generating sales? Are the levels of debtors and inventories relative to sales reasonable, given the firm's competitive and operating characteristics? What are the trends in collection period, inventory turnover and fixed assets turnover? Is the improvement in the fixed assets turnover due to: depreciated book value of fixed assets? and sale of some fixed assets? (Pandy, 2005).

Liquidity analysis will be guided by the following questions. What is the level of current assets relative to current liabilities? Is it reasonable given the nature of the company's business? What is the mix of current assets? Is the proportion of slow moving inventories high? How promptly does the company pay its creditors?, How far can it stretch payment to creditors without jeopardizing its relations with them?, How efficiently and frequently does the company convert its current assets into cash?, Given the company's riskiness and future financial needs, how soundly is it financed? (What is the mix of debt and equity? What is the maturity structure of debt? Is the company faced with large debt repayments in the near future?

Does the company generate enough cash flows to service debt adequately?, Is the company close to its borrowing limits of restrictive covenants?). Does the company have lease commitments not disclosed in the balance sheet? Does it have large contingent liabilities?, What potential does the company have to raise debt on acceptable terms? From whom? On what conditions? How quickly? and Can the company raise equity funds? Would market respond favourably? To whom and at what price shares would be sold? Is management willing for dilution of control if shares are issued? (Pandy, 2005).

Pandy (2005) asserted that under strategic analysis, there are a number of other questions beyond the scope of ratio analysis. They however need to be answered while assessing the financial health of the company. These questions are: What are the goals and strategies of the company? How successfully has the company pursued its goals and strategies? Is change in them warranted?, Are the company's goals, strategies, product-market choices, investment requirements, financing needs, and financing capabilities in balance?, What would happen to the above-referred balance if the company will have to face an adversity?; and If the company is struck by adversity - what kinds of competitive, operating and environmental risks would occur?, How would management respond in strategic and operating terms?, What kinds of financial pressures would be faced?, Would it be able to raise necessary funds on acceptable terms?

Would the company be able to use its reserve resources? In what sequence would these resources be used? (Pandy, 2005).

Igben (2004) contented that ratio analysis may be carried out using any of the following two approaches: (a) Trend/time series (intra-company) analysis: this involves computing ratios and comparing them with previous year's ratios of the same business to assess performance. It discloses growth or decline of a business. (b) Cross sectional (inter-company) analysis: this approach entails computing ratios of a business and comparing them with the average of the industry in which the business can be compared with that of another business in the same industry. This type of analysis discloses the strength and weaknesses of a business vis-à-vis other businesses. Essien (2004) buttressed that, trend analysis is the computation of ratios, evaluation and comparison of the performance of a business over its financial years. The data for trend analysis are obtainable from the past and present financial statements of the business organization. While, comparative analysis (cross sectional) is the computation of ratios, evaluation and comparison of the financial performance of one business entity in relation to the other in the same or similar financial year. It is ideal to compare companies in the same industry and having the same accounting date.

Brigham (2005) maintained that although financial indicators may not completely provide information for the evaluation of the company, ratios no doubt still provide a sound basis for such evaluation because the bottom line of the performance of the company is how profitable and liquid it is. These parameters are better measured by ratios. Expanding the argument of Igben (2004) and Essien (2004), Agara (2005) upheld that there are several bases of evaluating the performance of a firm using ratios. These bases include the following:

industrial trend analysis; historical trend analysis; inter-firm comparison; international comparison; and segment or departmental analysis.

The performance of a firm can be assessed based on the direction of its ratios when compared with those of the entire industry. This is however the beginning. Gitman (2005) asserted that, the fact that a firm's ratios are at variance with that of the industry does not necessarily mean the firm is performing abysmally or extremely well. It thus provides the basis for asking pertinent questions to explain the reason for such variations. Linke and Zumwalt (2002) opined that, one of the reasons why the ratios of a firm may be different from that of its industry is difference in the accounting policy for valuation of stock and depreciation policy. Others include difference in environmental factors, difference in weather, difference in the cost of capital, etc. The expectation, however, is that the company's ratio should favourably follow the industrial trend (Aborode, 2006).

Historical trend evaluation considers the trend of the firm's ratio over the past years. Jensen and Meckling (2004) observed that by this approach, it is possible to identify areas of set back and areas where the company has excelled. Agara (2005) argued that the company will maintain favourable trends by identifying areas of strength and weakness and put in place strategies to strengthen the weaknesses and sustain the strengths.

Inter-firm comparison analysis compares the various ratios between different companies. Jones (2004) argued that, one difficulty of this will be if the companies do not belong to the same industry. Jones further noted that, the comparison of the ratios of such companies would not provide enough information other than to indicate the notional performances of firms. For a meaningful inter-firm comparison, firms of similar sizes, of the same industry and location would provide a better basis for decision-making (Igben, 2004). There may perhaps be the need to adjust financial statements before calculating the ratios. This is necessary to minimize the effect of different accounting policies (Igben, added).

Lordan (2002) noted that, with globalization and the quests for companies to expand their capacities by investing in foreign lands, small scale industries are faced with both domestic and foreign variables that affect their activities differently based on the environment. A company that has its branch in a foreign country would be faced with certain difficulties such as differences in foreign exchange rates, company law, labour laws, accounting policies, interest rates, inflationary rate, etc. Each of these variables will impact differently on the performance of the different company's foreign branches even if such branches have the same asset base (Ekwere, 2005).

Kennedy (2004) reported that, segment analysis is carried out in a company that has many lines of business, each belonging to a distinct industrial group. This involves the breaking down of the operations of the company into industrial segments with each segment being analyzed in relation to the appropriate industry to which it belongs (Miller, 2007). To be able to analyze segmented financial statements, such statements must be presented in accordance with the accounting standards on segment reporting (Kennedy, 2004). The guideline is that segmentation should consider the similarity of products, production processes, and markets or marketing methods. After having established the above criteria and identified the appropriate segments, the relevant ratios are then presented on segment basis.

Myers (2003) upheld that, segment analysis enables a proper assessment to be made of the centre managers and the firm's performance in a particular industry. Without this segment analysis, it may be extremely difficult to measure the aggregate performance of the company against any industrial standard since the company carries on different business lines (Wood and Sangster, 2002b). Wood and Sangster (2002a) pointed that, without accounting ratios, financial statements would be largely uninformative to all but the very skilled. They added

that with ratios, financial statements can be interpreted and usefully applied to satisfy the needs of the reader.

Essien (2004) noted that, interpretation of accounts means the assessment of the financial performance, liquidity, stability and prospect of a business entity through ratio analysis, and the explanation thereof. The above explanation of 'interpretation of accounts' incorporates the reasons for ratio analysis thus: (i) performance evaluation of the business; (ii) evaluation of the liquidity of the business – the ability to meet its short-term financial obligations; (iii) assessment of the stability as well as the viability of the concern – the ability to meet its long-term financial obligations; and (iv) assessment of the future prospect of the business. It is believed that all things being equal, ratios should have resemblance from period to period, hence, a major variance between one period and another, would attract attention and comments (Miller and Daniel, 2004).

Lewellen (2003) opined that the strength or weakness of a firm could be in respect of its operations, financial position, and/or prospects. Most often, financial statements are interpreted for the purpose of assessing the operation of a business. This is done on a short-term basis that is, for one year or on a long-term basis (Meltzer, 2002). In the former, the analysis will take the form of explanation of and comment on the past year's result and the financial position of the firm at the end of the current year, making such deductions as are possible in relation to the trend of the past one or two years (Radcliffe, 2005). Brigham and Gapenski (2003) noted that, some matters that will usually be the subject of comparison and comment include: adequacy of the working capital; adequacy of the provision for losses in asset value for example, depreciation, bad and doubtful debts, etc; adequacy of long-term capital; consistency of accounting methods; the relative proportions of fixed and liquid assets; the general overall picture of the latest balance sheet; and impact of inter-company transactions in the case of group accounts.

Fatemi (2003) maintained that, the process of interpretation of financial statements entails the following: calculation of ratios considered to be appropriate and relevant for the purpose of analysis; comparison of the ratios with similar ratios, which could be the firm's own past ratios, target ratios (or projected ratios), industry ratios, or competitors' ratios; trend analysis or time series of the ratios so calculated; vertical and horizontal analysis of financial statements; inter-firm analysis; and preparation of a written report on the analysis and interpretation of the financial statements of a chosen firm, drawing a reasonable conclusion based on the purpose of the exercise. Therefore, Wood and Sangster (2002a) concluded that, ratio analysis is a first step in assessing an entity and that it removes some of the mystique surrounding the financial statements and makes it easier to pinpoint items which it would be interesting to investigate further.

There are many types of ratios that can be applied in measuring solvency. They fall in the categories of liquidity, stability/gearing, profitability, efficiency ratios, etc. Liquidity ratios are ratios that try to assess the liquidity position of a business to determine ability to pay current debts when due (Adams, 2002). Some ratios in this category are: current ratios, quick (acid- test) ratio, and cash ratio.

Current ratio compares current assets to current liabilities and is intended to indicate whether there are sufficient short-term assets to meet the short-term liabilities (Gerstenberg, 2002). Current ratio shows to what extent creditors can be paid from short-term assets, which could be converted to cash within a year. Olatunji (2002) opined that, current assets are those assets which are usually held for a short period of time for the purpose of conversion in the ordinary course of business. Current assets are likely to change in the short-term and certainly within twelve months of the accounting date. On the other hand, current liabilities are those

liabilities which are payable within a short period of time, usually, a year (Akintelure and Ogoubi, 2003).

Quick ratio (Acid test or liquidity ratio) expresses the ability of a business to pay its short-term financial obligations now – that is, on demand (Essien, 2004). Dewing (2003) contended that quick ratio shows the extent to which creditors can be paid from liquid or near liquid assets. It compares current assets less stock to current liabilities and is made to determine whether current liabilities can be settled from current assets outside stock. Stocks are supplies or goods held by a business for sell (Longe and Kazeem, 2006).

Moreso, cash ratio compares cash and bank balances to current liabilities and is intended to indicate whether cash and bank balances can be used to offset current liabilities (Agara, 2005). It shows the extent to which short-term creditors can be paid from available cash/bank balances. Essien (2004) reported that, while cash refers to money value kept in the business, bank balances refer to money value kept in the bank (Miller and Daniel, 2004). They are popularly referred to as cash-in-hand and cash-at-bank, respectively.

Gearing or stability ratios are usually employed to predict the stability of business overtime (Merret and Sykes, 2003). Aborode (2006) contended that in accounting, it is often said that the extent to which a business is financed by loan capital is gearing. Gearing ratios show the proportion of debt and equity in financing a business's assets (Martin, Petty, Keown and Scott, 2005). Martin, et al also stated that, there are basically two types of gearing: capital gearing; and income gearing. Capital gearing measures the level of a firm's income relative to its interest commitments, i.e. interest cover (Agara, 2005). Both capital and income gearing must be considered together to have overall perspective of the debt impact on the firm (Omorokpe, 2006). Some ratios in this category include: debt ratio, debt/equity ratio, interest coverage ratio, capital employed to net worth ratio, income gearing ratio, among others.

Lewellen (2003) opined that debt ratio compares liabilities to assets and is concerned with whether the company has sufficient assets to meet all its liabilities when due. Solomon (2004) buttressed that debt ratio indicates what percentage of total funds employed is generated from outside sources. That is, it compares debt capital to capital employed. Liabilities are the values or amount which a business is legally bound to pay while, assets are the values that belong to a business (Akintelure and Oguobi, 2003). Similarly, Longe and Kazeem (2006) explained that liabilities are the indebtedness of a business to outsiders. On the other hand, Olatunji (2002) viewed assets as the resources, properties or possession of a firm.

Debt/equity ratio is different from debt ratio in that, it is a measure of the solvency of a business and indicates the extent of cover for external liabilities (Igben, 2004). Agreeing with Igben, Essien (2004) contended that debt/equity ratio is a test of the financial solvency of a business, and the extent of cover for its external liabilities. Weston (2005) added that debt/equity ratio shows what proportion of the owners contribution is covered by debt funds i.e. the relationship describes the lenders proportion of each naira of the owner's contribution. Weston further contended that, where the leverage ratio is high, there will be undue interference in the operations of the company by the loan providers; further borrowing will be at a higher cost; and management may not be independent and may be incapacitated. Omorokpe (2006) summarized that when debt ratio and debt/equity ratio are high, they indicate that the company is having a stability problem.

Moreso, interest coverage ratio indicates how many times operating profit will be able to cover interest payments (Archer and D'Ambrosio, 2004). Operating profit is profit obtained before deducting interest and tax while interest charges (expenses) is the cost of the amount

borrowed (Essien, 2004). Wood and Sangster (2002a) emphasized that interest cover ratio shows whether enough profits are being earned to meet interest payments when due. Furthermore, Asaolu (2005) upheld that capital employed to net worth ratio is another way of expressing the relationship between debts and owner's funds. Asaolu stressed that the ratio shows how much funds are being contributed together by lenders and owners for each naira of owner's contribution. The ratio compares capital employed to net worth (or net assets to net worth). Brigham and Gapenski (2003) conceptualized capital employed as assets less current liabilities. It is the excess of assets over liabilities. However, for the sake of computing capital employed to net worth ratio, capital employed consist of net worth plus borrowing while net worth consist of share capital plus reserve (Agara, 2005). On the other perspective, net asset is equals to fixed assets plus current assets less current liabilities (Ofer and Taggart, 2002). Lastly, Magee (2003) noted that income gearing ratio compares interest charges to earnings (profits) before interest and taxes. The ratio shows the extent of the earnings (profits) before tax which is covered by interest charges. Gearing (stability) ratios are longer term in nature, being concerned more with the strategic rather than with the operational level of corporate decision-making (Hertz, 2002).

Another class of ratio outside liquidity and gearing ratios is profitability ratios. Asaolu (2005) explained that, profitability is a measure that indicates whether the business is performing satisfactorily (Osiegbu, 2005). Ogler (2003) explained that, it is used, among other things, to measure the performance of management, to identify whether a business may be a worthwhile investment opportunity, and to determine a business performance relative to its competitors. Some of these ratios are: return on capital employed, gross profit margin, net profit margin, operating expenses ratio, and return on equity ratio, etc.

Return on capital employed shows the overall profitability of a business. Meltzer (2004) contended that return on capital employed shows the efficiency of management in utilization of the resources placed at its disposal. Meltzer also asserted that, this ratio is the most important measure of the profitability and efficiency of a business. In view of this fact, Essien (2004) reported that the ratio is referred to as the primary ratio. Return on capital employed indicates the percentage return generated by total funds employed. Akintelure and Oguobi (2003) defined net profit as the difference between gross profit and business expenses. It is the profit realized after deducting business expenses from gross profit of the same business entity.

Similarly, return on equity ratio, Agara (2005) reported that, it is one of the most important ratios in financial analysis and it indicates how well the firm has used the resources of owners. It compares profit after tax to the net worth of the business. Profit after tax is that profit standing to the credit of the business less tax. Moreso, Olatunji (2002) contended that gross profit ratio expresses gross profit as a percentage of sales. That is, sales less cost of sales divided by sales. The gross profit margin or ratio reflects the efficiency with which management of a business produces each unit of product and the efficiency in utilizing raw materials and other input for production (Gitman, Forrester, and Forrester 2005).

Teichroew, Robichek and Montalbano (2002) explained that gross profit is the excess of sales (less returns) over the cost of goods sold. It is the profit arrived at before expenses are deducted. Sales is the total of cash received and credit recorded as a result of goods sold during the trading period while cost of sales (cost of goods sold) is the amount arrived at after adding purchases for the trading period to the opening stock (Okechukwu, et al, 2004). Like the gross profit margin, the net profit margin ratio indicates the ability to manage production cost, selling cost and the administrative cost in order to make a profit (Essien, 2004). It expresses the relative profitability of the business after taking into account all

incomes and expenses. Alpin and Casler (2004) stated that the net profit to sales ratio (net profit margin) is an indicator of the business ability to withstand adverse conditions, which may arise from several sources, such as the following (i) If the general price level in the market place falls, does the business have a sufficient margin to drop its price and still remain profitable? (ii) If the business is caught in a period of rising costs when it cannot raise its prices, will the business continue to be profitable? (iii) Can the business withstand unexpected drop in volume of goods sold and still show a profit?

Furthermore, the operational efficiency of management of a firm can be determined with the help of operating expenses ratio (Omorokpe, 2006). This ratio compares operating expenses to sales and is however affected by the controllability of the expenses considered, the variability in sales, change in the selling and administrative expenses, and change in taste and demand for the product (Agara, 2005). Okechukwu, et al (2004) contended that operating expenses are those expenses incurred in the course of running a business.

In addition to the determination of liquidity, stability and profitability of a business, accountants also determine how the daily activities of business are conducted. By so doing, they compute activity ratios. Activity (efficiency) ratios measure the firm's efficiency in utilizing its assets to generate cash flow, i.e. how efficient the firm converts assets to cash (Merrett and Sykes, 2003). There are a good number of ratios in this category including stock turnover ratio, debtors turnover, creditors turnover, debtor days, creditor days, debtors collection period, creditors payment period, etc.

Olatunji (2002) noted that stock (inventory) turnover ratio is used to measure the number of times stocks are replaced during a given period. The ratio compares cost of goods sold to average inventory and where cost of goods sold is not available; it can be replaced with sales (Osteryoung, 2004). Stock turnover ratio indicates the efficiency of the business in producing and selling its product. It shows how rapidly inventory is turning into receivable through sales. Weaver (2003) asserted that a high inventory turnover is indicative of good inventory management. However, a careful analysis should be made to ensure that the high rate is not achieved through maintaining a low closing stock figure, which constantly resulted in stock out situations (Searby, 2002). Akintelure and Oguobi (2003) described averaged stock as opening stock plus closing stock divided by two.

Igben (2004) recorded that debtors turnover ratio expresses the number of times trade debtors are turned over during the reporting period. It compares credit sales to average trade debtors. While credit sales represent sales made without cash received immediately, average trade debtors is the sum of opening trade debtors and closing trade debtors divided by two (Scott and Moore, 2003). Pappas and Huber (2002) opined that creditor's turnover ratio measures the number of times trade creditors are turned over during the period. It compares credit purchases to average trade creditors. Okechukwu, et al (2004) maintained that while credit purchases stand for purchases made without immediate payment for the items being made, average trade creditors represent creditors at the beginning of the period plus creditors at the end of period divided by two.

Further, Aborode (2006) stated that debtors collection period (DCP) being another form of efficiency (activity) ratio measures the average number of days for which trade debts remain uncollected. It is determined by comparing average trade debtors to credit sales and multiplying by three hundred and sixty five days (Runyon, 2005). Similarly, Solomon (2004) maintained that for the creditor's payment period ratio, average trade creditors are compared to credit purchase and then multiplied by three hundred and sixty five days. The creditor's payment period ratio measures the average number of days for which trade creditors remain unpaid, Solomon, added.

Brigham (2005) pointed that asset turnover is a measure of how effectively the assets are being used to generate sales. Agara (2005) opined that, assets turnover ratio shows the proportion of sales per naira of assets for operations or employed during the period. It compares sales to total assets less current liabilities. Wood and Sangster (2002b) upheld that where a company's assets turnover is significantly lower than that of its competitors, it suggest there may be over investment in assets which could, in turn, make the company vulnerable to take over by a company interested in selling off any surplus assets while otherwise retaining the business in its current form. Although the scope of small scale industries operations is limited given their capital base when compared with large scale business ventures (Soldofsky, 2001); they stand to benefit from the application of accounting ratios both in the short- term and the long ï term (Beaver, 2002).

3. Solvency is the state of being able to pay debts without having to sell assets (Dewing, 2003). Ekwere (2005) opined that a solvent business is that which has the ability to pay its own debts when due. In the short-run (short-term solvency) accountants attempt to determine a business's ability to pay debts when due within a relatively short period, say an accounting year (Ikpe, 2006). In the long-run (long-term solvency) accountants attempt to predict the stability of business overtime. In accounting, it is often said that the extent to which a business is financed by loan capital is gearing. Gearing ratios show the proportion of debt and equity in financing a business's assets (Martin, Petty, Keown and Scott, 2005). Accountants go along way to ascertain short ï term and long-term solvency of small scale industries.

4. Oyekanmi (2006) stated that, there is no universally accepted definition of small scale industry in Africa. Oyekanmi buttressed that even definitions in other countries lack uniformity and reflect the relative development of the respective economies. Small scale industry definition is individual Country specific and is based on the size and level of the economy. Definitions commonly use one or a combination of the following parameters: number of employees, turnover, investment capital; and total assets.

For instance, Beyene (2000) noted that in the United States of America, the small business administration defined 'small business' as any business with less than 500 employees adding that, the latter figure may represent medium to large enterprises in the African context. Again, that in Mauritius, small scale industries are defined as manufacturing enterprises which use production equipment with an aggregate value not exceeding ten million rupees. Beyene remarked that unlike other African Countries, South Africa uses an elaborate categorization of survivalist, micro enterprises, small enterprises, medium enterprises and large enterprises. The micro and small are further sub-divided into small micro and very small enterprise. Survivalist enterprises represent activities by people unable to find paid jobs or get into the economic sector of their choice. Small enterprises, which constitute the bulk of established businesses, have from 5 to 50 employees (Oyekanmi, 2006). They are often owner-managed or family-controlled businesses and are likely to operate from business or industrial premises, are registered and satisfy other formal registration requirements (Beyene, 2000).

In Namibia, the government defined small business in the manufacturing sector as those with employment of less than 10 persons, turnover of less than \$500,000. In all other sectors, small business is defined as one which employs less than 5 persons, whose turnover is less than \$250,000 and capital employed less than N \$100,000 (Oyekanmi, 2006). Thus, as could be surmised from the foregoing examples, which represent more the rule than the exception in many African Countries, there is hardly a uniform definition for small scale industries.

Essien (2001) upheld that small scale business is an industry with total capital of over ₦1.5m but not more than ₦50m including working capital but excluding cost of land and/or a labour size of 11 to 100 workers. The Small and Medium Industries and Equity Investment Scheme (SMIEIS) (2001) defined SME as any enterprise with a maximum asset base of N200 million excluding land and working Capital and with the number of staff employed not less than 10 or more than 300. SMIEIS is a voluntary initiative of the Bankers's Committee whose membership includes all the Managing Directors and Chief Executive Officers (MD/CEOs). Similarly, National Council of Industry (NCI) (2004) explained that small scale industry is that with total assets less than ₦50m with less than 100 employees while medium size enterprise is any company with operating assets less than ₦200m and employing less than 300 persons. FRN (2007) described small business as that venture with a workforce between 10 to 49 persons and an asset base of less than ₦50m, excluding land and building. Adenekan (2008) noted that, the World Bank in 1988 classified small scale industry as industries with fixed assets, excluding land and working capital, which do not exceed ₦10m. Small scale industries have been defined along a broad continuum of size and type. In terms of size, measures used to classify small scale industry include employment, assets and revenue. This is as shown in the classification of Figure 1.

A. Employment -Based Classification

Organization Enterprises	Micro Enterprises	Small Enterprises	Medium
International Finance Corporation (IFC)	<10	10 i 15	50 i 100
Central Bank Of Nigeria (CBN)	-	<50	<100
National Association of Small Scale Industries (NASSI)	-	<40	-
Accenture	-	<50	<500

B. Asset-Based (excluding Real Estate) Classification

Organization	Small Enterprise	Medium Enterprise
International Finance Corporation (IFC)	<\$2.5 million	-
Central Bank Of Nigeria (CBN)	<N1 million	<N150 million
National Association of Small Scale Industries (NASSI)	<N40 million	-
Federal Ministry of Industry	<N50 million	<N200 million
National Economic Reconstruction Fund (NERFUND)	<N10 million	-

Figure 1: Classification of SMEs according to Employment generated and Assets owned.

Source: International Finance Corporation (IFC) Publications (2001)

Oyekanmi (2006) asserted that small scale industries contribute substantively to two fundamentals of poverty reduction i job creation and economic growth, adding that there are important for successful economic growth and social development. Small scale industries properly supported, foster entrepreneurship i a proven prerequisite for national economic success. Public and private policy support of small scale industries is most effective when

small scale industries are part of the formal sector. Oyekanmi (2006) acknowledged that, one key objective, therefore, is to encourage migration of small scale industries from informal to formal sector. Nigerian small scale industries in informal sector are beyond the reach/help of public or private policy: (i) policies do not provide sufficient support, (ii) difficult access to finance; and (iii) limited access to training in basic management skills. To use small scale industries to stimulate economic growth and encourage businesses; requires small scale industries to move from informal sector to formal sector (Oyekanmi, 2006).

Udi and Omorokpe (2006) posited that small scale industries are internationally known to be pivotal to the development of any economy, which necessitates the support given to them by a number of world organizations purposely set up to strategically facilitate its development. Davis (2002) stated that, small scale industries are generally believed to be advantageous in the area of low capital and output ratio, capital and employment ratio, optimal utilization of local inputs and other higher multiplier effects per unit of investment. These were considered key strategies to achieving industrial self-reliance, employment generation and poverty alleviation (Udi and Omorokpe, 2006). The capability of small scale industries to achieve their goals is undoubted because they promote the use of local raw materials, technologies and manpower as well as promote industrial dispersion and balanced development (Davis, 2002).

Oyekanmi (2006) concluded that small scale industries have the following impact on economic growth - employment generation (studies show that small scale industries account for a large proportion of employment in many countries), utilization of local resources - small scale industries promote the use of local raw materials requiring simple technology, output expansion - contribute substantially to national output in middle income economies, promotion of innovation and technological development - all economies have transited from artisan industries to modern business and that developing countries can leapfrog using experience of more developed countries, production of intermediate goods - small scale industries produce intermediate goods for large corporations. There is also a symbiotic relationship between small and large firms.

Although any list containing the nature of small business can never be complete, the inherent nature of small firms suggests their nature is influenced by the following key factors: management and ownership is rarely separate, control over business operations and decisions with one or two persons, who are usually family members; the equity in the business is not publicly traded, the personal security of the owners is required to secure business debt. Limited liability is rarely present, the level and number of formal contractual relations are kept at a minimum level; and personal objectives of owner(s) will guide and directly influence business decisions (Udi and Omorokpe, 2006).

Small scale industries especially in developing economies like ours are confronted with several challenges ranging from taxation through poor capitalization to infrastructural decay (Ugwuogo, 2004). A frequent cause of bankruptcy is undercapitalization. This is often a result of poor planning rather than economic conditions (Dauten, 2005). This has tended to undermine the contributions of small scale industries to national development (Davis, 2002). Chau (2000) acknowledged that small scale industries face liquidity crunch. Szczepaniec (2005) reported that one third of small scale industries in Poland go through temporary liquidity problems. These problems which are typical for medium sized enterprises occur due to the forms of payment - micro enterprises usually sell goods and services for cash while medium sized enterprises operate mostly in the prolonged payment system. One forth of enterprises facing liquidity problems use credit and one in fifty use factoring services. Medium sized enterprises relatively more often use credit or debt factoring (Branch, 2006).

Insufficient control over working capital normally results to insufficient funds to meet the demands of creditors (Wood and Sangster, 2002b). To avoid the consequences of insolvency or illiquidity, entrepreneurs in the manufacturing industry should embrace the culture of periodically assessing the performance of their businesses using accounting ratios.

5. Anyaele (2003) argued that manufacturing industries are those industries involved in the transformation of raw materials into finished goods (both consumer and producer goods). Similarly, Eba and Igbo (2005) asserted that manufacturing industries are industries concerned with the conversion of materials into finished products by mechanical or chemical means. Manufacturing industries produce beverages, bread, palm oil, timber, textile, leather, cement, irons and steel, etc. Eba and Igbo further noted that the relative importance attached to these industries at home is very small because, most of the raw materials like manpower and capital goods are imported.

Udu and Agu (2004) reported that economists usually group economic activities into three broad categories, namely, agriculture, industry and services. In this context, industry relates to those economic activities which involve transformation of inputs into new products. Udu and Agu added that a manufacturing industry involves the transformation of raw materials into new products, assembly of component parts, etc. By nature of their commercial activities, manufacturing industries ought to be conscious of their accounting records as there provide the means through which, performance over a given period can be measured. Without good accounting records, information to be used in measuring the solvency of small scale industries cannot be obtained and where this happens operators will run their small scale industries without having to know whether or not their businesses are exposed to the risk of insolvency or illiquidity. Accounting records prepared at the directives of management follow a pattern of accounting concepts and conventions which can be described as accounting theories.

Theoretical Framework

There is no overall 'accepted' accounting theory. Nevertheless, Wood and Sangster (2002b) explained that accounting theory provides a general frame of reference by which accounting practices can be judged and it also guides the way to the development of new practices and procedures. Although, there is no accepted account theory, the preparation of financial statements is tied to a platform of accounting concepts and conventions which constitute a theoretical model upon which financial accounting arguments are made. These theoretical accounting postulates provide a basis for accounting derivatives with mathematical characteristics applied in the interpretation of financial statements. Interpretation further provides accounting knowledge regarding the prospects or otherwise of a business. Some of these theoretical assumptions relevant to this study are discussed below.

(a) **Going Concern Theory:** Olatunji (2002) stated that the going concern theory holds that a business will continue to operate for an indefinitely long period of time. In most cases, the accounting system will treat value on the assumption that the business will continue trading and operate in the future and not cease at the accounting date. Here, it is assumed that a business organization like small scale industry will operate in perpetuity. Except on liquidation, a business enterprise is expected to operate in the unforeseeable future (Akintelure and Oguobi, 2003). Okechukwu, et al (2004), opined that with the going concern theory, an accountant is entitled to prepare the final accounts of a business with a view that it will continue to operate in the future. Okechukwu, et al added that, if there is some prospects that a business or some part of it, may shutdown or cease to operate, the accountant must reflect this in the accounts prepared, and in particular, in the balance sheet of the business.

The adoption of the going concern theory has important implications in accounting. For instance, it provides justification for the use of the cost principle in accounting for fixed assets and for the allocation of their costs to depreciation over their useful lives. This is because, it is assumed that these assets will not be sold in the near future but will continue to be used in operating activities, and current market values are of little importance (Omorokpe, 2006). Similarly, Essien (2004) noted that the going concern axiom is anchored on the fact that, there is no intention or necessity to fold up the business or reduce remarkable size of the business operations within the next accounting year. To this end, Ekwere (2005) asserted that a business should be established to last forever and accounting should be on a non-liquidation basis. Ekwere further asserted that, the going concern assumption is in support of the fact that money is invested in a business to earn profit in the future.

Asaolu (2005) buttressed that with going concern concept, a business is run as though it will exist for years to come. That is, it is unusual to assume liquidation for a business when preparing its financial statements, unless there is strong evidence to this effect. Asaolu further contended that in valuation of fixed assets, it is usual not to indicate the current value of such assets since the business is not put up for liquidation. There is, therefore, no need for expressing the asset's value in what it will fetch in the current market. Rather, assets are stated in their cost value less the amount of depreciation (Asaolu, 2005). The going concern concept is particularly related to this work because; operators of small and medium scale enterprises invest in businesses to make profit. Since profit accruing to a business is not a one day thing, small scale industries have to continue in operation for operators to realize the desired profit.

(b) Entity Theory: Wood and Sangster (2002a) opined that the entity theory implies that the affairs of a business are to be treated as being quite separate from the non-business activities of its owner(s). The items recorded in the books of the business are therefore, restricted to the transactions of the business. No matter what activities the proprietors get up to outside the business, they are completely disregarded in the books kept by the business. Wood and Sangster also noted that, the only time the personal resources of the proprietors affect the accounting records of a business is when they introduce new capital into the business, or take drawings out of it.

Olatunji (2002) stated that entity concept suggests that a business organization should be treated as a separate entity from the owner. That is, if the money in the business is used to pay for the owner's expenses, it must not be treated as business expenses rather, should be charged to the owner's drawing account. Akintelure and Oguobi (2003) summarized that in accounting, every business is usually treated as being different from its owner(s) no matter its legal form.

Okechukwu, et al (2004) maintained that a business entity is a separate business unit, distinct from other business units and from the owner of the business. Each entity (sole proprietorship, partnership and limited liability companies, etc) is assumed to own its assets and incur its liabilities, irrespective of whether they are owned by individual or group of individuals or not. Okechukwu, et al further noted that a business's assets, liabilities and activities are kept completely separate from those of the owner(s) of the business as well as from those of other businesses owned by the same owner(s). A separate set of accounting records is maintained for each business and the prepared financial statement represent the financial position and results of operations of that business only. Essien (2004) asserted that in accounting every economic unit (business) regardless of its legal form of existence is treated as a separate entity from parties having proprietary or economic interest in it.

Asaolu (2005) opined that, by entity postulate, it is assumed that a business is a distinctly separate entity from the owners of such a business organization. Therefore, an accountant prepares accounting reports not of the owners of the business but of the business entity itself. Ekwere (2005) contended that a business unit and its owners are two separate entities and the prepared financial reports relate to the former and not to the latter. Ekwere explained further that, even in the case of sole proprietorship, where the owner and the business are legally the same, both are regarded as separate for the purpose of preparing the financial statements. Similarly, in partnerships and in joint stock organizations, the real business is a separate and distinct entity from the owners or partners (Omorokpe, 2006). The entity assumption has a core value in this study; judged from its relationship. This is because, even though the operational finances for running small and medium sized enterprises are provided by the proprietor(s), it does not mean that the small scale industries and their owners can be construed as a single entity. Indeed, they are two distinct entities. Therefore, when a small scale industry operator is unable to pay his personal bills, it does not affect the business. Moreover, in reporting the affairs of a Small scale industry, the personal transactions of the proprietor should not be part of the statement.

(c) Periodicity Theory: Olatunji (2002) stated that, it is an acceptable norm within the business community and users of financial statements that financial performance of business organizations should be divided into accounting periods, usually one year and business changes should be measured over these periods. Agreeing with Olatunji (2002), Akintelure and Oguobi (2003) contended that in order to measure the performance of the organization overtime, the accounting records are usually divided into a twelve month period.

Essien (2005) asserted that the reason why the business community and users of financial statements require that the life of the business be divided into accounting periods of twelve months is to enable the performance of the business to be measured separately and compared over the periods. A change of the accounting periods and the effect it has on the financial statements should be disclosed in the financial statement.

Asaolu (2005) contended that periodicity assumption is about a definite period for reporting accounting information. As earlier mentioned, the going concern concept assumes that business has indefinite life span, but all those that have interests in accounting reports cannot wait for eternity before getting such reports (Ekwere, 2005). The business operator or manager desires prompt reporting of accounting procedures in order to take effective management decisions. The government expects tax annually. All these underscore the desirability of breaking accounting reports into short but useful periods (Okechukwu, et al, 2004). The theoretical importance of this assumption relative to this study rest on the fact that, management of small scale industries needs to measure their performances within a definite period of operation. Since the widely acclaimed accounting period is twelve months as stated by Akintelure and Oguobi (2003) and Essien (2005), the operations of small scale industries ought to be broken in this wise and performance assessment made to determine areas of weakness and strength.

(d) Money Measurement Theory: The language of accounting is money. Thus, the recording of business transactions is usually expressed in monetary terms. Therefore, Olatunji (2002) wrote that money measurement assumption states that only transactions which can be expressed in monetary terms are recorded in the records of a business. That is, any item which cannot be ascribed monetary value cannot be included in the records such as, information about good or bad management or poor morale prevalent among the staff are not shown. Wood and Sangster (2002a) explained that accounting information has traditionally

been concerned only with those facts covered by (i) and (ii) which follow: it can be measured in monetary units, and most people will agree to the monetary value of the transaction. This limitation is referred to as the money measurement assumption, and it means that accounting can never tell everything about business. For example, Omorokpe (2006) noted that accounting does not show whether the business has good or bad managers, whether a rival product is about to take away many of the best customers, whether there are serious problems with the workforce; and whether the government is about to pass a law which will cost the business a lot of extra expenses in future.

Okechukwu, et al, (2004) opined that before the effect of business transactions can be recorded, however, they must be measured. Therefore, money is a common measuring unit. In Nigerian economy, business activities are measured by prices attached in money terms. Hence money serves as both medium of exchange and a measure of value. Okechukwu, et al further buttressed that accountants assume that data expressed in terms of money are useful in making economic decisions and that the money unit (Naira) represents a realistic unit of value that can be used to measure net income, financial position, and changes in financial position.

Essien (2004) noted that transactions be recorded in the accounts and the financial statements drawn up with income, expenditure, assets and liabilities being expressed in monetary terms since, money is the unit of measuring financial performance. Longe and Kazeem (2006) stated that the information in financial statements must reflect only those facts which are capable of being expressed in monetary terms. According to them, money measurement assumption defines the type of information which will be selected and measured by accountants. The relevance of money measurement assumption to this study is under scored by the need for small scale industry operators to include only items that have quantifiable money values and those that can be agreed to by users of accounting information, in the financial statements.

(e) Accrual Theory: Olatunji (2002) opined that the accrual assumption holds that revenues and expenses are recognized as they are earned or incurred and not when money is received or paid. This assumption reveals that net profit is the difference between revenues and the expenses incurred in generating those revenues. Wood and Sangster (2002a) upheld that the key to the application of the accrual assumption is that all income and charges relating to the financial period to which the financial statements relate should be taken into account without regard to the date of receipt or payment. This assumption is particularly misunderstood by people who have not studied accounting. To many of them, actual payment of an item in a period is taken as being matched against the revenue of the period when the net profit is calculated (Wood and Sangster, 2002a).

Akintelure and Oguobi (2003) buttressed that the accrual assumption states that, the income to be recognized in any accounting period is the income earned, and not income received and that for the same period the expenses to be recognized are expenses paid. Similarly, Essien (2004) contended that the accrual assumption demands that revenue and cost are recognized in a period they are earned or incurred, not as money is received or paid, matched with one another, and dealt with in the profit and loss account of the period for which they relate. Okechukwu, et al (2004) concluded that the accrual assumption is the basis for preparing business final account. To Okechukwu, et al, the assumption holds that the cost it bears should be recognized at the time they take place, and not at the time they are actually paid for (which may be several months later).

Asaolu (2005) summarized that the accrual assumption is one which undertakes to apportion the cash inflow. That is, as Longe and Kazeem (2006) puts it, the accrual assumption states

that all the expenses are matched against the revenue generated at that period to determine the net income (net profit). In preparing the final accounts of small scale industries, management ought to reflect all the costs incurred and revenues received for that accounting period so long as they relate to the accounting period in question. In matching revenue and cost for the period, all income earned and expenses incurred should be recognized as opposed to the recognition of only income received and expenses paid. The need for Small scale industries management to ensure that in preparing the final accounts of their ventures, all income earned and expenses incurred are properly reflected in financial statements echoes the relationship of the accrual assumption to this study. This is largely because, the actual assessment of a business prospects is dependent on the quality of accounting information made available in the financial statements.

(f) Realization Theory: Under the realization theory, income is considered or regarded to have been earned when the goods are dispatched to the customer and the customer incurs liability for them (Olatunji, 2002). Akintelure and Oguobi (2003) maintained that the assumption requires the periodic recognition of income as soon as it is capable of being measured or when the value of the assets to be exchanged can easily be identified. Essien (2004) asserted that the realization assumption establishes that the profit on a given transaction is recognized immediately when the goods are sold, and not until the cash is received. The realization assumption states that income should be measured as the net cash equivalent price derived in arms length exchanges transactions (Ekwere, 2005). That is, income is recognized at the point of sales. When the exchange process is complete and goods passed from the seller to the buyer, income is recognized at that point.

Asaolu (2005) noted that realization relates to an inflow of cash and of other assets into a business organization. That is, the cash and assets earned by a business. The assumption explains the conditions that should operate and the point-in-time when a business could take any inflow of cash or asset as realized or earned thus: there must have been an exchange transaction, that is, there must have been a sale or an offer of services, cash or assets must have been offered in return for such sale or for offer of service; and there must have been a determinable amount of cash or value of asset collected.

Further, Omorokpe, (2006) asserted that realization assumption established the rules for the periodic recognition of revenue as soon as: (a) it is capable of objective measurement; and (b) the value of assets is reasonably certain. It is possible to recognize revenue at a variety of points, example, when goods are produced. Choice in most cases is an industrial norm and depends on which of the points is the critical event. However, Omorokpe (2006) concluded that only when this event is passed, can revenue be legitimately recognized.

The usefulness of the realization assumption to this study cannot be over-emphasized because, it will enable small scale industries management to recognize income at the point where the economic item, event or service is passed to the customer and the latter incurs liability to that effect.

(g) Consistency Theory: The consistency theory states that when a business has once fixed a method for the accounting treatment of items, it will enter all similar items that follow exactly the same way (Wood and Sangster, 2002a). However, it does not mean that the business has to follow the method until the business closes down. A business can change the method used, but such a method is not made without a lot of consideration (Ekwere, 2005). When such a change occurs and the profits calculated in that year are affected by a material amount (i.e. one that makes a noticeable difference to the figures shown in the financial statements) then, either in the profit and loss account itself or in one of the reports that accompany it, the effect of the change should be stated (Wood and Sangster, 2002a).

Olatunji (2002) upheld that consistency assumption states that accounting treatment of similar items should be continuously applied from one accounting period to the next in a consistent manner. Olatunji explained that, it is wrong to change the method used year by year so that most favourable picture is presented such as, using ñLIFOò in one accounting period and unreasonably changing to ñFIFOò in the next accounting period.

It follows that in accounting, there could be more than one way or alternative in solving a specific problem and the accountant is at liberty to choose any alternative in line with management policy. However, Akintelure and Oguobi (2003) noted that once an alternative has been selected, the accountant is expected to follow that alternative until its full benefit is derived rather than changing from one method to the other.

Agreeing with Oguobi (2003), Okechukwu, et al (2004) explained that there are many acceptable alternative methods for measuring revenue, expenses, assets and liabilities. The methods chosen have a significant effect on profit and loss account reported for the year and also the financial position at the end of the period. Omorokpe (2006) explained that financial statements for any given year may be useful in themselves; they are more useful if they can be compared with similar statements of the previous years.

Asaolu (2005) contended that by the consistency assumption, accountants are expected to record and report accounting activities in the same way, year by year, if any sensible and meaningful comparisons would be made of financial reports of a firm for different periods. In other words, where there are alternative acceptable accounting practices, it is desirable for the accountant to keep to the same practice from year to year in order to facilitate comparisons of one accounting period to another (Longe and Kazeem, 2006).

To this end, management of small scale industries should ensure that their accountants prepare financial statements using consistent approaches to make comparison with previous year's operations meaningful. Since accounting ratios are some of the indices used in measuring the performance of business overtime, they may not give a true picture of the enterprise, where the financial statements are prepared using different methods year in year out. Therefore, going concern, entity, periodicity, money measurement, accrual, realization; and consistency theories discussed above constitute the theoretical foundation upon which this research is based.

Liquidity Ratios Applied in Measuring Short-Term Solvency of Business Enterprises

Liquidity ratios help in measuring the ability of the firm in meeting its obligation when they are due. Wood and Sangster (2002b) stressed that accounting is used, not just to calculate profitability, but also to provide information that indicates whether or not a business will be able to pay its creditors, expenses, loans falling due, etc. at the correct time. This is what liquidity ratios achieve. Essien (2004) argued that liquidity ratios express the ability of a firm to liquidate its current financial obligations as they fall due. Udi and Omorokpe (2006) opined that a well managed business should always have enough current assets to cover current liabilities. Udi and Omorokpe further explained that liquidity ratios indicate the ability of the business to meet current liabilities with the current assets available.

Pandy (2005) explained that it is extremely essential for a firm to be able to meet its obligations as they become due. Pandy added that, analysis of liquidity needs the preparation of cash budgets and cash and fund flow statement; but liquidity ratios, by establishing a relationship between cash and other current assets to current obligations, provides a quick measure of liquidity.

Anthony and Reece (2002) maintained that, a firm should ensure that it does not suffer from lack of liquidity, and also that it does not have excess liquidity. The failure of a company to meet its obligations due to lack of sufficient liquidity, will result in a poor credit worthiness,

loss of credit confidence, or even in legal tangles resulting in the closure of a company, Anthony and Reece, added. Fragman (2003) remarked that a very high degree of liquidity is also bad; idle assets earn nothing. The firm's funds will be unnecessarily tied up in current assets. Therefore, it is necessary to strike a proper balance between high liquidity and lack of liquidity.

Olatunji (2002) reported that the following are part of liquidity ratios: (i) current (working capital) ratio and (ii) quick (acid test) ratio. Adams (2002) maintained that, current ratio shows to what extent creditors can be paid from short-term assets, which could be converted to cash within a year. Current ratio explains how many times current assets covers current liabilities i.e. the extent to which a business can meet its obligations to the short-term creditors. Wood and Sangster (2002a) asserted that current ratio compares assets which will become liquid within approximately twelve months with liabilities which will be due for payment in the same period and it is intended to indicate whether there are sufficient short-term assets to meet the short-term liabilities. Essien (2004) agreed that current ratio measures the ability of a company to meet its current liabilities as they fall due, out of its current assets. Essien further noted that current ratio is given as current assets divided by current liabilities. Olatunji (2002) contended that current assets are those assets, which are usually held for a short period of time for the purpose of conversion in the ordinary course of business. They are expected to be used within one accounting period, say one year. Igben (2004) maintained that a low current ratio is an indication that the business may be unable to pay its future bills on time, particularly, if a slowdown occurs in collections from debtors. On the other hand, Igben noted that a high current ratio may indicate an excessive amount of current assets and management's failure to utilize the resources of the business properly. In order to withstand the sudden adverse consequence of such eventualities as reduction of credit period received from creditors or exceptional amounts of bad debts, it is necessary that the current assets adequately cover the current liabilities. To determine whether current ratio is high or low or just right, comparisons should be made with current ratio of previous periods and of similar businesses (Asaolu, 2005). Omorokpe (2006) mentioned that current ratio is applied on the assumption that all current assets are fairly liquid, i.e., stock is selling and producing debtors who will pay cash within a fairly short pace of time. Omorokpe further explained that for the fact that current ratio shows the relationship of current assets to current liabilities; it is a short-term measure of the liquidity of an entity. Current assets include stocks, debtors, cash-in-hand, cash-at-bank, etc. Olatunji (2002) summarized the characteristics of current assets as: (a) held for resale at a profit, (b) have a short life span; and (c) easily realizable. On the other dimension, Wood and Sangster (2002a) explained that current liabilities are items that have to be paid within a year of the balance sheet date. Olatunji (2002) defined current liabilities as those which are due for settlement within a year. They are usually paid within a short period of time. Olatunji gave the characteristics of current liabilities as: (i) they are payable within one year (ii) they are owed to outsiders. Asaolu (2005) opined that current liabilities are short-term debts of a business. Current liabilities are funds owed to outsiders as a result of using such fund in running a business. Longe and Kazeem (2006) noted that current liabilities are liabilities which are payable within a short period of time, usually a year. They added that current liabilities are events that require the enterprise to pay money, and provide goods or perform services which are due. Current liabilities include items like creditors, overdraft, accrued expenses, etc. As a general rule, a current ratio of 2:1 is acceptable to be ideal (Igben, 2004 and Agara, 2005).

This rule is based on the logic that in a worse situation, even if the value of current assets becomes half, the firm will be able to meet its obligation. The current ratio represents a

margin of safety for creditors. The higher the current ratio, the greater the margin of safety; the larger the amount of current assets in relation to current liabilities the more the firm's ability to meet its current obligations (Adeniyi, 2002). Pandey (2005) advised that, an arbitrary standard of 2 to 1 should not be blindly followed. Pandey explained that, firms with less than 2 to 1 current ratio may be struggling to meet their obligations. This is so because the current ratio is a test of quantity, not quality. The current ratio measures only total net worth of current assets and total net worth of current liabilities. It does not measure the quality of assets. Liabilities are not subjected to any fall in value; they have to be paid. But current assets can decline in value. If the firm's current assets consist of doubtful and slow-paying debtors or slow moving and obsolete stock of goods, then the firm's ability to pay bills is impaired; its short-term solvency is threatened (Buchanan and Flowers, 2004). Thus, too much reliance should not be placed on the current ratio, a further investigation about the quality of the items of current assets is necessary (Martin, et al 2002).

Quick (Acid-test) ratio is another type of liquidity ratio. This ratio provides a measure of a firm's ability to meet its current liability from current assets without having to dispose stock. The only difference in the items involved between current ratio and acid-test ratio (or quick ratio) is that the latter does not include stock. Wood and Sangster (2002b) noted that otherwise, acid test ratio is identical to the current ratio, comparing current assets, excluding stocks, with current liabilities. They buttressed that, stock is omitted as it is considered to be relatively illiquid, because it depends upon prevailing and future market forces and may be impossible to convert to cash in a relatively short time.

Igben (2004) asserted that quick ratio expresses the relative amount of cash and other assets that can be easily converted to cash that are available to meet current liabilities. For this purpose, only liquid assets are considered. Therefore, stocks are deducted from the current assets in computing current ratio. Igben further advised that in practice, an analysis of debtors will be carried out so that debtors' balances which are doubtful of recovery will be deducted from the current assets. Essien (2004) contended that acid test ratio expresses the ability of a business to pay its short-term financial obligations now that is, on demand.

Asaolu (2005) mentioned that quick (acid test or liquidity) ratio considers only the current assets that can quickly be turned into cash should creditors press for immediate payment. Agara (2005) opined that quick ratio (acid test ratio) shows the extent to which creditors can be paid from liquid or near liquid assets. Longe and Kazeem (2006) echoed that quick ratio is a better test of the short-term solvency of a business because of the length of time often necessary to convert stocks into cash. Similarly, Udi and Omorokpe (2006) emphasized that quick ratio is a stricter test of liquidity. They argued that some current assets such as stocks (of finished goods and work in progress) may be difficult to turn quickly into cash.

Omorokpe (2006) suggested that if the current ratio is rising and the quick ratio is static, there is almost certainly a stockholding problem. Acid test ratio is expressed as current assets deduct stock divided by current liabilities

Olatunji (2002) observed that stock represents goods available for sale in a business. As a general rule, after deducting stock and dividing the quick assets by current liabilities, a quick assets ratio of 1:1 is accepted to be ideal (Essien, 2005, and Longe and Kazeem, 2006).

Igben (2004) holds that the rule that current (working capital) ratio of 2:1 and acid test ratio of 1:1 are considered to be ideal is a general one and should be used as a guide in interpreting the two ratios only if specific information regarding the nature of a company's business and its industry is not available. In reality, such factors as transaction cycle and the nature of a company's business should be taken into consideration before deciding whether the current ratio and acid test ratio of the company are ideal or not (Ekwere, 2005).

Igben (2004) explained that, in a departmental store, for example, the transaction cycle (i.e., the time-frame from the date goods are purchased to the date cash is received after sale) is relatively short. This is because, the stages that must be passed before the cash invested in stock is gotten back by the company is only two; except where the store sells on credit, in which case the stages would be three, Igben added.

On the other hand, Igben (2004) argued that, in a manufacturing company the transaction cycle is relatively longer as indicated in the diagram that follows. Igben further contended that, the cycle starts with investment of cash in raw materials; the raw materials are then turned to work-in-progress (W.I.P) before being turned to finished goods which, in turn, are turned to trade debtors and then turned to cash when the debts are collected.

Akintelure and Oguobi (2003) maintained that due to the relatively short transaction cycle of a department store, its current assets will consist of a relatively large amount of stock and a relatively small amount of cash. They also observed that, on the other hand, the relatively longer transaction cycle of a manufacturing company dictates that it holds a relatively large amount of cash because of the longer time it takes to receive the cash back after investing it in raw materials. It is therefore quite normal that the acid test ratio of a departmental store be much lower than that of a manufacturing company (Igben, 2004).

The nature of some companies operations will also determine the ideal current and acid test ratios. To this end, Essien (2004) stated that a construction company, for example, holds a relatively small amount of current assets in relation to long-term assets. For this reason, Essien added that, a construction company could survive very well with current assets ratio and acid test ratio that are well below 2:1 and 1:1, respectively.

Pandy (2005) noted that, although quick ratio is a more penetrating test of liquidity than the current ratio, yet it should be used cautiously. Pandy added that, quick ratio of 1 to 1 or more does not necessarily imply sound liquidity position. It should be remembered that all debtors may not be liquid, and cash may be immediately needed to pay operating expenses. It should also be noted that inventories are not absolutely non-liquid. To a measurable extent, inventories are available to meet current obligations. Therefore, Umoh (2003) contended that, a company with a high value of quick ratio can suffer from the shortage of funds if it has slow paying, doubtful and long-duration outstanding debtors. On the other hand, Umoh stated that, a company with a low value of quick ratio may really be preparing and paying its current obligation in time if it has been turning over its inventories efficiently. Nevertheless, the quick ratio remains an important index of the firm's liquidity.

Moreso, Agara (2005) maintained that cash ratio being one of the liquidity ratios, shows the extent to which short-term creditors can be paid from available cash balances, sales of securities or discounted debtor balances. Agara upheld that factors that affect short-term solvency are size of operating cost; bank credit available; and seasonal pattern of trade.

Omorokpe (2006) asserted that, cash ratio is a measure of the adequacy of available cash. Omorokpe buttressed that analysts often use cash ratio to compare comparable companies. Though cash is the lifeblood of a business, a company should be careful not to have a cash ratio that is too high or low. Holding excess cash is usually uneconomic. Cash ratio is computed as cash plus cash equivalents divided by current liabilities. Cash equivalents are short-term investments with original maturities of three months or less that are readily convertible to cash and whose value is unlikely to change (Omorokpe, 2006).

Gearing (Stability/Leverage) Ratios Applied in Measuring Long-Term Solvency of Business Enterprises

Essien (2004) stated that gearing ratios shows how much the business is financially committed or obligatory to outsiders in relation to its financial responsibility to them. They

inform whether the business is mostly financed by outsiders or not, the extent of the finance, and the relative magnitude thereof. Gearing ratios are used by management to measure the gearing power (stability or leverage) or to predict the stability of a business organization (Olatunji, 2002). The extent to which a business is financed by loan capital is gearing. Asaolu (2005) explained that, gearing ratios indicate the amount of capital in the business which belongs to owners of the business and the amount which belongs to creditors.

Agara (2005) maintained that gearing ratios show the proportion of debt and equity in financing a business's assets. Omorokpe (2006) asserted that gearing ratio is the ratio of debt (i.e. loans from all sources including debentures, term loans and overdraft) to total finance (i.e. shareholder's capital plus reserves plus long-term debt plus overdraft). Aborode (2006) upheld that stability or gearing ratios assess what percentage of total funds used to finance operations, is generated from outside sources i.e., it assessed the stability of a company. Agara (2005) also reported that there are basically two types of gearing: capital gearing; and income gearing. Capital gearing measures the extent to which the capital structure of the company consist of debt while, income gearing measures the level of firm's income relative to its interest commitments, i.e. interest cover. Omorokpe (2006) contended that both capital and income gearing must be considered together to have overall perspective of the debt impact on the firm.

Brigham (2005) holds that the short-term creditors, like bankers and suppliers of raw materials, are more concerned with the firm's current debt-paying ability. On the other hand, long-term creditors, like debenture holders, financial institutions etc. are more concerned with the firm's long-term financial strength. In fact, a firm should have a strong short-term as well as long-term financial position. To judge the long-term financial position of the firm, financial leverage, or capital structure ratios are calculated. These ratios indicate mix of funds provided by owners and lenders. As a general rule, there should be an approximate mix of debt and owner's equity in financing the firm's assets, Brigham added.

The manner in which assets are financed has a number of implications. Radcliffe (2005) noted that first, between debt and equity, debt is more risky from the firm's point of view. The firm has a legal obligation to pay interest to debt holders, irrespective of the profits made or losses incurred by the firm. If the firm fails to pay to debt holders in time, they can take legal action against it to get payment and in extreme cases, can force the firm into liquidation. Second, use of debt is advantageous for shareholders in two ways: (a) They can retain control of the firm with a limited stake and (b) 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. The process of magnifying the shareholders' return through the used of debt is called 'financial leverage' or financial gearing' or 'trading on equity' (Pandy, 2005).

However, leverage can work in opposite direction as well. If the cost of debt is higher than the firm's overall rate of return, the earnings of shareholders will be reduced. In addition, there is threat of insolvency. If the firm is actually liquidated for non-payment of debt-holder's dues, the worst sufferers will be shareholders i.e. the residual owners (Hastie, 2004). Thus, use of debt magnifies the shareholders' earnings as well as increases their risk. Thirdly, Martin, et al (2005) posited that a highly debt i.e. burdened firm will find difficulty in raising funds from creditors and owners in future. Creditors treat the owner's equity as a margin of safety; if the equity base is thin, the creditors risk will be high. Thus, leverage ratios are calculated to measure the financial risk and the firm's ability of using debt to shareholder's advantage.

Leverage ratios may be calculated from the balance sheet items to determine the proportion of debt in total financing. Hertz (2002) maintained that many variations of these ratios exist;

but all these ratios indicate the same thing i.e. the extent to which the firm has relied on debt in financing assets. Leverage ratios are also computed from the profit and loss item by determining the extent to which operating profit are sufficient to cover the fixed charges. Debt ratio is one of the gearing ratios. Wood and Sangster (2002b) contended that debt ratio compares the total debts to total assets and is concerned with whether the company has sufficient assets to meet all its liabilities when due. They noted that whether debt ratio is good or bad will, as with all accounting ratios, depend upon the norm for the industrial sector in which the company operates and on the underlying items within the figures included in the ratio. Essien (2004) opined that debt ratio signifies the relationship between the equity funds of the business and the total debts owed to outsiders (Lenders and long-term finances). Asaolu (2005) noted that debt ratio compares liabilities to assets and is concerned with whether the company has sufficient assets to meet all its liabilities when due. Agara (2005) explained that debt ratio shows long-term solvency of the firm. It shows the proportion of interest bearing debts in the capital structure of the firm. It shows to what extent the operations of the firm are being financed by long-term interest bearing debts, Agara added. Omorokpe (2006) concluded that debt ratio is the simplest way of measuring a company's gearing or leverage as it indicates what percentage of total funds employed is generated from outside sources. Debt ratio is expressed as total liabilities divided by total assets.

Olatunji (2002) described liabilities as obligations arising from past transactions. It is a claim by the outsiders on the assets of the business or the indebtedness of an organization to outsiders. Akintelure and Oguobi (2003) defined liabilities as the values or amount which a business is legally bound to pay. Liabilities are claims on the assets.

On the other hand, assets are conceived to mean the resources, properties or possession of a firm (Olatunji, 2002). Assets are owned properties or possession of a firm. Assets are owned by business and are expected to be of some future benefits. Omorokpe (2006) contended that where the analyst is interested in measuring the relative proportion of a firm's assets financed by long-term or permanent debt, the following ratio is recommended. Long-term debt ratio is obtained by dividing long-term debts by total debts.

Agara (2005) noted that total debts include all interest bearing loans both (short-term and long-term) debenture, stocks/bonds, deferred payments, arrangements for the acquisition of capital equipment, bank borrowings, public deposits and any other interest bearing loan. By this definition, ordinary trade creditors are excluded from the calculation. However, Agara added that, a firm may decide to include such debts in the computation of gearing ratios. Moreover, Longe and Kazeem (2006) observed that long-term debts are obligations expected to be paid after one year. They are liabilities payable in the future.

Whatever way the debt ratio is calculated; it shows the extent to which debt financing has been used in the business. A high ratio means that claims of creditors are greater than those of owners. Pandey (2005) asserted that, a high level of debt introduces inflexibility in the firm's operations due to the increasing interference and pressures from creditors. A high-debt company is able to borrow funds on very restrictive terms and conditions. The loan agreements may require a firm to maintain a certain level of working capital, or a minimum current ratio, or restrict the payment of dividends, or fix limits to the officers and employees' salaries and so on (Okoro, 2004). Barges (2005) argued that, heavy indebtedness leads to creditors' preserves and constraints on the management's independent functioning and energies. During the periods of low profits, a highly debt-financed company suffers great strains. It cannot even pay the interest charges of creditors as a result, their pressure and control are further tightened (Weston, 2001). To meet their working capital needs, the firm

finds difficulty in getting credit. It may have to borrow on highly unfavourable terms. Thus, it gets entangled in debt-trap (Smith and Hague, 2006). The recommended standard for debt ratio is 0.4:1 (Agara, 2005).

Another type of gearing ratio is debt ÷ equity ratio. Igben (2004) maintained that debt ÷ equity ratio is a measure of the solvency of a business and indicates the extent of cover for external liabilities. Agara (2005) stated that debt-equity ratio shows what proportion of the owner's contribution is covered by debt funds that is; the relationship describes the lender's proportion of each naira of the owner's contribution. Agara further argued that where the gearing ratio is high, there will be undue interference in the operations of the company by the loan providers, further borrowing will be at higher cost, dividend payments in cash may be restricted; and management may not be independent and may be incapacitated.

When analyzing gearing ratios, contingent liabilities should not be ignored as they may crystallize into real liabilities shortly. Olatunji (2002) asserted that contingent liabilities are obligations, which will arise in future only through a specified event. It is a condition, which exists at the balance sheet date where the outcome will be confirmed only on the occurrence or non-occurrence of one or more uncertain future events. Igben (2000) maintained that contingent liabilities are those liabilities, the occurrence and amount of which depend on some uncertain future event(s). Since the liability does not actually exist at the balance sheet date and its future occurrence is not certain, it is not normal to show contingent liability on the Balance Sheet the way provisions and accrued expenses are (Teichroew, 2002). Rather the estimated amount of the contingent liabilities is disclosed by way of notes to the balance sheet.

Aborode (2006) contended that debt/equity ratio expresses total funds generated from outside sources as a percentage of shareholders or owner's interest. When debt ratio and debt/equity ratio are high, they indicate that the company is having stability problems (Omorokpe, 2006). That is because, if debt capital holders decide to pull out their funds from the company, the operation of the company may collapse and as such, it is advised that a company should maintain a low gearing ratio (Essien, 2004). Debt/equity ratio is calculated as debt capital (total debts) divided by equity (net worth). While debt capital is the proportion of capital sourced externally, equity capital (net worth) is the amount of capital sourced internally or from the business owner(s) (Solomon, 2004).

A low debt-equity ratio implies a greater claim of owners than creditors. Afemikhe (2003) opined that, from the point of view of creditors, it represents a satisfactory situation since a high proportion of equity provides a larger margin of safety for them. During the periods of low profits, the debt servicing will prove to be less burdensome for a company with low debt ÷ equity ratio. Thus, Smith (2002) concluded that, there is a need to strike a proper balance between the use of debt and equity. The most appropriate debt-equity combination would involve a trade-off between return and risk (Pandy, 2005).

Interpretation of debt ÷ ratio needs caution. Companies do not show some fixed obligations in the balance sheet but state them in the notes to the annual accounts (Searby, 2005).

Liabilities arising out of the possible payment of pension benefits are an example. Similarly, some of the contingent liabilities may become real liabilities. Therefore, Scott and Moore (2003) advised that, they should not be ignored while analyzing financial leverage and risk of the firm.

Agara (2005) advised that, where there is acquisition of fixed assets by lease, the outstanding lease obligation should be included as debt in the calculation of gearing ratios adding that, the debt/equity ratio of 4:1 is the recommended standard.

Wood and Sangster (2002b) noted that interest coverage ratio as a gearing ratio; shows whether enough profit are being earned to meet interest payment when due. Igben (2004) argued that interest coverage ratio is a measure of the number of times interest is covered by profit. Igben added that the higher the ratio; the higher the level of confidence of lenders in the ability of the company to repay loans granted to it and vice versa. Essien (2004) opined that interest coverage demonstrates the number of times the operating profit of a business cover fixed interest charges paid to its financiers. It, therefore, indicates the ability of a company to pay the interest on its borrowing to avoid possible litigation or liquidation by the creditors. Agara (2006), summarized that, interest coverage ratio shows the number of times profits are available for interest payments. Peterson (2007) maintained that, interest coverage measure the amount of interest paid by a company on its borrowings against its operating profit in the same period. Aborode (2006) contended that interest coverage ratio is expressed as operating profit divided by interest expense.

Essien (2004) stated that, operating profit is profit obtained before deducting interest and tax while interest charges (expenses) is the cost of the amount borrowed. Peterson (2007) upheld that operating profit is that profit earned by a company after deducting its operating costs from gross profit.

Martin, et al (2005) maintained that interest coverage measures that amount of interest paid by a company on its borrowings against its operating profit in the same period.

Furthermore, on gearing ratios, Asaolu (2005) upheld that capital employed to net worth ratio is another way of expressing the relationship between debts and owner's funds. Asaolu stressed that the ratio shows how much funds are being contributed together by lenders and owners for each naira of owner's contribution. The ratio compares capital employed to net worth (or net assets less current liabilities). Olatunji (2002) described capital employed as the excess of total assets over current liabilities. Longe and Kazeem (2006) pointed that capital employed is simply assets less current liabilities.

However, for the sake of computing capital employed to net worth ratio, capital employed consist of net worth plus borrowing while net worth consists of share capital plus reserve.

Agara (2005) remarked that capital employed to net worth ratio is expressed as capital employed divided by net worth or net assets divided by net worth.

Agara also mentioned that, income gearing being a gearing ratio compares interest charges to earnings (profits) before interest and taxes. The ratio shows the extent of the earnings (profits) before tax which is covered by interest charges. Gearing ratio is determined by dividing interest charges by earning before interest and taxes

Income gearing measures the level of a firm's income relative to its interest commitments (or interest cover). Wood and Sangster (2002b) concluded that gearing (stability) ratios are long-term in nature, being concerned more with the strategic rather than with the operational level of corporate decision making.

Profitability Ratios Applied in Measuring Performance and Effectiveness of Business Enterprises

A company should earn profits to survive and grow over a long period of time. Profits are essential, but it would be wrong to assume that every action initiated by management of a company should be aimed at maximizing profits, irrespective of concerns for customers, employees, suppliers or social consequences (Pandy, 2005). It is unfortunate that the word 'profit' is looked upon as a term of abuse since some firms always want to maximize profits at the cost of employees, customers and society. ICAN (2006) reported that except such infrequent cases, it is a fact that sufficient profits must be earned to sustain the operations of

the business to be able to obtain funds from investors for expansion and growth and to contribute towards the social overheads for the welfare of the society.

Profit is the difference between revenues and expenses over a period of time (usually one year). Profit is the ultimate 'output' of a company, and it will have no future if it fails to make sufficient profits (Magee, 2003). Therefore, the financial manager should continuously evaluate the efficiency of the company. Weaver (2003) observed that besides management of the company, creditors and owners are also interested in the profitability of the firm. Creditors want to get interest and repayment of principal regularly. Owners want to get a required rate of return on their investment. This is possible only when the company earns enough profits, Weaver added.

Generally, two major types of profitability ratios are calculated: profitability in relation to sales; and profitability in relation to investment (Teichroew, et al (2002). Profitability ratios measure the effectiveness of the management as shown by the returns obtained on sales and capital invested (Olatunji, 2002). Wood and Sangster (2002a) remarked that profitability measures indicate whether the company is performing satisfactory. They are used, among other things, to measure the performance of management, to identify whether a company may be a worthwhile investment opportunity, and to determine a company's performance relative to its competitors (Gitman, Forrester and Forrester, 2005). Agara (2005) buttressed that profitability ratios measure the overall performance and effectiveness of the firm.

Udi and Omorokpe (2006) opined that the ratios measure the adequacy of profit by comparing with one or more primary activities or factors that are measured in the financial statements. Udi and Omorokpe further explained that several different tests of profitability are commonly used but all boil down to (a) the showing of profitability in relation to sales or turnover and (b) the showing of profitability in relation to capital employed or investment. Together, they indicate the efficiency of the firm's operation. Longe and Kazeem (2006) emphasized that profitability ratio measures the profit earned over the period and capital employed at the end of the year noting that, this will show the effectiveness of the management team.

Omorokpe (2006) contended that profitability ratios measure the adequacy of profit by comparing with one or more primary activities or factors that are measured in the financial statements. Asaolu (2005) maintained that, the following measures can be taken in order to improve profitability of a business. Increasing the sales volume without necessarily increasing the cost of sales proportionately, reducing any item that increases the cost of sales e.g. cutting down on purchases and carriage inwards, or increasing the closing stock; and a cut down of the amount of expenses would take less out of the gross profit and consequently increase the net profit.

There are a good number of profitability ratios as revealed by the following discussion. Return on capital employed ratio gives a very good indication of the efficiency of the management of business in utilizing its assets (Olatunji, 2002). Alpin and Casler (2005) posited that an adequate return on capital employed is why people invest their money in a business in the first instance. They added that return on capital employed ratio illustrates that, what is important is not simply how much profit has been made but how well the capital has been employed. Meltzer (2002) remarked that the ratio shows the overall profitability of the business and that; it shows the efficiency of management in utilization of the resources placed at its disposal. Return on capital employed is the most important measure of the profitability and efficiency of a business hence; it is referred to as the primary ratio (Runyon, 2005). Ekwere (2005) maintained that return on capital can be explained with the aid of two secondary ratios namely: (a) Profit margin – which relates the profit used in return on capital

employed to sales. Profit margin is given as profit divided by sales multiplied by 100. (b) Assets turnover which measures the efficiency of utilization of assets in generating revenue. These secondary ratios show the number of times assets are turned over during the period. Assets turnover is obtained by dividing sales by capital employed multiplied by 100. Igben (2004) noted that return on capital employed is the product of both secondary ratios as shown: return on capital employed is equal to profit margin multiplied by asset turnover. This is equal to profit divided by sales, multiplied by sales divided by capital employed. This results to profit divided by capital employed

Asaolu (2005) buttressed that a company may be efficient without being profitable, profitable without being efficient or efficient and profitable. Richards and Laughlin (2005) posited that one problem with return on capital employed is that; there is no universal argument as to what constitutes the numerator (i.e. profit) and the denominator (i.e. capital employed).

Aborode (2006) buttressed that the profit used may be any of the following, depending on the school of thought to which the analyst belongs. (i) Operating profit (ii) Profit before tax; and (iii) Profit after tax. Aborode observed that those who argue in favour of operating profit (i.e. profit before adding interest income and deducting interest expenses) say that, it is the only profit which is subject to the operating efficiency or otherwise of management. They argue that the operating efficiency and profitability of a company should be judged only on profit which accrues from the activities controllable by management.

Igben (2000) stated that, those who prefer profit before tax are of the opinion that whether profits accrue from the internal operations of a company or from without, the shareholders and other stakeholders will judge the company on the total profit earned. They also argue that, even though investment income cannot be attributed to the internal operating efficiency of the company, it is never-the-less an indication of efficiency of management to be able to locate and acquire profitable investments. They however argue that tax should be discountenanced because the tax man's rules for ascertaining tax liability of accompany are mostly arbitrary (Igben, 2000).

Omorokpe (2006) noted that, those who prefer profit after tax agree with the views of the preceding school of thought except the issue on taxation. They argue that taxation is a liability which must be suffered by all persons who have received or earned income. Moreover, Omorokpe added, they argue that it is possible to avoid tax by conscious steps on the part of management (for example, fixed assets acquisitions can be timed to maximize capital allowances). It is therefore their opinion that the fact that one company incurs a higher tax liability than similar companies is an indication of that company's inefficiency and vice versa.

On the other perspective, Igben (2004) upheld that the capital employed used in computing return on capital employed could be any of the following: Fixed assets plus working capital which also means shareholders funds plus long-term liabilities, total assets; and net assets which also mean shareholder's funds.

Another type of profitability ratio is gross profit ratio. It shows the gross profit expressed as a percentage of sales. Miller and Daniel (2004) posited that gross profit as percentage of sales is among the ratios that are in common use for the purpose of comparing one period's results against those of the previous period. Osteryoung (2004) maintained that gross profit percentage (gross margin) ratio shows the average profit on goods sold. It shows the profit relative to sales after deducting direct costs.

Jones (2004) opined that gross profit margin can be expressed as sales less cost of sales divided by sales or as gross profit divided by sales. Jones further noted that the ratio reflects the efficiency with which management produces each unit of product. It indicates the

efficiency in utilizing raw materials and other inputs for production. Weston (2001) stated that gross profit margin is a key ratio for most types of businesses, and it is simply the gross profit expressed as a percentage of sales (or turnover). The gross margin measures the efficiency of the main area of activity (i.e. buying and selling). Gross margin has to cover for final profit (net profit) (Anderson and Boyd-Harman, 2005). However in business which naturally have many overheads (i.e. hotel and catering industry) the gross profit needs to form a large percentage of sales in order to cover those overheads (i.e. a large gross profit margin) (Smith, 2002). Other businesses with reduced expenses can manage with a low profit margin.

Smith elaborated that, the main thing is that the margin should remain at a fairly constant level year by year and should therefore be compared with previous years. This is because, as sales increase (or decrease), cost of sales should increase (or decrease) in proportion, so that although the gross profit amount changes, its relationship with the changed sales or turnover value is the same (Archer, 2004).

Searby (2002) contended that fluctuation in gross profit ratio can occur because of the following reasons: changes in buying policies, changes in personnel, changes in selling prices, stock losses due to depreciation; obsolescence, changes in volume of output; and changes in basis of stock valuation.

Udi and Omorokpe (2006) explained that, if there is a significant change in the percentage figure of gross profit margin, it should be investigated. If it has fallen, it could be due to increased costs of supplies not being passed to selling price, or it could be due to reduced selling prices, whilst cost of supplies remains same. The latter reason is sometimes accompanied by a large increase in the volume of sales (due to a cut in selling price) Udi and Omorokpe, added.

Lordan (2002) echoed that for a mono-product company, the gross profit percentage (ratio) should correspond to the trade mark-up. For a multi-product company which does not apply a uniform trade mark-up to all the different lines of goods sold, a different gross margin should be calculated for each line of goods. Lordan buttressed that, before placing a reliance on the gross margin computed, the factors to be considered are stock valuation method *if* did this change during the year?, trade discount granted to customers; purchase or production cost; and sales mix. As stated in the preceding paragraphs, gross profit margin is expressed as gross profit divided by sales, multiplied by 100.

Akintelure and Oguobi (2003) upheld that, gross profit is the difference between turnover (sales) and cost of goods sold. It is not the actual profit made by a business organization. They argued that gross profit can be used in several ways; for example, to compare the performance of one business with another and to help in taking certain progressive business decisions with the pricing of goods for sale. On the other hand, Longe and Kazeem (2006) described sales as the total of cash and credit sales made during the trading period. Sales are credited to the trading account and do not include sales of fixed assets. Agara (2006) advised that, in the absence of gross profit, gross profit margin can be obtained by deducting cost of sales from sales and dividing by sales. Cost of sales is defined as the goods actually sold. Peterson (2007) concluded that, it is the cost of producing goods. Similarly, with a retailer or distributor type of business, cost of sales is the cost of purchasing goods prior to their resale.

Pandy (2006) stated that the first profitability ratio in relation to sales is the gross profit margin (or simply gross margin ratio). The gross profit margin reflects the efficiency with which management produces each unit of product. This ratio indicates the average spread between the cost of goods sold and the sales revenue. Pandy emphasized that, when the gross profit margin is subtracted from 100 percent, the result is the ratio of cost of goods sold to sales. Both these ratios show profits relative to sales after the deduction of production costs,

and indicate the relation between production costs and selling price. A high gross profit margin relative to the industry average implies that the firm is able to produce at relatively lower cost (Myers, 2003).

Carleton, Dick and Downes (2003) contended that a high gross profit margin ratio is a sign of good management. A gross margin ratio may increase due to any of the following factors: higher sales prices, cost of goods sold remaining constant, lower cost of goods sold, sales price remaining constant, a combination of variations in sales prices and costs, the margin widening; and an increase in the proportionate volume of higher margin items. The analysis of these factors will reveal to the management how a depressed gross profit margin can be improved, Carleton et al, added.

A low gross profit margin may reflect higher cost of goods sold due to the firm's inability to purchase raw materials at favourable terms, inefficient utilization of plant and machinery, or over-investment in plant and machinery, resulting in higher cost of production. The ratio will also be low due to a fall in prices in the market, or marked reduction in selling price by the firm in an attempt to obtain large sales volume, the cost of goods sold remaining unchanged. The financial manager must be able to detect the causes of a falling gross margin and initiate action to improve the situation.

Net profit margin as a ratio is also used in measuring the profitability of a business. Net profit margin (Net profit percentage) is a ratio that expresses net profit as a percentage of sales.

Igben (2004) buttressed that this ratio expresses the relative profitability of a business after taking into account all incomes and all expenses. It is an indicator of a business ability to withstand adverse conditions, which may arise from several sources, including falling prices: If the general price level in the market place falls, does the business have a sufficient margin to drop its price and still remain profitable?, rising cost: If the business is caught in a period of rising costs when it cannot raise its prices, will the business continue to be profitable?; and can the business withstand unexpected drop in volume of goods sold and still show a profit? (Dauten, 2005).

Agara (2006) opined that, Net profit margin indicates the firm's ability to turn every naira of sales into profit, which will increase the shareholders fund. Agara remarked that; it shows the ability to manage production cost, selling cost, and administrative cost. Longe and Kazeem (2006) asserted that Net profit margin shows whether or not the expenses of running a business are in proportion to the amount of trade.

Omorokpe (2006) buttressed that net profit margin is an extension of gross profit margin, i.e allowing for expenses. It is simply, the proportion that net profit bears to the total net sales (or turnover) of an accounting entity for a period (Udi and Omorokpe, 2006). The ratio is an indicator of the extent to which sales have been profitable. Asaolu (2005) pointed that net profit margin can be expressed as net profit divided by sales, multiplied by 100. Akintelure and Oguobi (2003) described net profit as the difference between gross profit and business expenses. Longe and Kazeem (2006) noted that net profit is that profit arrived at after deducting all expenses incurred in a period.

Pandy (2005) maintained that, net profit margin ratio establishes a relationship between net profit and sales and indicates management's efficiency in manufacturing, administering and selling the products. Pandy added that, this ratio is the overall measure of the firm's ability to turn each naira sales into net profit. If the net margin is inadequate, the firm will fail to achieve satisfactory return on shareholders' funds.

Net profit margin ratio also indicates the firm's capacity to withstand adverse economic conditions (Chambers, Mullick and Smith, 2002). A firm with a high net margin ratio would be in an advantageous position to survive in the face of falling selling prices, rising costs of

production or declining demand for the product. Chambers et al also noted that it would really be difficult for a low net margin firm to withstand these adversities. Similarly, a firm with high net profit margin can make better use of favourable conditions, such as rising selling prices, falling costs of production or increasing demand for the product. Such a firm will be able to accelerate its profits at a faster rate than a firm with a low net profit margin (Radcliffe, 2005).

Solomon (2004) stated that an analyst will be able to interpret the firm's profitability more meaningfully if he/she evaluates both ratios – gross margin and net margin – jointly. To illustrate, if the gross profit margin has increased over years, but the net profit margin has either remained constant or declined, or has not increased as fast as the gross margin, this implies that the operating expenses should be identified and controlled. Gross profit margin will decline unless operating expenses decrease significantly. The crux of the argument is that both ratios should be jointly analyzed and each item of expense should be thoroughly investigated to find out the causes of decline in any or both ratios (Archer and D'Ambrosio, 2004).

Furthermore, the operating efficiency of management of a firm can be determined with the help of operating expenses ratio (Omorokpe, 2006). This ratio compares operating expenses to sales and is however affected by the controllability of the expenses considered, the variability in sales, change in the selling and administrative expenses, and change in task and demand for the product (Agara, 2005). Okechukwu, et al (2004) posited that operating expenses are those expenses incurred in the course of running a business. Operating expenses ratio is given as operating expenses divided by sales. Similarly, the ratio that shows the relative weight of each item of expenses in relation to total expenses is called expenses ratio (Igben, 2004). It is given as individual expenses divided by total expenses, multiplied by 100. Igben (2004) asserted that when expenses ratio is compared with the previous year's ratio, it could disclose some useful information. For instance, Igben observed that, if salaries and wages was 15% of total expenses the year before but had now doubled to 30% in the current year without any substantial increase in the number or remuneration of employees, this could be thoroughly investigated. It could be due to the entry of ghost workers into the payroll. An equally acceptable explanation could be the success of management in cutting other cost thereby increasing the relative weight of salaries and wages even though total expenses may have fallen (Ekwere 2005).

What does operating expense ratio reveal? A higher operating expenses ratio is unfavourable since it will leave a small amount of operating income to meet interest, dividends, etc (Pandy, 2005). Chisholm and Whitaker (2002) noted that to get a comprehensive idea of the behaviour of operating expenses, variations in the ratio over a number of years should be studied. Certain expenses are within the managerial discretion; therefore, it should be seen whether change in discretionary expenses is due to changes in the management policy.

Detailed analysis may reveal that the year – to – year variations in the operating expenses ratio are temporary in nature arising due to some temporary conditions (Pappas and Huber, 2002). According to Pappas and Huber, the variation in the ratio, temporary or long lived, can occur due to several factors such as; (a) changes in the sales prices, (b) change in the demand for the product, (c) changes in the administrative or selling expenses, or (d) changes in the proportionate shares of sales of different products with varying gross margins. These and other causes of variations in the operating ratio should be thoroughly examined.

Scott and Moore (2003) asserted that the operating expense ratio is a yardstick of operating efficiency, but it should be used cautiously. According to them, It is affected by a number of factors, such as external uncontrollable factors, internal factors, employees and managerial

efficiency (or inefficiency), all of which are difficult to analyze. Further, the ratio cannot be used as a test of financial condition in the case of those firms where non-operating revenue and expenses form a substantial part of the total income (Pandy, 2005).

The operating expenses ratio indicates the average aggregate variations in expenses, where some of the expenses may be increasing while others may be falling. Thus, Orgler (2003) concluded that to know the behaviour of specific expense items, the ratio of each individual operating expense to sale should be calculated. These ratios when compared from year to year for the firm will throw light on managerial policies and programmes. For example, the increasing selling expense, without a sufficient increase in sales, can imply uncontrolled sales promotional expenditure, inefficiency of the marketing department, general rise in selling expenses, or introduction of better substitutes by competitors (Jones, 2004). The expenses ratio of the firm should be compared with the ratios of the similar firms and the industry average. This will reveal whether the firm is paying higher or lower salaries to its employees as compared to other firm; whether its capacity utilization is high or low; whether the salesmen are given enough commission; whether it is unnecessarily spending on advertisement and other sales promotional activities; whether its cost of production is high or low and so on (Smith, 2002).

Again, Asaolu (2005) maintained that expenses to sales ratio helps to highlight the source of the improvement or deterioration in the net profit to sales percentage. This ratio is expressed as individual expenses divided by sales, multiplied by 100.

Asaolu noted that, if expenses to sales ratio increase in respect of an expense, that expense must have caused deterioration in profits because it has risen at a faster rate than sales or fallen at a slower rate than sales. The converse argument holds for decrease in the ratio.

Activity Ratios Applied in Measuring the Efficiency with which Business Enterprises utilize Assets to Generate Cash Flow

In addition to the determination of liquidity, stability and profitability of a business, management is also faced with the challenge of knowing how the daily activities of a business are conducted. By so doing, they direct the computation of activity ratios. Wood and Sangster (2002a) maintained that, profitability is affected by the way that the assets of a business are used. If plant and machinery are used only for a few hours a day, the business is failing to utilize these assets efficiently. This may be because; there is limited demand for the product produced. Wood and Sangster elaborated that; it could be due to the business restricting supply in order to maximize profitability per unit produced.

On the other hand, it could be that there is shortage of skilled labour and that there is no one to operate the plant and machinery the rest of the time. Alternatively, Aborode (2006) argued that, it could be that the plant and machinery is unreliable, breaking down a lot, and that the limited level of use is a precautionary measure designed to ensure that production targets are met.

Asaolu (2005) upheld that, in common with all accounting ratios, it is important that the results of efficiency (activity) ratio computations are not treated as definitively good or bad. Asaolu also advised that, they must be investigated further through considering both of the underlying variables in the ratios, and of the broader context of the business and its relation to the industrial sector in which it operates.

Agara (2005) maintained that, activity ratios measure the firm's efficiency in utilizing its assets to generate cash flow, that is, how efficient the firm converts its current assets to cash. Udi and Omorokpe (2006) explained that efficiency (activity) ratios provide a measure of how quickly outstanding debts are collected (and payments made to creditors), and how effective management is making money to work for the success of the business.

Gupta (2006) posited that funds of creditors and owners are invested in various assets to generate sales and profits. The better the management of assets, the larger the amount of sales. Activity ratios are employed to evaluate the efficiency with which the firm manages and utilizes its assets. These ratios are also called turnover ratios because they indicate the speed with which assets are being converted or turned over into sales. Activity ratios, thus, involve a relationship between sales and assets (Orgler, 2003). A proper balance between sales and assets generally reflects that assets are managed well (Altman, 2005). Several activity ratios can be calculated to judge the effectiveness of asset utilization.

Among the activity (efficiency) ratios is stock turnover ratio. This ratio is included in virtually every case where accounting ratios are being calculated (Longe and Kazeem, 2006). Wood and Sangster (2002b) posited that, stock turnover measures the number of times (approximately) that stock is replenished in an accounting period. They contended that, there are two major difficulties in computing the stock turnover ratio: (1) If cost of sale is not available, it is tempting to use sales instead. This should not be done. Sales are expressed at selling prices; stock is expressed at cost price. Use of sales instead of cost of sales in the equation will not be comparing like with like. (2) There are at least, three possible stock values that could be used; opening, closing and average of these figures. The average figure would be the more commonly used, but use of any of the three can be justified.

Ekwere (2005) asserted that, which ever approach is taken, the result will, at best, be a crude estimate. Due to seasonality of the business, stock, as shown in the balance sheet for example, may not be representative of the 'normal' level of stock. However, Ekwere emphasized that, it is still useful for comparing trends over time and should be used mainly for that purpose. The result needs careful consideration.

Olatunji (2002) explained that, a rising stock turnover may indicate greater efficiency, or it may be an indicator that stocks are being run down and that there may be problems in meeting demand in future. In addition, Olatunji buttressed that, a falling stock turnover may indicate lower efficiency, perhaps with a build-up of obsolete stocks, or it could indicate that higher stock volumes are being held because stock purchasing has become efficient and the higher stock levels are financially beneficial for the company, it is however important not to overlook that any change in the ratio may have nothing to do with the stock, but be due to changes in factors relating to the sales for the period (Okechukwu, et al 2004).

Igben (2005) pointed that, stock-turnover (stock turn) ratio measures the physical turnover. Igben added that, a turnover of trading stock spans the period from the date the goods are purchased or produced to the date they are sold. The shorter this period, the higher the rate of turnover in the accounting period and, vice versa; *ceteris paribus* (Igben, 2000).

Agara (2005) buttressed that stock (inventory) turnover indicates the efficiency of the firm in producing and selling its products. That it shows how rapidly inventory is turning into receivable through sales. Agara echoed that, a high inventory turnover is indicative of good inventory management. However, a careful analysis should be made to ensure that the high rate is not achieved through maintaining a low closing stock figure, which constantly resulted in stock out situations. Udi and Omorokpe (2006) noted that, for some businesses; such as wholesales and retailes, a high stock turnover ratio is essential in order to make any profit and that, a low stock turnover will indicate the presence of slow moving stock, which should be disposed off rapidly. Stock turnover ratio is expressed as cost of good sold divided by Average inventory, multiplied by time.

Wood and Sangster (2002b) observed that, stock turn (inventory or stock turnover) ratio can be expressed as number of days ÷ the number of days stock is held. To achieve this, 365 days (in a year) is divided by the number of times stock is turnover for that year. Alternatively, it

can be obtained by dividing cost of sales by average stock (average inventory) and multiplying by 365 days (Aborode, 2006). Agara (2005) and Aborode (2006) posited that, where the cost of sales is not available, stock turnover ratio can be expressed as sales divided by average inventory or sales divided by closing inventory.

Agara and Aborode further maintained that, closing inventory should only be used where the opening inventory figure is not available. Agara (2005) noted that, the days of inventory holding are calculated as 360 divided by inventory turnover. That is, average Inventory divided by cost of sales, multiplied by 360 days. For manufacturing: (a) Raw materials inventory turnover is equal to raw material consumed divided by Average Raw Material Inventory; (b) work-in-progress inventory turnover is equal to cost of production divided by average work-in-progress inventory.

Average inventory (average stock) is obtained by adding stock to closing stock and dividing by two, while closing stock (closing inventory) is the stock available at the end of the trading period (Longe and Kazeem, 2006). Akintelure and Oguobi (2003) opined that, Work-in-Progress (W.I.P) is a term used to indicate partly manufactured goods. That is, goods which have passed from the raw material stage but for one reason or the other, have not yet reached the finished goods stage. They contended that, raw material consumed refers to the total of goods which have been used in the production of goods manufactured.

Like the average stock, average raw material inventory is obtained by adding opening raw material inventory to closing raw material inventory and dividing by two. Similarly, to obtain average Work-in-progress inventory, simply add opening work-in-progress to closing work-in-progress and divide by two (Olatunji, 2002). Finally, Akintelure and Oguobi (2003) explained that, when the total of all factory overheads are added together with prime cost, the result is total production cost.

Miller (2007) noted that the inventory turnover shows how rapidly the inventory is turning into receivable through sales. Generally, a high inventory turnover is indicative of good inventory management. A low inventory turnover implies excessive inventory levels than warranted by production and sales activities, or a slow moving or obsolete inventory. A high level of sluggish inventory amounts to unnecessary tie-up of funds, reduced profit and increased costs. If the obsolete inventories have to be written off, this will adversely affect the working capital and liquidity position of the firm. However, a relatively high inventory turnover should be carefully analyzed (Pandy, 2005). A high inventory turnover may be the result of a very low level of inventory, which results in frequent stock outs; the firm may be living from hand-to-mouth (Foster, 2002). The turnover will also be high if the firm replenishes its inventory in too many small lot sizes, Foster added. The situations of frequent stock outs and too many small inventory replacements are costly for the firm. Thus, too high and too low inventory turnover ratios should be investigated further. The computation of inventory turnovers for individual components of inventory may help to detect the imbalanced investments in the various inventory components (Altman, Haldeman and Narayan, 2003).

Further, Debtors turnover is another efficiency (activity) ratio that depicts the number of times the business could collect its debt from the good debtors in a year, and for sales. A firm sells goods for cash and credit. Credit is used as a marketing tool by a number of companies. When the firm extends credit to its customers, debtors (accounts receivables) are created in the firm's accounts. Debtors are convertible into cash over a short period and, therefore, are included in current assets. Butters (2003) noted that the liquidity position of the firm depends on the quality of debtors to a great extent.

Igben (2000) argued that debtors turnover expresses the number of times trade debtors are turned over during the reporting period. Where trade debtor average is not available for computation of debtors collection period and debtor turnover ratio, closing trade debtors should be used (Asaolu, 2005). Average trade debtors is preferable to closing trade debtors because, whereas the former reflects the trade debtor's position throughout the year as much as possible, the latter reflects the trade debtor's position at the year end; Asaolu added. Igben (2004) posited that, where management/interim accounts are prepared, all the trade debtors are averaged so that the average trade debtors figure obtained is even more representative of the trade debtor's position throughout the year.

Agara (2005) buttressed that, Debtor's turnover indicates the number of times debtors turnover (time debts are collected) each year, indicating the level of debtor's management. The higher the rate, the more efficient the management of debtors. Debtors's turnover ratio is given as credit sales divided by average trade debtors. Whereas, credit sales are sales arising from goods sold without immediate payment for them, average trade debtors is the summation of opening and closing debtors divided by two (Longe and Kazeem, 2006). Agara also noted that where the opening debtors and credit sales are not available, the ratio should be determined as sales divided by closing debtors.

Opening debtors are those at the beginning of the trading period while closing debtors are those reflecting at the end of the trading period. Closing turnover is another measure of the activity or efficiency of management in a business organization. Creditor's turnover ratio measures the number of times trade creditors are turned over during the period. Udi and Omorokpe (2006) asserted that, the ratio is used to monitor how long it takes to pay supplies. When a business is experiencing a shortage of cash, it will delay payment to creditors as long as possible and thus risk possible bankruptcy proceedings (Omorokpe, 2006). Igben (2004) stated that, creditors's turnover is expressed as credit purchases divided by average trade creditors.

Okechukwu, et al (2004) maintained that, while credit purchases stand for purchases made without immediate payment for the items being effected, average trade creditors represent the average of creditors at the beginning and end of the period. Igben (2000) explained that, where trade creditor average is not available for the determination of creditor's payment period and creditors's turnover ratio, closing trade creditors should be used. Average trade creditor is preferable to closing trade creditor for reason similar to those advanced for average trade debtors (Asaolu, 2005).

The activity (efficiency) of management can also be measured using debtors's collection period and creditor's payment period. Wood and Sangster (2002b) noted that, debtors collection period (DCP) ratio measures the average number of days for which trade debts remain uncollected. According to them, both the trade debtors and sales figures must be VAT inclusive. Omorokpe (2006) stated that, debtors collection period can be measured as average trade debtors divided by credit sales, multiplied by 365 days.

Igben (2006) opined that, to express this ratio in weeks or months, the numerator will be 52 weeks or 12 months instead of 365 days. Pandey (2005) asserted that the average collection period measures the quality of debtors since it indicates the speed of their collection. The shorter the average collection period, the better the quality of debtors, since a short collection period implies the prompt payments by debtors (Barges, 2005). The average collection period should be compared against the firm's credit terms and policy to judge its credit and collection efficiency. For example, if the credit period granted by a firm is 35 days, and its average collection period is 50 days, the comparison reveals that the firm's debtors are outstanding for a longer period than warranted by the credit period of 35 days.

Kennedy (2004) contended that an excessively long collection period implies a very liberal and inefficient credit and collection performance. This certainly delays the collection of cash and impairs the firm's liquidity. The chances of bad debt losses are also increased, Kennedy added. On the other hand, a low collection period is not necessarily favourable. Rather, it may indicate a very restrictive credit and collection policy. Because of the fear of bad debt losses, the firm sells only to those customers whose financial conditions are undoubtedly sound, and who are very prompt in making the payment (Anthony and Reece, 2002). Such a policy succeeds in avoiding the bad debt losses, but it so severely curtails sales that overall profits are reduced, Anthony and Reece added. Osiebu (2005) upheld that the firm should consider relaxing its credit and collection policy to enhance the sale level and improve profitability. In addition to measuring the firm's credit-and-collection efficiency with its own credit terms, the analyst must compare the firm's average collection period with the industry average (Smith and Hague, 2006).

They further noted that if there is a great divergence between the industry average and the firm's average collection period, the analyst must investigate the causes. The investigation may reveal that the firm manages its debtors more efficiently or inefficiently than the industry, or its credit policy is too liberal or too restrictive. This may warrant a change in the credit policy. Smith and Hague further buttresses that, the effect of the changes in the firm's existing credit policy on sales, profits and liquidity should be analyzed.

Pandy (2005) stated that, the collection period ratio thus helps an analyst in two respects: In determining the collectability of debtors and thus, the efficiency of collection efforts, and in ascertaining the firm's comparative strength and advantage relative to its credit policy and performance vis-à-vis the competitor's credit policies and performance. It is useful to examine trend in average collection period to know the firm's collection experience.

Pandy explained that the average collection period measures the equality of debtors through the aging schedule. The aging schedule breaks down debtors according to the length of time for which they have been outstanding. The aging schedule gives more information than the collection period, and very clearly spots out the slow-paying debtors (Myers, 2003).

On the other hand, creditors payment period (CPP) ratio measures the average number of days for which trade creditors remain unpaid. Both the trade creditors and purchases figures must be VAT inclusive (Essien, 2004). This ratio is given as average trade creditors divided by credit purchase, multiplied by 365 days.

Furthermore, asset turnover can be used to determine the efficiency of small scale industries management. Asaolu (2005) contended that, asset turnover is a measure of how effectively the assets are being used to generate sales. Ekwere (2005) posited that, assets turnover ratio shows the proportion of sale per naira of assets used for operations or employed during the period. Wood and Sangster (2002b) noted that, where a company's asset turnover is significantly lower than that of its competitors, it suggest there may be over investment in assets which could, in turn, make the company vulnerable to take over by a company interested in selling off any surplus asset while otherwise, retaining the business in its current form. However, Igben (2006) asserted that, considerable care must be taken when interpreting asset turnover ratio: the assets may be much newer than those of another company(ies); the company may use a lower rate of depreciation than its competitors; or the company may purchase its plant and machinery, whereas, the industry norm is to lease them. Wood and Sangster (2002a) observed that, on the other side of asset turnover ratio, the result may be high because selling prices are being suppressed in order to maximize volume.

Agara (2005) maintained that, in interpreting asset turnover ratio, consideration should be given to the time of acquisition of the assets used in production, time of fund injection, state

of the fixed assets, etc. Omorokpe (2006) buttressed that, where the assets are acquired during the end of the period, they may not have generated enough production for sale. The same applies for funds. That is, if additional funds are gotten only towards the end of the year, such funds may not have been fully utilized during the year and so there may be a relative fall in the ratio. The determining factor will be time during which the assets and the additional funds were in use. Assets turnover ratio compares sales to total assets less current liabilities (Miller, 2007).

Agara (2005) pointed that asset turnover ratio can be expressed as: (a) net assets turnover or capital employed turnover is equal to sales divided by net assets, (b) current assets turnover is equal to sales divided by current assets, (c) total assets turnover is equal to sales divided by total assets; and (d) fixed assets turnover is equal to sales divided by net fixed assets.

Cash Flow Statement Applied in Reporting Cash Flow of Business Enterprises

Prior to the introduction of cash flow statement by statement of accounting standards number 18 (SAS No. 18), companies in Nigeria were preparing statement of Sources and Application of Funds as a parameter for evaluating corporate liquidity (ICAN, 2006). Statement of Sources and Application of Funds is based on movements in working capital.

ICAN (2006) explained that while cash comprises cash on hand and demand deposits denominated in naira and foreign currencies; cash equivalents are short-term, highly liquid investments that are readily convertible to known amount of cash and which are subjected to an insignificant risk in value. ICAN also added that cash flows are inflows and outflows of cash and cash equivalents.

Working capital encompasses cash, cash equivalent and other assets convertible into cash within an accounting year such as stock and debtors. Omorokpe (2006) stated that, the focus of a statement of sources and application of funds is on changes in working capital.

Omorokpe added that, this creates problem of interpretation, as positive working capital does not necessarily indicate positive cash flow, nor does negative working capital necessarily indicate illiquidity. Other problems associated with the statement include; ambiguity in the definition of funds, non-inclusion or unclear presentation of cash flows in the statement and inconsistent presentation (Afemikhe, 2003).

ICAN (2006) reported that paragraph 3 of SAS No. 18 states that the main reason why the statement of cash flows, is now regarded as a preferred parameter for evaluating corporate liquidity is that the statement of sources and application of funds based on movement in working capital can obscure movements relevant to assessing the viability and liquidity of an enterprise. For example, it is argued that a potentially disastrous decrease in cash available can be masked by an increase in stock or debtors. Enterprises may, therefore, run out of cash while reporting increases in working capital.

It is the above deficiency that led to the introduction of cash flow statement to replace statement of sources and application of funds. A statement of cash flow is one setting out for a business enterprise, the cash receipts and their sources, on the one hand, and cash payments and for what purposes they were made, on the other hand, during the reporting period (Igben, 2004). Aborode (2006) asserted that cash flow statement refers to the classified lists of the origins and destinations of cash flows. (i.e. cash receipts and cash payments) within a business. From such a list, an insight can be gained into the liquidity, viability and financial adaptability of the business together with its cash generating and absorption mechanisms, thus, providing a basis for the assessment of the future, Omorokpe further explained.

ICAN (2006) asserted that cash flow statement is financial information that shows the cash flows and outflows of an enterprise, in a given accounting year or a reporting period, but excludes inflows arising from changes in cash, as a result of the purchase and liquidation of

cash equivalents. It is prepared to assist users of financial statement to know the pattern of cash and cash equivalent generation and utilization by an enterprise in a given reporting period. Nwankwo (2004) noted that, the statement therefore reveals the ability of the enterprise to generate cash and cash equivalent, and assist users of financial statement to assess properly the liquidity position of the enterprise since cash is the ultimate measure of liquidity. To that extent, cash flow statement is a veritable tool in financial reporting for assessing the corporate liquidity of both group and non-group company (Aborode, 2006). The cash flow statement reports cash flow. Wood and Sangster (2002b) explained that, cash flow is an increase or decrease in cash or cash equivalents as a result of a transaction. Cash equivalents are short-term highly liquid investments with original maturities of three months or less that are readily convertible to cash and whose value is unlikely to change. Wood and Sangster further noted that basically, a cash flow statement show where the cash funds came from, and where they have gone to, as shown in Figure 2.

CASH COMES FROM	CASH GOES TO
1. Profits	1. Losses
2. Sales of Fixed Assets	2. Purchase of Fixed Assets
3. Decrease in Stock	3. Increase in Stock
4. Decrease in Debtors	4. Increase in Debtor
5. Capital Introduced	5. Drawings / Dividend
6. Loans Received	6. Loans Repaid
7. Increase in Creditors	7. Decrease in Creditors

Figure 2: Cash Movement in a Business Organization
Wood, F. and Sangster, A. (2002a). Business Accounting 1.

From the diagram in figure 2, it can be observed that Profits bring a flow of cash into the business; Losses take cash out of it, the cash received from sales of fixed assets comes into the business; a purchase of fixed assets takes it out, reducing stock in the normal course of business means turning it into cash; an increase in stock ties up cash funds; and a reduction in debtors means that the extra amount paid comes into the business as cash; letting debtors increase stops that extra amount of cash coming in. it can also be observed that an increase in a sole proprietor's capital, or issues of share in a company, brings cash in; drawings or dividend takes it out, loans received in cash, while their repayment reduces cash; and an increase in creditors keeps the extra cash in the business; a decrease in creditors means that their repayments take cash out.

Wood and Sangster (2002a) stressed that, if, therefore, the cash (and bank) balances are taken at the start of a financial period, and adjusted for cash flows in and out during the financial period, then, the analyst should arrive at the cash (and bank) balances at the end of the period.

ICAN (2006) posited that it is generally agreed that funds flow statement is based on movement in working capital and therefore can obscure movement relevant in assessing the viability and liquidity of an enterprise. For example, a huge decrease in cash available may be masked by a huge increase in stock or debtors. Group and non-group companies therefore run out of cash while reporting increases in working capital. Conversely, a decrease in

working capital does not necessarily indicate cash shortage. This is not the case with cash flow statement, which directs attention to movement in cash and as such cannot obscure movement relevant to the viability of group and non-group companies.

Cash flow statement provides a better means of comparing the result of different group and non-group companies than funds flow statement. There is ambiguity in the definition of the term funds to be adopted by reporting entity. Some group companies will report movement in net liquid funds and some in working capital. Therefore, Igben (2004) concluded that it follows that two companies might prepare a whole range of different funds flow statement where there is no ambiguity in the definition of cash and cash equivalents.

Cash flows can be direct input into a business valuation model for group and non-group companies and therefore historical cash flows may be directly relevant in a way not possible for working capital funds flow information. Cash flow statements are easier to understand since the accrual concept, which appears confusing to many users of financial statement does not apply unlike funds flow statement. Also, cash flow is a concept, which is easier to understand than mere changes in working capital that apply with funds flow statement (Aborode, 2006). Cash flow information of historical nature can be used as an indicator of the amount, timing and certainty of future cash flows. This is not the case with funds flow statement. Cash flow statement satisfies the needs of all users better than funds flow statement. Cash flow statement is easier to prepare than funds flow statement.

ICAN (2005) buttressed that SAS No. 18 classifies cash flows into three broad categories i operating, investing and financing activities. Operating Activities: this involves the normal trading activities of an enterprise i production, delivery of goods or services and other support activities. They consist of those transactions usually included in determining operating profit. Cash flows from operating activities are the cash effects of these transactions. They include, but are not limited to: payments for the purchase of stock, other goods and services from suppliers for cash, payment of salaries, wages and other staff costs, payment of rent, rates, levies, duties and taxes related to the normal operations of the enterprise, cash receipts from sales of goods and services; and dividends received from enterprises where the reporting entity exercise significant control, and holds at least 20% of the investee enterprise's equity.

Investing activities relate to the acquisition and disposal of fixed assets, investments properties, investments and other productive assets held for, or used in producing the enterprise's goods and services other than stock held for processing or resale. Cash flows from investing activities include the following: payments to acquire fixed assets, investment properties, other investments and long term assets, payments relating to increase in fixed assets under construction, payments for debt and equity instruments other than cash equivalents of a third party, payments for the acquisition of the net assets of a subsidiary less any cash and cash equivalents acquired, cash receipts from sales of fixed assets, investment properties, other investments and long term assets, cash receipts from sale or liquidation of debt and equity instruments of the third parties, receipts from sales of the net assets of a subsidiary less cash and cash equivalents, interest received; and dividend received where the reporting entity does not exercise significant control over the investee.

Activities on the other hand include obtaining resources from lenders and owners of the enterprise, and repaying such amounts either as they become due or when they are surplus to the requirements of the enterprises. They also include the payment of returns to the providers of such financing in form of interest and dividend as well as expenses directly related to obtaining the financing. Cash flows from financing activities include: cash proceeds from the issue of equity instruments, cash proceeds from the issue of debentures, bonds, loan stock;

commercial paper and other debt securities, draw-down on loan and overdraft facilities including the discounting of acceptances, repayments on principal on all forms of borrowing, finance lease repayments, payments of interest and dividend, payments relating to the issue of debt and equity securities such as credit related fees, issuing house and underwriting fees, etc., receipts and payments relating to obtaining and repaying long term credit; and payments relating to the acquisition of the enterprise's own equity instruments.

Igben (2004) reported that some items by their nature require classification as to which activities they belong such as exceptional and extraordinary items: cash flows from extraordinary and exceptional transactions whose effect are included in the profit and loss accounts are usually reported under the appropriate standard headings of operation, investing or financing activities – according to the nature of each item. There is usually sufficient disclosure of the nature of cash flows relating to the exceptional item, by way of note (Aborode, 2006).

Interest paid and received: Ekwere (2005) opined that interest paid is usually classified as cash flow from financing activities, while interest received is usually classified as cash flow from investing activities. These classifications are based on the view that operating activities should not be affected by the capital structure decisions of an enterprise.

Dividend received and paid: There is wide agreement that cash flows from dividends received arise from investing activities (ICAN, 2006). It is also held that there may be cases where the investor – company has significant control over the activities of the investee company, ICAN emphasized. In these cases, it is argued that dividends received form part of operating activities. Dividend received can therefore, be classified either as operating activities or investing activities depending on the nature of the dividends. In those cases where the investor – company has significant control over the activities of the investee – company, and hold at least 20% of the equity, dividends received are classified as operating activities (Essien, 2004). Taxation: The total amount of income tax paid is separately disclosed and classified as an operating cash outflow.

ICAN (2006) maintained that the preparation of a statement of cash flows involves five steps: compute the net increase or decrease in cash, compute and report net cash provided (used) by operating activities (using either direct or indirect method), compute and report net cash provided (used) by investing activities, compute and report net cash provided (used) by financing activities; and compute net cash flow by combining net cash provided (used) by operating, investing, and financing activities and then prove it by adding it to the beginning cash balance to show that it equals the ending cash balance. Moreover, all important non-cash investing and financing activities are disclosed in either a note or a separate schedule to the statement (ICAN, 2006).

There are two methods of preparing cash flow statement, namely: direct and indirect methods. The direct method describes the system of reporting operating cash flows whereby an enterprise reports gross cash receipts (cash received from customers) and gross cash payments (such as cash paid for merchandise). The cash payments are subtracted from cash receipts to determine the net cash provided by operating activities (Aborode, 2006).

Omorokpe (2006) asserted that the indirect method reports net income and then adjusts it for items necessary to obtain net cash provided (used) by operating activities. It does not report the necessary adjustments to reconcile net income to net cash provided (used) by operating activities.

The amount of net cash provided by operating activities is identical under both the Direct and indirect methods (ICAN, 2006). The differences in these methods are with the computations and presentation of this amount and apply only to the operating activities section.

Ekwere (2005) noted that the information provided in a statement of cash flows when used with related disclosures and other information in the financial statements will over a period assist users to assess the impact of an enterprise's current transactions i.e. operating, investing and financial activities i.e. on its performance and financial position, assess the ability of the enterprise to meet its debt obligations, pay dividends and meet other claims, assess the ability of the enterprise to finance ongoing operations and growth from internal sources and determine the amount of external financing required; and assess the ability of the enterprise to generate cash and cash equivalent, which is the key to the continuous survival of the enterprise. Cash flow information provides a better means of intra or inter-firm comparison of reported operating performance because it eliminates the effect of using different accounting treatments for the same transaction. Cash flow statement is useful in examining the relationship between the enterprise's profitability and its net cash position; and historical cash flow information is used as an indicator of amount, timing and certainty of future cash flows.

In order to prepare a statement of cash flows, the following information must be available: the balance sheet as at the end of the accounting period for which the cash flow statement is to be prepared, the balance sheet as at the end of the accounting period immediately preceding the accounting period for which the cash flow statement is to be prepared; and the profit and loss account for the accounting period for which the cash flow statement is to be prepared or, in the absence of this, the necessary information to enable one derive the transactions that took place during the period (Igben, 2004).

Asaolu (2005) noted that a statement of cash flow has the following uses: How adequately does cash inflow from operating activities support business operations? A study of the statement of cash flows would reveal to management how inflows from operating activities cover the business operations. If the inflows are considered adequate, the company would probably not need to raise additional funds by borrowing, issue of shares etc. unless it plans substantial expansion in operations. A net inflow of cash from operating activities indicates that the operational cash receipts cover the operational cash payments leaving a surplus which can be applied on investing activities such as fixed assets acquisition (Igben, 2004). Of course, the larger the net flow, the higher the degree to which cash from operations cover business operational requirements.

How adequate do cash inflows from operating activities cover annual payouts? To what extent can the ordinary operations of the company generate the cash required to make annual payouts i.e. charges that have to be met on annual basis i.e. such as taxation, dividends and interest on borrowings? Of course, a net inflow from operation activities suggests that operational receipts cover taxation payments(s) (Pandy, 2005).

Ekwere (2005) advised that, dividend and interest payments should be reported as financial outflows but that is not to suggest that they should be made out of financing inflows. Even where the financing inflows are adequate, it must be stressed that they are usually long-term funds i.e. such as proceeds of issue of shares and debentures i.e. and they should not be utilized to settle short-term obligations like dividend and interest payments, Ekwere added. Doing this is an indication that the company has to borrow more to settle outstanding interest on existing borrowings. Since the existing long-term borrowings were used to expand or enhance the company's production/operating capacity, it is ideal that operating activities generate sufficient cash required to service the borrowings (Igben, 2004). It is, therefore, an indication of the viability of accompany that it is able to generate sufficient net inflow from operating activities to cover dividend and interest payments. This fact would also indicate to the shareholders, prospective investors and lenders that the company can generate sufficient

cash from its ordinary operations to pay reasonable returns on the funds they invest in the company. Is the company investing adequately in its future? Aborode (2006) noted that, the size of the capital expenditure, as indicated by cash payments for long-term assets acquisitions, would indicate to shareholders and other interested parties whether or not management is investing adequately in the future of the company to enhance its long-term stability and viability.

Bookkeeping Procedures and Accounting Records kept by Business Enterprises

Ekwere (2005) asserted that businesses are established for trading and profit-making. In the process of trading, purchases of goods and services are made from outsiders, this is called business transactions. Business transactions can be in two forms i.e. cash transaction and credit transaction. In either case, two groups of people are involved i the receiver and the giver or the debtor and the creditor.

In modern times, the recording of business transactions in the books of account is founded on the principle of 'double entry book-keeping' (Okechukwu, et al, 2004). Longe and Kazeem (2006) maintained that the principle states that for every debit entry, there must be a corresponding credit entry, and vice versa. It is the foundation of book-keeping. The principle operates on the basis that every financial transaction must have two aspects i receiving and giving. Longe and Kazeem further noted that, the procedures for double entry book-keeping are: The keeping of books of accounts, the division of each book into separate accounts, each account is divided into two halves, left hand side (Debit i Dr.) and right hand side (Credit i Cr.), All transactions must be recorded into two accounts. One account is debited and another account credited; and the giver (giving account) is credited with the value of whatever it receives and the receiver (receiving account) is debited with the same amount.

From the above, it can be seen that, double entry system of book-keeping is the basis for recording financial transactions. As earlier noted by Ekwere, financial transactions may be classified into cash and credit transactions. In cash transaction, buyers pay immediately for goods bought. In this circumstance, no account will be opened in respect of a supplier or customer (Ekwere, 2005). The steps in recording cash transactions are: (a) prepare two accounts, (b) identify the 'Giving account' and the 'Receiving account', and (c) apply the double entry principle i credit giver, debit receiver (Longe and Kazeem, 2006). All cash transactions must pass through the cash book. Similarly, majority of commercial transactions are termed credit transactions, meaning that the transfer of ownership takes place before payment to the supplier is effected i.e. settlement is deferred to a future date. Steps in recording credit transactions include: (a) prepare day books (sales, purchases, returns and journal proper, (b) prepare two accounts, (c) identify the 'Giving account' and the 'Receiving account', and (d) apply the double entry principle.

The ideas behind debit and credit entries can be summarized as follows: a debit entry represents an increase in the value of assets, a decrease in the amount of a liability; and an item of expenditure or expenses while a credit entry represents a decrease in the value of assets, an increase in the value of a liability; and an item of income or gain.

Having looked at the foundational issues backing the documentation of business transactions, what then are the accounting books or records required by small and medium scale enterprises? Olatunji (2002) contended that, there are two books of accounts i subsidiary books, and principal books. Essien (2004) stated that, the two books are very necessary in the recording of financial transactions.

Before going into explaining subsidiary books and principal books, it is imperative to look at what source documents are. All entries in the books of account must be supported by

documentary evidence. Therefore the source documents provide detail information for the preparation of accounting books (Asaolu, 2005). The source documents are: invoice, credit note, debit note, petty cash voucher, statement of account; and receipts.

Asaolu (2005) contended that an invoice is a document which is prepared by a seller and given to a buyer. Longe and Kazeem (2006) reported that the invoice sets out the full details of goods sent by the suppliers to the buyer stating the quantity, price, discount given and terms of payment. An invoice is usually prepared with three to five duplicate copies, depending on the practice of the organization. Usually, the buyer is given a copy of the invoice. Essien (2004) noted that there are two types of invoice – commercial invoice and pro-forma invoice. Essien contended that a commercial invoice is a bill for goods sold or services rendered for cash or on credit issued by a seller of those goods or provider of the services to a buyer (usually a customer). Invoices can be viewed from two angles. If they are viewed from the seller's angle, they are known as "Sales Invoices", and if they are viewed from the buyer's angle, they are known as "Purchases Invoices". Sales invoices must be recorded by the seller in his sales day book; being a register maintained for credit sales. Any discount allowed by the seller must be indicated on the invoice and in the sales day book, while purchases invoice must be recorded in the purchases day book, being a register maintained for credit purchases, by the buyer (Essien, 2004).

On the other hand, a pro-forma invoice is a document issued for a transaction that has not yet taken place as no good(s) is supplied. Its aim is to supply information. Asaolu (2005) gave the features of an invoice as: it bears an evidence of what the buyer has bought from the seller, it carries the name and address of both the seller and the buyer, it gives the particulars of the goods bought e.g. description, quantity, unit price and value, it makes reference to the terms and conditions of the purchase, there are columns for the signatures of both the seller and the buyer; and the commercial phrases, Errors and Omissions Exempted, E and OE, are usually inserted. This simply means that any mistakes on the invoice can be amended as and when required.

Akintelure and Oguobi (2003) described a credit note as a document issued by a supplier as evidence of an allowance given to a customer on the request of the customer through his letter of complaint that some of the goods supplied were defective or damaged. In effect, it notifies the customer that his account has been credited with the value of goods supplied which had proven to be defective or damaged due to wrong packing and/or other reasons. Longe and Kazeem (2006) viewed credit note as a document sent by the seller to the customer(s) for reduction in the amount owed by him. It arises because some goods are damaged or not as ordered. There has been an overcharge on some goods returned. To avoid confusion it must be printed in red. Longe and Kazeem buttressed that credit note can be viewed from two perspectives: (i) credit note received from suppliers – if the credit note relates to goods returned to the suppliers, it will be entered in the returns outward book and then debited to the suppliers account, (ii) credit note issued to customers – this will be posted to the returns inwards book and then credited to the customers account.

Similarly, Ekwere (2005) contended that a debit note is a document sent by the seller to the buyer to correct an undercharge or when goods are not charged on the invoice. The buyer can also use it to claim an overcharge of for items returned to a seller. Debit note is sent to customers to increase their indebtedness. Ekwere also noted that petty cash voucher(s) is a document that covers payments credited to the petty cash book.

Statement of accounts is a document sent by the seller to the buyer at regular intervals, usually showing credits and debits to the account and the balance due. Finally, a receipt is an official paper issued by the seller of goods or provider of services to a buyer as evidence that

the goods or services provided have been paid for (Igben, 2000). Having analyzed the sources of information for the subsidiary books, what then are subsidiary books of account? Olatunji (2002) defined subsidiary books as the books of original or prime entry in which events and transactions are initially recorded before being posted or transferred to the ledgers. Longe and Kazeem (2006) opined that, subsidiary books are used to make first entry of transactions. Longe and Kazeem gave reasons for preparing subsidiary books as: to know the value of total sales and purchases, they are used as books to make first entry of transactions; and to keep track of the people to whom money is owed and of the people who owed money.

Before any entry can be made in the ledger, it must first be recorded in the subsidiary books. Olatunji further stated the uses of books of prime (original/subsidiary) entry as: Aids to memory: The subsidiary books provide aids to memory as every detail of business transactions are captured as they occur, Ascertainment of sales and purchases: The total amount of sales and purchases can be readily ascertained, control account preparation: It provides an avenue for the control accounts to be easily prepared, ascertainment of debtors and creditors: The total money owed to suppliers and money owed to customers can be readily ascertained; and provides opportunity for monthly totals: the book of original entry provides opportunity for totals to be calculated every month.

Longe and Kazeem (2006) stated that subsidiary books can be divided into six books: sales day book or sales journal, purchase day book or purchases journal, sales return or returns inwards journal, purchases returns or returns outward journal, general journal or principal journal or journal proper; and cash book.

The sales day book or sales journal is a book of original entry in which credit sales are recorded before posting to the ledgers (Wood and Sangster, 2002a). The sales day book shows the following - date, name of customers, invoice number, folio, details and total amount. In the sales day book, cash transactions must not be recorded. Equally, sales of fixed assets must be excluded from the sales day book. The sales journal is not part of the double entry. The seller will enter the sales journal from the information on the sales invoices. When posting, total of sales day book will be transferred to the credit side of sales account in the general ledger and personal account debited (Ekwere, 2005). Procedures to follow when preparing sales day book are: daily credit sales are entered in the book, credit sales account with total; and debit customers account.

Olatunji (2002) asserted that purchases day book is a book of original entry for recording all the goods purchased on credit from suppliers. It is sometimes called purchases journal. The total of purchases day book will be posted to the debit side of the purchases account and credited to personal ledgers of suppliers. The purchase day book has columns for date, particulars, folio, detail, and total, like the sales day book. Longe and Kazeem (2006) summarized the procedure for preparing purchases day book as: daily credit purchases are entered in the book, credit personal account; and debit purchases account with total.

Purchases returns book (returns outward day book or purchases return journal) is used for the recording of returned goods to the suppliers as a result of one reason or the other e.g. defectiveness, damages or wrong kind, etc (Akintelure and Ogoubi, 2003). The transactions entered in this book are taken from the credit note sent by the suppliers. The returns outward book has columns for date, particulars, folio, details, and totals. The procedural approaches for the preparation of purchases returns journal include: goods returned are entered in the book, debit personal account of the supplier; and credit returns outward account.

Sales returns book (returns inward day book or sales return journal) is used to record goods returned by customers due to defectiveness, damages or wrong kind, etc (Igben, 2000). The

transactions entered in this book are taken from the credit note issued to customers. The returns outward book has columns for date, particulars, folio, details, and totals. The procedural approaches for the preparation of Purchases Returns Journal include: goods returned by customers are entered in the book, debit returns inwards book; and credit customer's account.

Longe and Kazeem (2006) upheld that the journal proper or general journal is another book of prime entry in which are recorded the initial entries in chronological order. It is a daily record of transactions. Akintelure and Oguobi (2003) observed that, the journal proper is used for the purpose of recording transactions, which by their nature cannot be entered in any other book of prime entry. It is also used for opening and closing entries, transfer of items or correction of errors; etc.

Finally, Olatunji (2002) defined cash book as a double entry account used to record cash transactions and also transactions with the bank. It is a subsidiary book and also performs the function of a Ledger.

Cash book is the book for recording detailed particulars of all money received and paid. All cash transactions and transactions with cheque must pass through the Cash book (Longe and Kazeem, 2006). The cash book is a subsidiary book and it is really part of the principal book called 'Ledge'. Longe and Kazeem also reported that, the cash book is the only book that combines the functions of the subsidiary and principal books. The cash and bank accounts are taken out of the ledger and combined into a single book called cash book. It is the book for cash receipts, payments and transactions with cheques. In the treatment of the cash book, the principle of double entry system will remain unchanged (Asaolu, 2005). Asaolu added that, any transaction on credit must not appear in the cash book.

Besides the single column cash book, there are two (Double)-column cash book; and three-column cash book. In the double column cash book, two separate accounts i cash and bank, are combined in the same book but with separate columns for the sake of convenience (Wood and Sangster, 2002a). That is, there will be separate columns for date, particulars, folio, cash; and bank in both debit and credit sides. The Cash column records all cash receipts and payments, while the bank column records all payments made by cheque and money received and paid into the Bank (Essien, 2004).

In the three-column cash book, three separate accounts i cash, bank, and discounts are combined in the same book but with separate columns for the sake of convenience (Wood and Sangster, 2002a). That is, there will be separate columns for date, particulars, folio, cash, bank; and discount in both debit and credit sides. The discount column records all discounts allowed and discounts received. Only cash discount will be recorded in the accounts. Trade discount will not appear in the cash book.

Among the principal and final books of accounts relevant to businesses in the manufacturing industry for the sake of ratio analyses are the manufacturing, trading, profit and loss account; and the balance sheet. Igben (2000) noted that, a business organization engaged in the manufacture of goods for sale will prepare a manufacturing account in addition to the trading, profit and loss account. Manufacturing of goods is the transformation of raw materials into finished goods. Some firms have to manufacture their products before they are sold to the public whereas; some merely sell products which are acquired in the finished form. Ekwere (2005) stated that, a manufacturing organization will acquire raw materials, engage labour and other inputs necessary to change the raw materials into finished goods. Igben (2000) and Longe and Kazem (2006) opined that, manufacturing accounts are prepared to ascertain the cost of goods manufactured during the financial year. It is an extension of the trading account. Longe and Kazeem concluded that, the purpose of manufacturing accounts

is: (a) to ascertain the cost of the goods manufactured; and (b) to ascertain the amount of any profit on the manufacturing process.

On the other hand, trading account is constructed for the purpose of determining the gross profit or gross loss of the business. It is a revenue account and form part of the double entry system. Similarly, the profit and loss account is constructed by the business organization to ascertain the net profit or net loss. Net profit is normally transferred to the capital account (Olatunji, 2002). The main purpose of profit and loss account is to arrive at the net profit after charging all the expenses from the gross profit. It is a continuation of the trading account. Olatunji further stated that, the uses of trading, profit and loss account include: (1) to show the profit of an organization, (2) for comparison, (3) for income assessment; and (4) for management purposes.

Finally, the balance sheet is described as a statement drawn up at the end of each financial period setting forth the various assets, liabilities and capital of the organization in a well arranged form (Ekwere, 2005). Balance sheet is not part of the double entry therefore there is no debit or credit side. Longe and Kazeem (2006) upheld that balance sheet is not an account and it is drawn up at a certain date. It is divided into two parts showing on the left ĩ capital and liabilities and on the right ĩ assets.

Olatunji (2003) noted that information disclosed in the balance sheet include the nature and extent of the assets, the solvency or otherwise of the business, the nature of liabilities; and information as to over or under trading.

Olatunji (2002) upheld that accounting records are kept to evaluate the performance and profitability position of a business, to enable management make qualitative decision on the finances and operations of the organization, to assess and ascertain the liquidity and financial position of a business; and to assist management in business planning. Other reasons for keeping accounting records are to track down the activities of an organization, to ascertain the resources (assets) and indebtedness (liabilities) of a business, to provide a basis upon which a business entity is assessed for tax; and for making economic intra and inter company comparison (Olatunji, 2002).

Further, Essien (2004) acknowledged that accounting records are necessary for the monitoring of business activities through the information revealed by the business, control of the day-to-day operations of a business to enhance its suppliers of goods; and for compliance with the law which requires the maintenance of statutory records, in the case of incorporated companies, is enhanced. Other purposes are for compliance with the generally accepted accounting practices is ensued, for providing information for decision making; and for control and safeguard of assets of a business against misappropriation (Essien, 2004).

Olatunji (2002) summarized the characteristics of a good financial report as relevance and timelessness. Financial information is relevant if it has the ability to influence the economic decisions of users and is provided in time to influence those decisions. Reliability is yet another characteristic of a good financial report. Financial information is reliable if it can be dependent upon by users to represent faithfully what it either purports to represent or could reasonably be expected to represent, It is free from deliberate or systematic bias, that is, it is neutral; it is free from material error, it is completed within the bounds of its economic activities and the reporting period; and if it is independently verified. Olatunji (2002) buttressed that comparability is another characteristic of a good financial report. Financial information should be produced on a consistent basis so that valid comparisons can be made with information from previous periods and with information produced by other sources ĩ the accounts of similar companies operating in the same line of business. It is also a requirement of the Companies and Allied Matters Act 1990 that all incorporated companies

should include five years financial summary to annual account and reports. Finally, understandability as a characteristic of a good financial report is what transforms data into information. If information is incomplete, it may be difficult to understand. If financial information is not understood, it cannot be used and thus cannot add value (Olatunji, 2002).

Problems Associated with Application of Accounting Ratios in Business Enterprises

Although ratios are a useful analysis tool, there are certain limitations, which are very important for an analyst to understand before applying this tool, in order to make his analysis more meaningful and significant. Some of these limitations are connected with financial statement analysis while others are associated with ratio analysis (Wood and Sangster, 2002a). Financial statement analysis is generally an outdated (because of Historical Cost Basis) post-mortem of what has already happened.

Weston (2001) opined that the choices of accounting policies may distort inter company comparisons. Different companies use different accounting standards for inventory, depreciation, etc. Therefore comparing their financial ratios can be misleading. For example, valuation of assets to be based on either revalued amount or at depreciated historical cost. The business may opt not to revalue its asset because by doing so the depreciation charge is going to be high and will result in lower profit. Changes in accounting policy may affect the comparison of results between different accounting years as misleading. The problem with this situation is that the Directors may be able to manipulate the results through the changes in accounting policy. This would be done to avoid the effects of an old accounting policy or gain the effects of a new one. It is likely to be done in a sensitive period, perhaps when the business's profits are low.

Weston also noted that businesses apply creative accounting in trying to show the better financial performance or position which can be misleading to the users of financial accounting. Like the International Accounting Standard mentioned above, if an asset is revalued and there is a revaluation deficit, it has to be charged as an expense in income statement, but if it results in revaluation surplus the surplus should be credited to revaluation reserve. So in order to improve on its profitability level the company may select in its revaluation programme to revalue only those assets which will result in revaluation surplus leaving those with revaluation deficits still at depreciated historical cost.

Alphin and Casler (2005) explained that window dressing is techniques applied by an entity in order to show a strong financial position. Financial statement analysis is limited by the fact that financial statements are "window dressed" by creative accountants. Window dressing refers to the understatement or overstatement of financial facts. For example, VTE Nig. Co. can borrow on a two year basis, ₦10 Million on 28th December 2008, holding the proceeds as cash, then pay off the loan ahead of time on 3rd January 2009. This can improve the current and quick ratios and make the 2008 balance sheet look good. However the improvement was strictly window dressing as a week later the balance sheet is at its old position.

Ratios are not definitive measures. Ratios need to be interpreted carefully. They can provide clues to the company's performance or financial situation. But on their own, they cannot show whether performance is good or bad. It is difficult to generalize about whether a particular ratio is "good" or "bad". For example a high current ratio may indicate a strong liquidity position, which is good or excessive cash which is bad. Similarly, non current assets turnover ratio may denote either a firm that uses its assets efficiently or one that is under capitalized and cannot afford to buy enough assets (Anthony and Reece, 2002).

Ratios require some quantitative information for an informed analysis to be made. Moreso, the figures in a set of accounts are likely to be at least several months out of date, and so

might not give a proper indication of the company's current financial position. Historical costs are not suitable for decision making.

International Accounting Standard Board conceptual framework recommends businesses to use historical cost of accounting. Where historical cost convention is used, asset valuations in the balance sheet could be misleading. Ratios based on this information will not be very useful for decision making (Solomon, 2004).

Financial statements contain certain summarized information.

Ratios are based on financial statements which are summaries of the accounting records.

Through the summarization some important information may be left out which could have been of relevance to the users of accounts. Ekwere (2005) contended that the ratios are based on the summarized year end information which may not be a true reflection of the overall year's results. Inflation renders comparisons of results over time misleading as financial figures will not be within the same levels of purchasing power. Changes in results over time may show as if the enterprise has improved its performance and position when in fact after adjusting for inflationary changes it will show a different picture. Similarly, when comparing performance over time, there is need to consider the changes in technology (Brigham, 2005). The movement in performance should be in line with the changes in technology. For ratios to be more meaningful the enterprise should compare its results with another of the same level of technology as this will be a good basis of measurement of efficiency.

Accounting standards offers standard ways of recognizing, measuring and presenting financial transactions. Any change in standards will affect the reporting of an enterprise and its comparison of results over a number of years. As stated above, the financial statements are based on year end results which may not be true reflection of results year round.

Businesses which are affected by seasons can choose the best time to produce financial statements so as to show better results. For example, a tobacco growing company will be able to show good results if accounts are produced in the selling season. This time the business will have good inventory levels, receivables and bank balances will be at its highest. In planting seasons the company will have a lot of liabilities through the purchase of farm inputs, low cash balances and even nil receivables.

Butters (2003) asserted that no two companies are the same, even when they are competitors in the same industry or market. Using ratios to compare one company with another could provide misleading information. Businesses may be within the same industry but having different financial and business risk. One company may be able to obtain bank loans at reduced rates and may show high gearing levels while another may not be successful in obtaining cheap rates and it may show that it is operating at low gearing level. To uninformed analyst he may feel like company two is better when in fact its low gearing level is because it cannot be able to secure further funding.

Companies may have different capital structures and to make comparison of performance when one is all equity financed and another is a geared company it may not be a good analysis. Again, selective application of government incentives to various companies may also distort inter-company comparison. One company may be given a tax holiday while the other within the same line of business not, comparing the performance of these two enterprises may be misleading.

Adeniyi (2002) stated that many things can impact the calculation of ratios and make comparisons difficult. These include: The use of estimates in allocating costs to each period. The ratios will be as accurate as the estimates; the cost

principle is used to prepare financial statements. Financial data is not adjusted for price changes or inflation/deflation; companies have a choice of accounting methods (for example, inventory LIFO against FIFO and depreciation methods). These differences impact ratios and make it difficult to compare companies using different methods.

Other things that can impact the calculation of ratios and make comparisons difficult as explained by Adeniyi are: companies may have different fiscal year ends making comparison difficult if the industry is cyclical, diversified companies are difficult to classify for comparison purposes; and financial statement analysis does not provide answers to all the users' questions. In fact, it usually generates more questions. Financial statement analysis just presents a few static snapshots of a business's financial health but not the complete moving picture. It is very difficult and not easy to say based on Financial Ratios whether a company is healthy or not because that depends on the size and nature of the business.

In discussing the limitations of financial statements, Aborode (2006) acknowledged that financial statements are prepared on going concern basis while company may fold up few months after the financial statement date, application of accounting concept and convention may not be the same from organization to organization; and that financial statements are prepared to show true and fair view hence the actual figures may not be shown notes to the financial statement.

Aborode further stated that financial statement only discloses monetary facts (Non-monetary facts can only be disclosed in the notes to the financial statement); and that financial statement of two or more companies may be difficult to compare unless the statement of accounting policies used for the preparation of the statement is known.

Contributing to the limitations of accounting ratio analysis, Aborode (2006) buttressed that the differences in the methods adopted by two enterprises may distort the result of analysis and therefore misinform judgment. An example of such difference being occasioned is 'X' company adopting 'first in first out' stock valuation whereas 'Y' company used 'weighted average'. The profit figures declared by the two companies may diverge, not as varying levels of efficiency and effectiveness.

There is inherent assumption that the historical data used for ratio analysis are inviolate, fixed and applicable under all situations. However, the dynamics of political and economic factors may prove such data as 'out-of-date'. Just as mathematics, which engages in 'arm-chair' reasoning and does not concern itself with what goes on in the empirical world, ratio analyses are not supposed to be ends in themselves (Beaver, 2002). Useful as they are, ratio analysis should be considered along with other quantitative and indeed qualitative factors. The issues which crop up are: what is the suitable standard for comparison? What is the suitable industry standard? There is no ideal standard. Only guides exist. No fixed standard can be laid down for ideal ratio. Accounting ratios only trigger off points for further investigation

Igben (2000) observed that in spite of the obvious benefits of ratio analysis, there are some limitations to the usefulness of ratios. They include the following: the major limitations derive from the fact that they are mostly computed from historical accounts. Consequently, they suffer from the same limitations which historical accounts have, one of which is the fact that historical information is of little use in assessing future prospects of a company. Another

limitation is the fact that ratios are quantifiable data, they cannot provide non-quantifiable information like competence of management and staff and changes in the operating environment. Igben added that some of the ratios (e.g. ROCE) do not have universally accepted uniform parameters; and when carrying out inter-company analysis, different accounting policies adopted by the companies could distort ratios calculated. For example, different depreciation policies adopted by different companies will influence the carrying amounts of fixed assets which will influence ratios like ROCE. For inter-company analysis to be meaningful therefore, cognizance must be taken of the different accounting policies so that necessary adjustments are made where the need arises.

Ratio analysis is useful, but analysts should be aware of these problems and make adjustments as necessary. Ratios analysis conducted in a mechanical, unthinking manner is dangerous, but if used intelligently and with good judgment, it can provide useful insights into the firm's operations.

Manufacturing Industry

Manufacturing (from Latin manufactura, "making by hand") is the use of tools and labour to make things for use or sale. The term may refer to a range of human activity, from handicraft to high technology, but is most commonly applied to industrial production, in which raw materials are transformed into finished goods on a large scale. Manufacturing takes place under all types of economic systems. In a free market economy, manufacturing is usually directed towards the mass production of products for sale to consumers at a profit. In a collectivist economy, manufacturing is more frequently directed by the state to supply a centrally planned economy. In free market economies, manufacturing occurs under some degree of government regulation. Modern manufacturing includes all intermediate processes required for the production and integration of a product's components.

Manufacturing Industry is the branch of manufacture and trade based on the fabrication, processing, or preparation of products from raw materials and commodities. This includes all foods, chemicals, textiles, machines, and equipment. This includes all refined metals and minerals derived from extracted ores. This includes all lumber, wood, and pulp products. Anyaele (2003) asserted that manufacturing industries are those industries involved in the transformation of raw materials into finished goods (both consumer and producer goods). Similarly, Eba and Igbo (2005) asserted that manufacturing industries are industries concerned with the conversion of materials into finished products by mechanical or chemical means. Manufacturing industries produce beverages, bread, palm oil, timber, textile, leather, cement, irons and steel, etc. Eba and Igbo noted that the relative importance attached to these industries at home is very small because, most of the raw materials like manpower and capital goods are imported.

Udu and Agu (2004) explained that, economists usually group economic activities into three broad categories, namely, Agriculture, Industry and Services. In this context, industry relates to those economic activities which involve transformation of inputs into new products.

Production process management (scheduling) is an important tool for manufacturing and engineering, where it can have a major impact on the productivity of a process. In manufacturing, the purpose of scheduling is to minimize the production time and costs, by telling a production facility what to make, when, with which staff, and on which equipment. Production scheduling aims to maximize the efficiency of the operation and reduce costs.

Production scheduling tools greatly outperform older manual scheduling methods. These provide the production scheduler with powerful graphical interfaces which can be used to visually optimize real-time work loads in various stages of production, and pattern recognition allows the software to automatically create scheduling opportunities which might not be apparent without this view into the data. For example, an airline might wish to minimize the number of airport gates required for its aircraft, in order to reduce costs, and scheduling software can allow the planners to see how this can be done, by analyzing time tables, aircraft usage, or the flow of passengers.

Companies use backward and forward scheduling to allocate plant and machinery resources, plan human resources, plan production processes and purchase materials. Forward scheduling is planning the tasks from the date resources become available to determine the shipping date or the due date. Backward scheduling is planning the tasks from the due date or required-by date to determine the start date and/or any changes in capacity required. The benefits of production scheduling include: process change-over, reduction in inventory reduction (leveling), reduced scheduling effort, increased production efficiency, labour load leveling, accurate delivery date quotes; and real time information.

The Standard Industrial Classification in Pack (1993) categorized manufacturing industries into eight groups including Lumber and Wood Industry, Furniture and Fixtures Industry; and Food and Kindred Industry. Lumber and Wood Industry are all establishments engaged in cutting timber and pulpwood; mills engaged in producing lumber and wood basic materials; and establishments engaged in manufacturing finished articles made entirely or mainly of wood or related materials. This does not include furniture and office and store fixtures (see Furniture and Fixtures), musical instruments, toys and playground equipment, and caskets (see Miscellaneous Manufacturing Industries). This also does not include wood reconditioning and repair.

Furniture and Fixtures Industry are all establishments engaged in manufacturing household, office, public building, and restaurant furniture; and office and store fixtures. This does not include establishments engaged in the production of millwork or wood kitchen cabinets (see

Lumber and Wood Products); those manufacturing cut stone and concrete furniture (see Stone, Clay, Glass and Concrete Products); those manufacturing hospital furniture other than beds (see Measuring, Controlling and Analyzing Instruments); nor, those manufacturing beauty and barber shop furniture.

Food and Kindred Industry are all establishments manufacturing or processing foods and beverages for human consumption, and certain related products, such as manufactured ice, chewing gum, vegetable and animal fats and oils, and prepared feeds for animals and fowls. This does not include chemical sweeteners.

Over the years, the industrial sector in Nigeria has had some experiences which together serve as the bedrock upon manufacturing industries size themselves. Imevbore (2002) contended that despite substantial adjustments during the past decades, Nigeria's industrial policy adopted since independence in 1960 was dominated by the goals and instruments of the 1970s. The policy has been one emphasizing import substitution (IS) strategy, which was necessary and inevitable for Nigeria having regard to her colonial experience in the area of economics and trade. In the 80s, it was felt that the strategy ought to have advanced to the stage of import displacement; that is producing locally made goods which are different from or at least only similar to former inputs, but which are based on locally available inputs and technology and on real needs (as distinct from imported consumption patterns) of the economy. Such a strategy of import displacement was meant to scientifically replace the erstwhile strategy of simple import substitution, which involved the importation of inputs for the local production of goods identical with the former exports. An input displacement strategy was considered to be a most effective avenue for significantly enhancing local value added, stimulating the development of home grown and modified or adapted technology and minimizing the offshore cost of manufacturing. The government also agreed that import substitution and replacement ought to be complemented by stimulation of export oriented industrial enterprise (Imevbore, 2002).

One philosophy which was utilized with the hope to promote economic development in the 1970s was the Indigenization Decree of 1972 and 1977. The idea behind indigenization was to give Nigerian's greater opportunities compared to preceding years to participate in the productive sectors of the economy. The decrees sought also to limit the sections of the economy in which foreign companies could operate. The overall aim was to push foreign capital into higher technology areas thereby creating opportunities for Nigerian's in other areas. The indigenization policy was only partly successful in that it did not shift control to Nigerians and it reduced the extent of Foreign Direct Investment (FDI) which came into the country (Dayo, 1999)

In 1986 a technology policy was formulated to complement the industrial policy whose major strategy was import substitution. The technology policy relied on transfer of foreign technology as well as endogenous technology development as vehicles for achieving the nation's industrial goal.

This policies gave rise to the promotion of large and medium scale light consumer goods industries, through Foreign Direct Investment (FDI) and joint ventures; large scale public core projects in the area of steel, cement, pulp and paper, fertilizer, petrochemicals, sugar, machine tools and the like using the same mechanism for private small and medium enterprises and employing considerable labour. Conspicuously absent from the Nigerian Industrial Landscape were the new generation of SME's with relatively high technology intensity called New Technology Based Firms (NTBFs). A great deal of major technological innovations now and in the future are expected from this 'new entrepreneurial base small

firms which had had more impressive growth in the United State, Germany and United Kingdom (Ajakaiye and Akinbinu, 2000).

Nigerian Institute of Social and Economic Research (NISER) (1995) has shown that a major preoccupation of manufacturers in the contemporary Nigerian situation is how to source inputs especially raw materials and spare parts. There is also some concern over the sourcing of major machinery and equipment as well as human resources. NISER found that most firms import raw materials because of the non availability of local alternatives and the low quality of local substitutes. Indeed over 80 percent of the responding firms in the NISER study did not produce their own raw materials and very few were investing in backward integration investment activities. Moreover, their most important machinery was imported from Europe from where over 79 percent of total cumulative private foreign investment also originated. NISER pointed out that the reliance on imported machinery is a reflection of the rudimentary engineering, steel, aluminum and fabricated metal products industries in Nigeria. Most firms still depend heavily on imported spare parts because of lack of suitable local substitutes. Another study by NISER (2000) found that 17.5 percent of the corresponding firms indicated that they sourced their production and machinery from Nigeria in 1999 compared with 23.9 percent in 1996, 19.3 percent in 1997 and 18.1 percent in 1998. Thus the local sourcing of producing machinery has been decreasing continually.

NISER also reported that generally, capacity utilization from 1992 to 1999 was low due to high cost of production, high cost of transportation, electricity, communication, labour and exchange rate due to the continuing depreciation of the naira exchange rate. In 1998, Nigeria adopted the VISION 2010 Report. In that Report, Nigeria set herself a vision that by the year 2010 Nigeria should become the leading nation in Africa, exerting great influence on the world economy. The VISION 2010 projects an annual GDP growth of 7% between 1997 and 2000, accelerating to 9% (2001 to 2005) and then 10% (2006 to 2010) (Imevbore (2002) Imevbore further contended that, if achieved, this industrial growth would increase GDP share of manufacturing to 20% in 2010 up from 6.9% in 1996. Nigeria would achieve the bulk of this growth by refocusing on its natural comparative advantage in agro-related manufacturing. This sector's share of GDP will virtually increase threefold from 3.4% in 1996 to 9.4 by 2010.

Manufacturers Association of Nigeria (MAN) (2000), which is the principal private sector institution serving the industrial sector, observed that the situation of declining contribution by the manufacturing sector to GDP is due to a number of factors: the high cost condition in the country occasioned by poor and inadequate infrastructural support services and other policy related distortions which pose a series of threats not only for output growth in the manufacturing sector but also for competitiveness.

A major constraint is the poor sourcing of local raw materials for the local industries caused by several factors: dysfunctional infrastructural obstacles, inadequate technical facilities to process raw materials of the right technical specifications and quality, uncertainty of supply arising from irregular production and supply schedules, the relatively exorbitant prices of some local raw materials compared with the imported counterparts occasioned by high cost conditions and the failure of government to demonstrate commitment to local manufacturing (MAN, 2000).

Imevbore (2002) maintained that there is also the lack of a level playing ground for local industries to compete with cheap import owing to premature and uncoordinated pursuit of import liberalization, dumping and inconsistency in government policies. To worsen the situation, while the best quality imports from advanced countries catch the fancy of the upper echelon of income groups those lower priced substandard quality products from South-East

Asian countries attract the lower income groups whose buying power has been weakened by the massive depreciation of the Naira value. In the face of all this, the high incidence of dumping and under-invoicing of imports, especially from Asian countries is threatening the survival of local industries. Unless effective measures to check this trend are put in place, the process of de-industrialization which has been in motion for some years now will only continue to be accentuated.

Dayo (1999) argued that even though Nigeria has consistently designed industry as the engine of growth of the economy, the government has tended to regard industry only in the short-term economic consideration with industries paying little or no attention to environmental and health issues. Most industries have no effluent treatment plants and are simply discharging raw solid, liquid and gaseous waste directly without regard to their environmental and health consequences. Nigeria therefore faces potentially serious environmental and health hazards ranging from contamination of underground and surface waters, land contamination to air pollution.

Furthermore, the continuing harassment of companies by some state and local government over unauthorized multiple levies and charges in spite of the law create a significant disincentive for business. Consequently, frequent disruptions of productions occur. Clearly there is an urgent need to enhance the ability of local manufacturers by policy measures that seek to address the problems related to poor capacity utilization. In particular, the orientation of Nigerian firms should be tilted toward being inward looking for the supply of their important inputs through the development of science and technology and through the removal of unnecessary barriers against local manufacturing (Ajakaiye and Akinbinu, 2000).

Review of Related Empirical Studies

Anayochukwu (1991) appraised the working capital management of Small Firms in Enugu State. This was to tackle the issue of Small Firms inability to meet their outstanding obligations to creditors, employees, auditors and government. The major purpose of the study was to appraise the working capital management of Small firms and compare it with the theoretical frame work noting the variances, and possibly finding solutions to the variances. 120 small firms drawn from the manufacturing and service industries constituted the population for the study. Of this number, a sample of 12 small firms made up of 6 manufacturing industries and 6 service industries were used for the study. Data were obtained for the study through personal interviews, questionnaire and secondary sources. To analyze the data, Anayochukwu employed tables, charts graphs, percentages and chi-square. From the analysis made, it was discovered that Small Firms do not use efficient cash management techniques, do not use efficient inventory management techniques, there is poor control over stock among small firms. This leads to excessive stock, debtors, creditors and cash levels due to lapses in accounting practice.

Consequently, it was recommended that accounts of small firms be managed by qualified personnel instead of owner manager(s); they should be training and retraining of owner manager(s); they should maintain a reasonable credit level according to the capacity of the small firm, etc. The relationship of this work to the present study is underscored by the evidence that, the working capital which operators of small scale industries are deemed to manage is made up of equity and debt finance. Therefore, where this capital is not properly managed resulting in low economic activities within the organization, creditors may call for their finances hence, illiquidity or insolvency may set in.

Similarly, Otah (2000) conducted a study on the working capital management of small scale enterprises using Owerri Metropolis as a case study. The problems this study sought to address included: liquidity squeeze confronting SMEs, operation of SMEs with scanty and

inadequate accounting records and diversion of business funds for personal use. The major purpose of the study was to re-appraise the working capital management of SMEs with the aim of ensuring a more effective and efficient working capital management practices. The population of the study consisted of 120 registered SMEs in Owerri Metropolis. They cut across manufacturing, service and construction industries. The sample for the study was 92 SMEs made up as follows: 32 manufacturing industries, 42 service industries and 18 construction industries. Data for the study were collected using questionnaire, personal interviews and library sources and analyzed with the aid of statistical tables, percentages for data generated while chi-square test of homogeneity and independence was used in testing the hypotheses. The major findings of the study included; absence of accurate and up to date records, inability to engage qualified professional and diversion of business funds for private/personal use; and inadequate stock and cash control among SMEs.

Based on these findings, the following recommendations were made: SME operators should keep accurate, reliable and up to date financial records about their business activities, only qualified staff should always be employed to work in key functional areas within SMEs, etc. The work is particularly related to the present study in that, the extent to which working capital is managed affects profitability, liquidity and stability of Small scale industries. It also determines the condition of cash flow favourably or unfavourably.

Amaka (2000) carried a study on factors limiting the use of ratio analysis as a tool for management decision making using general metals product limited as a case study. The major purpose of the study was to examine the factors limiting the use of ratio analysis as a tool for management decision making. The study also sought to determine the users of financial statements; and to proffer solution to the problems of financial statement analysis. Questionnaires and secondary sources were used to collect data while percentages, mean, graphs, tables and chi-square were used to analyze the data. The findings revealed that general metals product limited do encounter problems in analyzing information provided by the financial statements. It was also found that ratio analysis has certain limitations including effects of changing prices; window dressing of the result of operation by some managers etc. It was therefore recommended that management can cope with the problems by making sure that the financial statements used during ratio analysis are comparable both in accounting policies as well as in the purchasing power of money at the time the financial statements were prepared. Amaka (2000) also recommended that, the use of technical language should be minimized when preparing financial statements.

The present study is related to Amaka's because, it buttresses that the use of accounting ratios in analyzing the financial statements of a business venture whether micro, small or large scale; has some inherent limiting factors that if not considered, would mar the result of financial statements analysis. For instance, one cannot compare the viability or otherwise of two business entities operating in different industrial sectors and whose scope of operations differ substantially.

Ali (2001) conducted a study on accounting skills required by Entry i level managers in business organizations in Kogi State. This served as the major purpose of the study. The population of the study consisted of 215 managers in business organizations in Kogi State. Of this number, a sample of 150 managers was drawn and used for the study. Frequencies and mean were used to answer the research questions, while t i test statistic and chi-square were used for the hypotheses. The study among other things, revealed that preparing a balance sheet, maintaining cost control, recognizing estimation cost, scheduling and maintaining quality, caring for over trading were viewed as accounting skills required by entry i level managers.

Consequently, it was therefore recommended as follows: training of entry level managers is necessary; entry level managers should be made to work; and that job enlargement should be emphasized in business organizations where entry level managers practice.

Interpretation of financial statements is a skill any manager must have. Lack of this skill means managing without a vision. Except financial statements prepared at the end of the trading period are adequately interpreted, the statements will not make meaning to management. This is because; managerial decision cannot depend on such a vague financial statement. Hence Ali's work is related to the present study since interpretation of financial statements using ratios is an accounting skill required of any managerial team of any business organization.

Ukigwe (2002) researched on the role of accounting in small business management. The major purpose of the study was to conduct an empirical study on the role of accounting in small business management. Data were collected using questionnaire, personal interviews and secondary sources. Analyses were made using tables, percentages, mean and chi-square. From the findings, it was revealed that about 70% of the respondents agreed with the fact that, introduction of accounting processes largely increased profit margins for the business. However, it was recommended that staff be adequately trained to enhance efficiency in the accounting process of small businesses.

The relationship between Ukigwe's work and the present study lies on the need to strengthen accounting records which is a product of the accounting process. A faulty financial statement cannot reflect a true and fair view of any business entity. Therefore, analysis from such statements lacks credibility, reliability and dependability as information arising there from would be misleading.

Ohanu (2004) studied the usefulness of financial ratios in assessing the performance of companies and in guiding investment decision; to look at the problem of preponderance of business failure due to wrong analysis, interpretation and application of financial statements (balance sheet and profit and loss). The major purpose of the study was to investigate the means by which companies maintain proper valuation of assets and liabilities and thus be able to ascertain the firm's network, examine some of the difficult problems that are constraints to the firm's liquidity needs; and find out the relationship between debt and equity as a means of financing a business. From the population of the study, a sample size of 90 companies was used for the study. Questionnaires, personal interviews and secondary sources were used in gathering data while data analysis was made with the help of tables, percentages, mean and chi-square. Result of the analysis showed that companies staff in accounting department cannot employ ratios in analyzing financial statements and that, they lack the requisite skills to interpret financial statements to determine their viability or otherwise. To this end, it was recommended that qualified accountants be engaged by companies. It was also recommended that staff in the accounting department who are not accountants should be trained so that, they can render support services to the professionals, etc.

How then does this work relate to the present study? Financial or accounting ratios enable financial experts to determine or measure a wide range of economic performances of any business entity. That is, with financial ratios, one can determine the extent to which a company is geared, liquid, solvent, profitable and in fact, financially healthy. This echoes the relationship of this study to the present study.

Ugwuogo (2004) studied the impact of capital structure on profitability of business enterprises. The study sought to tackle the problem of low profitability arising from capital gearing. Data were collected using questionnaire, personal interview and secondary sources

while analysis was made using percentages mean, and chi-square. The findings of this study were that a business entity that is highly geared stands the risk of having low profit. This is due to the cost associated with interest charges on the borrowed funds. That, unfavourable debt/equity ratio can lead to illiquidity when suppliers of finance demand for their funds at any point in time. The withdrawal of finance from a business net worth endangers operations especially in a situation where debt finances overshadows equity finances.

Consequently, it was recommended that the capital mix of any business organization should consist more of equity finance and a little fraction of debt finance. The relationship of this study to the present is anchored on the fact that, a Small scale industry that is not profitable cannot continue to operate and the essence of measuring solvency is to determine viability and ability to continue in operation in line with the going concern concept.

Adache (2005) assessed the accounting practices adopted by small scale business organizations in Benue State. The study intended addressing the poor accounting practices applied by small business organizations. The population for the study consisted of 320 small scale business managers and accountants, registered with Benue State Ministry of Commerce and Industry. No sample was drawn as the entire population was studied. Data were collected using a questionnaire. Mean scores and standard deviation were used to answer research questions while hypotheses were analyzed using t test statistic. Major findings of the study were: managers and accountants agreed that success in small scale business required effective bookkeeping practices. Managers and Accountants were in agreement that cost accounting practices were vital for success in small scale business. The study also revealed that budgeting practices improved the smooth operations of small business. Financial reporting practices embarked upon by small scale business led to successful operations because they helped the management in decision making; internal auditing was crucial in that, it assisted the management to examine, review, evaluate and take appropriate decisions, etc.

As a follow-up, it was recommended that Benue State Government through its Ministry of Commerce and Industry should organize workshops and seminars on small scale business accounting to improve their operational efficiency. Accounting they say; is the language of business. For this communication to be meaningful, the practices adopted in the accounting process must be in tune with accounting principles and conventions. Hence, the relationship of Adache's work with the present rest on the need for Small scale industries in the manufacturing sector to compile accounting information using homogeneous procedures so that ratios obtained from the analysis of one firm can be compared to another in the same industry.

Owoh (2006) conducted a study on financial accounting and business failure in Nigeria using some selected incorporated business organizations in Enugu State as a case study. The study aimed at addressing the problem of business failure resulting from financial accounting process. Data were gathered using questionnaires, personal interviews and secondary sources. To give meaning to these data, analysis was made using mean, percentages and chi-square. It was revealed from the analysis that, most financial statements and accounting records are often manipulated and therefore unreliable. It was also discovered that auditing of financial statements though legally mandatory, has often failed to forestall the manipulation of accounting records and financial statements characterizing business organizations. Consequently, it was recommended that workshop should be organized for the workforce to educate them on more modern approaches of keeping accounting records. Good record keeping and financial statements preparation is the bedrock to the analysis of financial statements.

The preparation of financial statements in line with Generally Accepted Accounting Principles (GAAP) eases the analysis of such statements. Therefore, when financial statements are prepared to foster analysis and interpretation, it reduces the risk of folding up or business failure among other things. This argument rests on the predictive power of accounting ratios and it emphasizes the relationship of Owoh's work to the present study. Okoro (2006) conducted an empirical research on strategies for improving the financial management practices of small and medium scale entrepreneurs in Niger Delta of Nigeria. The study was meant to address the financial management constraints faced by entrepreneurs such as lack of managerial and entrepreneurial skills. The major purpose of the study was to identify the strategies for improving the financial management practices of small and medium scale entrepreneurs in the Niger Delta region who registered with National Association for Small and Medium Scale Enterprises (NASME). The entire population was surveyed. A structured questionnaire was used to collect data. The mean and standard deviation were used to analyze the research questions while students' *t* test and analysis of variance were used to analyze the hypotheses.

The major findings of the study among others included: the respondents agreed that 10 out of the 15 sourcing of funds strategies are ways for enhancing their sourcing of funds; they also agreed that 8 out of 14 control strategies are ways for improving financial management. It was therefore concluded that financial management practices can be effectively improved through the application or adoption of the identified strategies. Finally, it was recommended that Federal Ministry of Industry should encourage practicing entrepreneur, to gain relevant knowledge in financial resources management. The analysis of financial statements using ratios is a practice that assists business managers to determine the position of their ventures in the face of prevailing economic conditions.

Therefore, Okoro's study is related to the present study because, when Small scale industries entrepreneurs improve on their financial management practices, it will go a long way to also improve on their business culture. Where financial management practices is faulty, the entire business process will also be faulty and any product from this process such as using information arising there from to analyze operational performance will also be faulty. This deficiency in management will continue to affect business decisions until rectified.

Summary of Literature Review

The review of literature centered on the accounting ratios applied by Business Enterprises in measuring solvency, predicting stability and ascertaining the operational efficiency of their business ventures. Specifically, Liquidity ratios, Gearing ratios, Profitability ratios, Activity ratios, Cash Flow Statement, Procedure for keeping Accounting Records used for Ratio Analysis, Problems associated with the application of accounting ratios in Business Enterprises; and Manufacturing Industry were reviewed. Also reviewed are some empirical studies related to this study. The literature reviewed reveals certain consensus of opinion by researchers and authors on the concepts under consideration as presented in the discussions that follow.

It has been argued that liquidity ratios help in measuring the ability of the firm in meeting its obligation when they are due. That accounting is used, not just to calculate profitability, but also to provide information that indicates whether or not a business will be able to pay its creditors, expenses, loans falling due, etc. at the correct time. This is what liquidity ratios achieve. Liquidity ratios express the ability of a firm to liquidate its current financial obligations as they fall due.

Similarly, it was emphasized that gearing ratios show how much the business is financially committed or obligatory to outsiders in relation to its financial responsibility to them. They

inform whether the business is mostly financed by outsiders or not, the extent of the finance, and the relative magnitude thereof. Gearing ratios are used by management to measure the gearing power (stability or leverage) or to predict the stability of a business organization.

Further, it was upheld that a company should earn profits to survive and grow over a long period of time. It was also agreed that sufficient profits must be earned to sustain the operations of the business to be able to obtain funds from investors for expansion and growth and to contribute towards the social overheads for the welfare of the society.

Profitability ratios measure the effectiveness of the management as shown by the returns obtained on sales and capital invested. Profitability measures indicate whether the company is performing satisfactory. Profitability ratios measure the overall performance and effectiveness of the firm.

In common with all accounting ratios, it was advised that the results of efficiency (activity) ratio computations should not be treated as definitively good or bad. They must be investigated further through considering both of the underlying variables in the ratios, and of the broader context of the business and its relation to the industrial sector in which it operates. Efficiency (activity) ratios provide a measure of how quickly outstanding debts are collected (and payments made to creditors), and how effective management is making money to work for the success of the business.

It was opined that a statement of cash flow is one setting out for a business enterprise, the cash receipts and their sources, on the one hand, and cash payments and for what purposes they were made, on the other hand, during the reporting period. In modern times, the recording of business transactions in the books of account is founded on the principle of "Double Entry Book-Keeping". It is the foundation of Book-keeping. The principle operates on the basis that the record of every financial transaction must have two aspects – receiving and giving.

Nevertheless, the literature reviewed showed that no research work has been conducted to determine the extent of application of accounting ratios in the light of measuring liquidity (short-term solvency) and predicting stability (long-term solvency) of Small scale industries in the Manufacturing sector of Cross River State. This shows a gap in literature hence, justifying the conduct of this study.

CHAPTER III METHODOLOGY

This chapter presents the procedures adopted in conducting this study. It covers the research design, area of the study, population for the study, instruments for data collection, validation and reliability of the instruments, method of data collection and method of data analysis.

Design of the Study

The descriptive survey design was adopted for this study. Survey research design as asserted by Osuala (2001) focuses on people, their opinions, attitudes, motivation and behaviour, etc. The survey design was therefore deemed suitable for this study since, opinions of accounting staff were sought on the application of accounting ratios in measuring solvency of small scale industries in the manufacturing sector of Cross River State; using structured questionnaire and interview schedule.

Area of the Study

This study was conducted in nine Local Government Areas across the three Senatorial Districts of Cross River State. The Local Governments and the Senatorial Districts include: South Senatorial District ï Calabar Municipality, Akamkpa and Biase Local Government Areas; Central Senatorial District ï Obubra, Ikom and Boki Local Government Areas; and North Senatorial District ï Ogoja, Obanliku and Bekwarra Local Government Areas. This study was conducted in Cross River State because of the State's emergence as the tourism destination of Nigeria as evidenced in its tourism potentials and the establishment of the TINAPA Project. TINAPA will bring in many investors into the State and the small scale industries under study should be able to check illiquidity in order that they continue in business to service inhabitants of the State by way of providing quality goods as at when needed.

Moreso, Cross River State is a high producer of palm oil and timber due to its enormous natural endowments (Mfam, 2002). Therefore, there is need for this study to be conducted in Cross River State to help Small Scale Industrialists in the areas of Palm oil processing, Wood processing and Bread baking to effectively apply scarce financial resources to their businesses with a view to guarantee solvency and subsequent continuity in business operations.

Population for the Study

The population for this study consisted of 667 respondents made up of 345 accounting staff working in Palm oil processing factories, 163 accounting staff working in Wood processing factories and 159 accounting staff working in Bread Baking factories (Ministry of Trade and Investment, 2008). The rationale for choosing accounting staff is that, they are involved in accounting activities and therefore, would be in a position to give the required information on the application of accounting ratios in measuring solvency of small scale industries in the manufacturing sector of Cross River State. The entire population was studied. The population distribution Table is given in Appendix C.

Instruments for Data Collection

A 79 item structured questionnaire and structured interview schedule were used to collect data for this study. The questionnaire was designed in eight sections, A to H and the eight sections were responded to by the accounting staff across the three industrial sub sectors under study.

Section A sought information on the background of the respondents. It contained one item numbered 1a - c. Section B was designed to obtain information on the extent of application of Liquidity ratios in measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State. It contained 11 items numbered 2 - 12. Section C was designed to collect information on the extent of application of stability (gearing/leverage) ratios in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State. It contained 12 items numbered 13 - 24.

Section D was designed to collect information on the extent of application of Profitability ratios in measuring the performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. It contained 11 items numbered 25 - 35. Section E was designed to gather information on the extent of application of Activity (efficiency) ratios in measuring the efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State. It contained 17 items numbered 36 - 52.

Section F was designed to obtain information on the extent of application of cash flow statement applied in reporting the cash flows of small scale industries in the manufacturing sector of Cross River State. It contained 7 items numbered 53 - 59. Section G was designed to gather information on the bookkeeping procedures followed and accounting records kept by small scale industries in the manufacturing Sector of Cross River. It contained 11 items numbered 60 - 70.

Section H was designed to gather information on the problems associated with the application of accounting ratios in small scale industries in the manufacturing sector of Cross River. It contained 9 items numbered 71 – 79. In all the sections, the respondents were required to tick the columns provided for their independent responses. Each questionnaire item was rated on a 5 point response scale. The scaling points and their corresponding values were as follows:

Scaling Points	Values
Greatly Applied/Strongly Agreed (GA/SA) -	5
Applied/Agreed (A/A)	- 4
Averagely Applied/Undecided (AVA/U)	- 3
Slightly Applied/Disagree (SLA/D)	- 2
Not Applied/Strongly Disagree (NA/SD)	- 1

Furthermore, the interview schedule used to collect data for this study was structured based on the eight purposes of the study. It was organized into eight sections, I ÷ VIII and the interaction centred on the researcher and the management staff of Small Scale Industries across the three industrial sub-sectors under study.

Section I contained questions that elicited information on the background of the respondents. It contained two items numbered 1-2. Section II was designed to elicit information on the application of liquidity ratios in measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State. This section had three items numbered 3-5.

Section III contained questions that elicited information on the application of gearing ratios in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State. It contained three items numbered 6-8. Section IV was meant to provide information on the application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. It contained three items numbered 9-11.

Section V contained questions that elicited response on the application of activity (efficiency) ratios in measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State. It contained three questions numbered 12-14. Section VI was meant to provide information on application of cash flow statement in reporting cash flow of small scale industries in the manufacturing sector of Cross River State. It contained two items numbered 15-16.

Section VII was designed to elicit information on bookkeeping procedures followed and accounting records kept by small scale industries in the manufacturing Sector of Cross River State. It contained three items numbered 17-19. Section VIII contained questions meant to provide information on the problems associated with application of accounting ratios by small scale industries in the manufacturing sector of Cross River State. It contained one item numbered 20.

Validation of the Instruments

The questionnaire was subjected to face validation by three Accountants; one of which is chartered. The three Accountants are in the service of University of Nigeria,

Nsukka. Their inputs included: reduction of item statements in sections B, E and F while, the item statements in sections C and D were increased. They also restructured 38 item statements across the sections of the instrument. The inputs from them were used in modifying the instrument accordingly.

Similarly, the interview schedule was face validated by one Accountant in the service of National Assembly Service Commission, Abuja and two academic staff of Faculty of Education, University of Calabar. Their contributions included: classifying the interview questions according to the seven research questions, restructuring nine questions in the interview schedule. The number of questions for the interview was also increased to capture the scope of the study.

Reliability of the Instrument

Cronbach Alpha reliability test was used to establish the internal consistency of the instrument. This was to measure the degree of consistency or stability overtime. A reliability co-efficient of 0.87 was obtained which showed that the instrument was highly reliable.

Method of Data Collection

The questionnaire was distributed by hand by the researcher and three research assistants. The research assistants were chosen based on those familiar with the Local Governments where the small scale industries under study are located. These were trained by the researcher on how to distribute and collect the instrument. The research assistants distributed and collected the questionnaire within two weeks while the researcher went round to collect the questionnaire from the research assistants a week after. Out of the 667 copies of questionnaire administered, only 582 copies (Palm oil 310, Wood 151; and Bread 121) were retrieved and analyzed. This represents 87.26% rate of questionnaire returned.

On the other hand, face to face interview was carried out between the researcher and the interviewees. The interviewees were management staff of small scale industries and the interaction was strictly between the interviewer and staff only. Thirty eight management staff were actually interviewed as follows: 15 staff from Palm oil factories, 13 staff from Wood factories and 10 staff from Bread baking factories.

The interviewees were informed of the interview at the point of distribution of the questionnaire designed for the study but actual interview was conducted at the point of collection of the questionnaire from the respondents. The interview was recorded with long hand writing. The interviewees were quite cooperative before, during and after the interview.

Method of Data Analysis

Descriptive and inferential statistical tools were employed in analyzing the data, using weighted mean and standard deviation to answer the research questions while Analysis of Variance (ANOVA) was used to test the seven null hypotheses at 0.05 level of significance at appropriate degrees of freedom. Percentages were also used to report the responses obtained from management staff through the interview. In calculating the mean of the items, the response scale and their corresponding values were as follows:

Scaling Points	Values
Greatly Applied/Strongly Agree (GA/SA)	- 5
Applied/Agree (A/A)	- 4
Averagely Applied/Undecided (AVA/U)	- 3
Slightly Applied/Disagree (SLA/D)	- 2
Not Applied/Strongly Disagree (NA/SD)	- 1

The arithmetic mean of the values of the scale was 3.00. Any item with a mean value of 3.00 and above was regarded as applied/agreed while any item with a mean value less than 3.00 was regarded as not applied/disagreed. The standard deviation was used to determine the closeness or otherwise of the opinion of the respondents from the mean.

Furthermore, the null hypothesis of no significant difference was accepted where the F-calculated value was less than the F-table value at 0.05 level of significance at appropriate degrees of freedom and was rejected if otherwise. The seven Null Hypotheses were tested item by item in addition to cluster analysis, using Analysis of Variance (ANOVA) at 0.05 level of significance at appropriate degrees of freedom. Statistical Package for Social Sciences (SPSS) was in computing the ANOVA. Where F was significant, Duncan's Post Hoc Test was used to determine the group that shows the source of the major difference.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

This chapter is concerned with the presentation, analysis and interpretation of the data collected for the purpose of answering the research questions and testing the hypotheses. The presentation, analysis and interpretation were organized based on the research questions and hypotheses of the study.

Research Question 1

To what extent are liquidity ratios applied in measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State? The data answering the question were presented in Table 1.

Table 1

Mean Ratings of the responses of Accounting Staff on extent of Application of Liquidity Ratios in measuring Short-term Solvency of Small Scale Industries in the Manufacturing Sector of Cross River State.

N = 582 (Accounting staff by factory: Palm oil 310, Wood 151 and Bread 121)

S/N	ITEM STATEMENT	Palm Oil		Wood		Bread		GRAND MEAN	Remarks
		X ₁	SD ₁	X ₂	SD ₂	X ₃	SD ₃		
2	Compute the value of total current assets for the accounting period.	4.46	0.96	3.94	1.18	3.87	1.13	4.09	A
3	Compute the value of total current liabilities for the accounting period.	4.34	1.07	3.63	0.09	4.00	1.18	3.99	AVA
4	Divide total current assets by total current liabilities for the accounting period to obtain Current Ratio.	1.97	1.21	2.31	1.28	1.98	1.26	2.08	SLA
5	Less the value of Stock from Current Assets to determine Quick Assets for the accounting Period.	1.92	1.03	2.06	1.04	1.98	1.39	1.99	NA
6	Conduct analysis of Debtors to ascertain doubtful balances for the accounting period.	4.13	1.08	3.98	1.11	3.89	1.31	4.00	A
7	Subtract doubtful balances from closing value of Debtors.	2.29	1.01	2.24	1.41	2.51	1.31	2.41	SLA
8	Divide Net Quick assets by current liabilities for the accounting period to obtain Quick (Acid-test) Ratio.	2.25	1.06	2.54	1.08	2.68	1.17	2.49	SLA
9	Ascertain the value of cash and cash equivalents for every accounting year end.	3.78	1.16	3.85	1.15	3.21	1.51	3.61	AVA
10	Divide the value of cash and cash equivalents by current liabilities for the accounting year end to get Cash Ratio.	2.07	1.11	1.78	1.1	1.89	1.11	1.91	NA
11	Compare Liquidity Ratios of current year to previous year's ratios obtained by the Business organization.	2.29	1.28	2.28	1.24	2.36	1.32	2.31	SLA
12	Compare Liquidity Ratios of current year to previous year's ratios with that of similar business(es) in the same industry.	2.25	1.28	2.31	1.39	2.26	1.32	2.27	SLA

Cluster Mean ($\bar{x}$) = 2.83

Data presented in Table 1 reveals that 4 out of the items in the Table had their grand mean ($\bar{x}$) values ranging from 3.61 to 4.09. This shows that the means were above the cut-off point of 3.00; indicating that the respondents agreed as follows: that they averagely ascertain the value of cash and cash equivalents for every accounting year end ($\bar{x}$ = 3.61) and compute the value of total current liabilities for the accounting period ($\bar{x}$ = 3.99). The respondents also agreed that they conduct analysis of debtors to ascertain doubtful balances for the accounting period ($\bar{x}$ = 4.00) and compute the value of total current assets for the accounting period ($\bar{x}$ = 4.09) as they relate to measurement of short-term solvency by Small Scale Industries in the manufacturing sector of Cross River State.

Table 1 further shows that the remaining 7 items had grand mean values ranging from 1.91 to 2.49 which were below the cut-off point of 3.00. This indicated that the respondents agreed that they do not divide the value of cash and cash equivalents by current liabilities for the accounting year end to get cash ratio ($x = 1.91$), less the value of stock from current assets to determine quick assets for the accounting Period ($x = 1.99$). They also agreed that they slightly: divide total current assets by total current liabilities for the accounting period to obtain current ratio ($x = 2.08$), compare liquidity ratios of current year to previous year's ratios with that of similar business(es) in the same industry ($x = 2.27$), compare liquidity ratios of current year to previous year's ratios obtained by the business organization ($x = 2.31$), subtract doubtful balances from closing value of debtors ($x = 2.41$); and divide net quick assets by current liabilities for the accounting period to obtain quick (acid-test) ratio ($x = 2.49$) as they relate to measurement of short-term solvency by small scale industries in the manufacturing sector of Cross River State. With a cluster mean (x) of 2.83 obtained in respect of research question 1, it shows that liquidity ratios are not applied in measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State.

In another dimension, Table 1 shows that the standard deviations of the groups in item 2 ranged from 0.96 to 1.18 and the grand mean is 4.09. This points to the effect that, more respondents of Palm oil factories ($SD = 0.96$) agreed that they apply the item more than respondents of Bread baking ($SD = 1.13$), and Wood processing factories ($SD = 1.18$). Table 1 also points that the standard deviations of the groups in item 3 ranged from 0.09 to 1.18 with a grand mean of 3.99. This suggests that, more respondents of Wood processing factories ($SD = 0.09$) agreed that they apply the item more than respondents of Palm oil factories ($SD = 1.07$), and Bread baking ($SD = 1.18$).

Again, Table 1 uncovers that the standard deviations of the groups in item 6 ranged from 1.08 to 1.31 and has a grand mean of 4.00. This implies that, more respondents of Palm oil factories ($SD = 1.08$) agreed that they apply the item more than respondents of Bread Baking ($SD = 1.31$), and Wood processing factories ($SD = 1.11$).

Finally, Table 1 indicates that the standard deviations of the groups in item 9 ranged from 1.15 to 1.51 with a grand mean of 3.61. This reveals that, more respondents of Wood processing factories ($SD = 1.15$) agreed that they apply the item more than respondents of palm oil factories ($SD = 1.16$), and Bread baking ($SD = 1.51$).

Table 2

Percentage ratings of the interview responses of Management staff on Application of Liquidity Ratios in measuring Short-term Solvency of Small Scale Industries in the Manufacturing Sector of Cross River State.

N = 38 (Management Staff by factory: Palm Oil 15, Wood 13 and Bread 10)

S/N	INTERVIEW QUESTION	FREQUENCY						PERCENTAGE					
		Palm Oil		Wood		Bread		Palm Oil		Wood		Bread	
		A	N	A	N	A	N	A	N	A	N	A	N
3	Does your business organization compute any of the liquidity ratios to measure short term solvency?	5	10	2	11	3	7	3.33	66.67	15.38	84.62	30	70
4	Do you measure your company's current short term debts paying ability by comparing liquidity ratios of current year to previous year's ratios obtained by the business organization to ascertain the progress made over the period?	2	13	1	12	0	10	13.33	86.67	7.69	92.31	0	100
5	Does your business outfit compare liquidity ratios of current year to previous year with that of similar business(es) in the same industry to ascertain the comparative progress made over the period?	3	12	0	13	3	7	20	80	0	100	30	70

A = Agreed; N = Not Agreed

Data presented in Table 2 shows that 3.33%, 15.38% and 30% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that their business organizations compute liquidity ratios to measure short term solvency while 66.67%, 84.62% and 70% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree. Similarly, 13.33%, 7.69% and 0% of the interviewees in Palm oil, wood and bread baking factories, respectively agreed that their businesses measure current short term debts paying ability by comparing liquidity ratios of current year to previous year's ratios obtained by their business organizations to ascertain the progress made over the period while 86.67%, 92.31% and 100% of the interviewees in Palm oil, wood and bread baking factories, respectively did not agree.

In Table 2 also, it was shown that 20%, 0% and 30% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that their business outfits compare liquidity ratios of current year to previous year with that of similar business(es) in the same industry to ascertain the comparative progress made over the period while 80%, 100% and 70% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree.

Research Question 2

To what extent are gearing (stability) ratios applied in measuring long-term solvency of small scale industries in the manufacturing Sector of Cross River State? The data answering the question were presented in Table 3.

Table 3

Mean Ratings of the responses of Accounting Staff on extent of Application of Gearing Ratios in measuring Long-term Solvency of Small Scale Industries in the Manufacturing Sector of Cross River State.

N = 582 (Accounting staff by factory: Palm oil 310, Wood 151 and Bread 121)

S/N	ITEM STATEMENT	Palm Oil		Wood		Bread		GRAND MEAN	Remarks
		X ₁	SD ₁	X ₂	SD ₂	X ₃	SD ₃		

13	Determine the value of total assets for the accounting year.	4.30	1.02	3.50	1.44	3.91	1.34	3.89	AVA
14	Calculate the value of total liabilities for the accounting year.	2.62	1.05	3.87	1.31	4.08	1.04	3.52	AVA
15	Divide total liabilities by total assets to obtain Debt Ratio.	1.96	1.22	2.33	1.49	2.43	1.41	2.24	SLA
16	Ascertain equity capital from total capital for the year end.	0.85	1.41	3.71	1.49	2.63	0.21	3.41	AVA
17	Divide total liabilities by equity capital to get Debt/Equity Ratio.	1.99	1.32	2.3	1.27	2.4	1.4	2.23	SLA
18	Deduct expenses from Gross Profit to determine Net (Operating) Profit for the accounting period.	4.13	1.20	2.36	1.29	3.61	1.41	3.37	AVA
19	Determine interest payable on the amount borrowed by the Business.	4.03	1.21	2.39	1.21	3.91	1.09	3.44	AVA
20	Divide operating profit (Net profit) by interest expense to ascertain Interest Coverage Ratio.	1.97	1.04	2.07	1.3	2.06	1.06	2.03	SLA
21	Divide total assets by net worth (owner's equity) to determine Capital Employed to Net worth Ratio.	2.12	1.17	2.33	1.31	2.11	1.06	2.19	SLA
22	Divide interest charges by operating (Net) profit (when interest and taxes are not deducted) for the year end to obtain Income Gearing Ratio.	1.81	0.81	1.75	1.06	1.86	1.02	1.81	NA
23	Compare Gearing Ratios of current year to previous year's ratio obtained by the Business organization.	1.75	0.87	1.65	1.00	1.65	0.91	1.68	NA
24	Compare Gearing Ratios of current year to previous year's ratios with that of similar business(es) in the same industry.	1.61	0.74	1.6	0.96	1.62	0.91	1.61	NA

Cluster Mean ($\bar{x}$) = 2.62

Data presented in Table 3 shows that 5 out of 12 items had their grand mean ($\bar{x}$) values ranged from 3.37 to 3.89. This reveals that the means were above the cut-off point of 3.00; indicating that the respondents agreed as follows: that on the average, they determine the value of total assets for the accounting year ($\bar{x}$ = 3.89), calculate the value of total liabilities for the accounting year ($\bar{x}$ = 3.52), ascertain equity capital from total capital for the year end ($\bar{x}$ = 3.41), deduct expenses from gross profit to determine net (operating) profit for the accounting period ($\bar{x}$ = 3.37), and determine interest payable on the amount borrowed by the business ($\bar{x}$ = 3.44) as they relate to measurement of long-term solvency by small scale industries in the manufacturing sector of Cross River State.

Table 3 also indicates that the remaining 7 items had grand mean ($\bar{x}$) values ranged from 1.91 to 2.49 which were below the cut-off point of 3.00. This showed that the respondents agreed that they slightly: divide total liabilities by total assets to obtain debt ratio ($\bar{x}$ = 2.24), divide total liabilities by equity capital to get debt/equity Ratio ($\bar{x}$ = 2.23), divide operating profit (Net profit) by interest expense to ascertain interest coverage ratio ($\bar{x}$ = 2.03), and divide total assets by net worth (owner's equity) to determine capital employed to net worth

ratio ($x = 2.19$). They also agreed that they do not divide interest charges by operating (Net) profit (when interest and taxes are not deducted) for the year end to obtain income gearing ratio

($x = 1.81$), compare gearing ratios of current year to previous year's ratio obtained by the business organization ($x = 1.68$), and compare gearing ratios of current year to previous year's ratios with that of similar business(es) in the same industry ($x = 1.61$) as they relate to measurement of long-term solvency by small scale industries in the manufacturing sector of Cross River State. With a cluster mean (x) of 2.62 obtained in respect of research question 2, it shows that gearing ratios are not applied in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State.

In another perspective, Table 3 shows that the standard deviations of the groups in item 13 ranged from 1.02 ÷ 1.44 and the grand mean is 3.89. This uncovers that, more respondents of Palm oil factories (SD = 1.02) agreed that they apply the item more than respondents of Wood processing (SD=1.44) and Bread baking factories (SD = 1.34).

Table 3 also indicates that the standard deviations of the groups in item 14 ranged from 1.04 ÷ 1.31 with a grand mean of 3.52. This points that, more respondents of Palm oil factories (SD = 1.05) and Bread baking (SD = 1.04) agreed that they apply the item more than respondents of Wood processing factories (SD = 1.31).

In Table 3 also, it is shown that the standard deviations of the groups in item 16 ranged from 0.21 ÷ 1.49 and has a grand mean of 3.41. This suggests that more respondents of Bread baking factories (SD = 0.21) agreed that they apply the item more than respondents of Palm oil (SD = 1.41), and Wood processing factories (SD = 1.49).

Table 3 further reveals that the standard deviations of the groups in item 18 ranged from 1.20 ÷ 1.41 with a grand mean of 3.37. This shows that more respondents of Palm oil factories (SD = 1.20) agreed that they apply the item more than respondents of Wood processing (SD = 1.29), and Bread baking factories (SD = 1.41).

Finally, data presented in Table 3 also shows that the standard deviations of the groups in item 19 ranged from 1.09 ÷ 1.21 and has a grand mean of 3.44. By implication, it suggests that more respondents of Bread baking factories (SD = 1.09) agreed that they apply the item more than respondents of Palm oil (SD = 1.21), and Wood processing factories (SD = 1.21).

Table 4

Percentage ratings of the interview responses of Management staff on Application of Gearing Ratios in measuring Long-term Solvency of Small Scale Industries in the Manufacturing Sector of Cross River State.

N = 38 (Management Staff by factory: Palm Oil 15, Wood 13 and Bread 10)

S/N	INTERVIEW QUESTION	FREQUENCY						PERCENTAGE					
		Palm Oil		Wood		Bread		Palm Oil		Wood		Bread	
		A	N	A	N	A	N	A	N	A	N	A	N
6	Does your business organization compute any of the gearing ratios to measure long term solvency?	4	11	3	10	3	7	26.67	73.33	23.08	76.92	30	70
7	Do you measure your company's current long term debts paying ability by comparing gearing ratios of current year to previous year's ratios obtained by the business organization to ascertain the progress made over the period?	4	11	2	11	2	8	26.67	73.33	15.38	84.62	20	80
8	Does your business outfit compare gearing ratios of current year to previous year with that of similar business(es) in the same industry to ascertain the comparative progress made over the period?	2	13	4	9	2	8	13.33	86.67	30.77	69.23	20	80

A = Agreed; N = Not Agreed

Data presented in Table 4 reveals that 26.67%, 23.08% and 30% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that their business organizations compute gearing ratios to measure long term solvency while 73.33%, 76.92% and 70% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree. Again, 26.67%, 15.38% and 20% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that their companies measure current long term debts paying ability by comparing gearing ratios of current year to previous year's ratios obtained by the business organization to ascertain the progress made over the period while 73.33%, 84.62% and 80% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree. Finally, 13.33%, 30.77% and 20% of the interviewees in Palm oil, wood and bread baking factories, respectively agreed that their business outfits compare gearing ratios of current year to previous year with that of similar business(es) in the same industry to ascertain the comparative progress made over the period while 86.67%, 69.23% and 80% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree.

Research Question 3

To what extent are profitability ratios applied in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State? The data answering the question were presented in Table 5.

Table 5

Mean Ratings of the responses of Accounting Staff on extent of Application of Profitability Ratios in measuring Performance and Effectiveness of Small Scale Industries in the Manufacturing Sector of Cross River State.

N = 582 (Accounting staff by factory: Palm oil 310, Wood 151 and Bread 121)

S/N	ITEM STATEMENT	Palm Oil		Wood		Bread		GRAND MEAN	Remarks
		X ₁	SD ₁	X ₂	SD ₂	X ₃	SD ₃		
25	Divide operating (net) profit by total assets to obtain Return on Capital Employed Ratio.	1.95	1.28	1.79	1.11	2.33	1.14	2.02	SLA
26	Determine gross profit for the accounting period.	3.98	1.19	2.63	1.29	4.22	1.21	3.61	AVA
27	Compute total value of sales for the accounting period.	4.14	1.08	3.78	1.33	2.67	1.23	3.53	AVA
28	Divide gross profit by sales to find Gross Profit (Margin) Ratio.	4.01	1.28	3.71	1.47	4.37	0.97	4.03	A
29	Ascertain net profit for the period.	3.98	1.17	3.52	1.49	4.08	0.84	3.86	AVA
30	Divide net profit by sales to get Net Profit (Margin) Ratio.	3.96	1.18	3.42	1.45	3.96	1.16	3.78	AVA

31	Divide operating (General) expenses by sales to determine Operating Expenses Ratio.	2.11	1.22	1.92	0.83	2.16	1.38	2.06	SLA
32	Divide individual item of expense by total expenses to obtain Expenses Ratios.	1.94	1.17	1.96	0.94	2.20	1.34	2.03	SLA
33	Divide Individual expense by sales to ascertain Expenses to Sales Ratio.	1.88	1.15	1.87	0.92	2.00	1.20	1.92	NA
34	Compare Profitability Ratios of current year to previous year's ratios obtained by the Business organization.	2.01	1.22	1.85	0.84	1.88	1.15	1.91	NA
35	Compare Profitability Ratios of current year to previous year's ratios with that of similar business(es) in the same industry.	1.95	1.23	2.06	1.11	2.08	1.33	2.03	SLA

Cluster Mean ($\bar{x}$) = 2.81

Data presented in Table 5 reveals that 5 out of the items in the Table had their grand mean ($\bar{x}$) values ranged from 3.53 to 4.03. This shows that the means were above the cut-off point of 3.00; indicating that the respondents agreed that they divide gross profit by sales to find gross profit (margin) ratio ($\bar{x}$ = 4.03). They also agreed as follows: that they averagely determine gross profit for the accounting period ($\bar{x}$ = 3.61), compute total value of sales for the accounting period ($\bar{x}$ = 3.53), ascertain net profit for the period ($\bar{x}$ = 3.86), and divide net profit by sales to get net profit (margin) ratio ($\bar{x}$ = 3.78) as they relate to measurement of performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.

Table 5 further shows that the remaining 6 items had grand mean values ranged from 1.91 to 2.06 which were below the cut-off point of 3.00. This indicated that the respondents agreed that they slightly: divide operating (net) profit by total assets to obtain return on capital employed ratio ($\bar{x}$ = 2.02), divide operating (general) expenses by sales to determine operating expenses ratio ($\bar{x}$ = 2.06), divide individual item of expense by total expenses to obtain expenses ratios ($\bar{x}$ = 2.03), and compare profitability ratios of current year to previous year's ratios with that of similar business(es) in the same industry ($\bar{x}$ = 2.03). It was however noted that they do not: divide individual expense by sales to ascertain expenses to sales ratio ($\bar{x}$ = 1.92), compare profitability ratios of current year to previous year's ratios obtained by the business organization ($\bar{x}$ = 1.91) as they relate to measurement of performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. With a cluster mean ($\bar{x}$) of 2.81 obtained in respect of research question 3, it shows that profitability ratios are not applied in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.

Again, Table 5 shows that the standard deviations of the groups in item 26 ranged from 1.19 to 1.29 and the grand mean is 3.61. This points to the effect that more respondents of Palm oil factories (SD = 1.19) agreed that they apply the item more than respondents of Wood processing (SD = 1.29) and Bread baking factories (SD = 1.21).

Table 5 also points that the standard deviations of the groups in item 27 ranged from 1.08 to 1.33 with a grand mean of 3.53. This suggests that, more respondents of Palm oil factories

(SD = 1.08) agreed that they apply the item more than respondents of Wood processing factories (SD = 1.33), and Bread baking factories (SD=1.23).

With respect to standard deviations in item 28, the Table further uncovers that the deviations of the groups ranged from 0.97 to 1.47 and has a grand mean of 4.03. This implies that more respondents of Bread baking (SD = 0.97) agreed that they apply the item more than respondents of Palm oil factories (SD = 1.28), and Wood processing factories (SD = 1.47).

Table 5 also indicates that the standard deviations of the groups in item 29 ranged from 0.84 to 1.49 with a grand mean of 3.86. This reveals that more respondents of Bread baking (SD = 0.84) agreed that they apply the item more than respondents of Palm oil factories (SD = 1.17), and Wood processing factories (SD = 1.49).

In item 30 of Table 5, the standard deviations of the group of respondents ranged from 1.16 to 1.45 with a grand mean of 3.78. This explains that more respondents of Palm oil factories (SD = 1.18) and Bread baking (SD = 1.16) agreed that they apply the item more than respondents of Wood Processing factories (SD = 1.45).

Table 6

Percentage ratings of the interview responses of Management staff on Application of Profitability Ratios in measuring Performance and Effectiveness of Small Scale Industries in the Manufacturing Sector of Cross River State.

N = 38 (Management Staff by factory: Palm Oil 15, Wood 13 and Bread 10)

S/N	INTERVIEW QUESTION	FREQUENCY						PERCENTAGE					
		Palm Oil		Wood		Bread		Palm Oil		Wood		Bread	
		A	N	A	N	A	N	A	N	A	N	A	N
9	Does your business organization compute any of the profitability ratios to measure performance and effectiveness?	6	9	5	8	3	7	40	60	38.46	61.54	30	70

10	Do you measure your company's current performance and effectiveness by comparing profitability ratios of current year to previous year's ratios obtained by the business organization to ascertain the progress made over the period?	0	15	2	11	1	9	0	100	15.38	84.62	10	90
11	Does your business outfit compare profitability ratios of current year to previous year with that of similar business(es) in the same industry to ascertain the comparative progress made over the period?	1	14	0	13	2	8	6.67	93.33	0	100	20	80

A = Agreed; N = Not Agreed

Data presented in Table 6 indicates that 40%, 38.46% and 30% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that their business organizations compute profitability ratios to measure performance and effectiveness while 60%, 61.54% and 70% of the interviewees in Palm oil, wood and bread baking factories, respectively did not agree. In the same vein, 0%, 15.38% and 10% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that their companies measure current performance and effectiveness by comparing profitability ratios of current year to previous year's ratios obtained by the business organization to ascertain the progress made over the period while 100%, 84.62% and 90% of the interviewees in Palm oil, wood and bread baking factories, respectively did not agree. Lastly, 6.67%, 0% and 20% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that their business outfits compare profitability ratios of current year to previous year with that of similar business(es) in the same industry to ascertain the comparative progress made over the period while 93.33%, 100% and 80% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree.

Research Question 4

To what extent are activity (efficiency) ratios applied in measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State? The data answering the question were presented in Table 7.

Table 7

Mean Responses of Accounting Staff on Extent of Application of Activity Ratios in Measuring Efficiency with which Small Scale Industries in the Manufacturing Sector utilize Assets to Generate Cash Flow in Cross River State.

N = 582 (Accounting staff by factory: Palm oil 310, Wood 151 and Bread 121)

S/N	ITEM STATEMENT	Palm Oil		Wood		Bread		GRAND MEAN	Remarks
		X ₁	SD ₁	X ₂	SD ₂	X ₃	SD ₃		
36	Compute cost of goods sold for the accounting period.	3.99	1.28	3.92	1.41	1.86	1.31	3.26	AVA
37	Determine the value of average inventory for the year end.	3.84	1.33	4.02	0.98	4.08	1.34	3.98	AVA
38	Divide cost of goods sold by average inventory to find Stock Turnover Ratio.	3.88	1.4	3.81	1.18	1.96	1.13	3.22	AVA
39	Ascertain the value of credit sales for the period.	3.86	1.21	3.71	1.27	4.37	0.97	3.98	AVA
40	Calculate the average of trade debtors for the accounting period.	2.13	1.28	1.67	1.11	2.16	1.33	1.99	NA
41	Divide credit sales by average trade debtors to determine Debtors Turnover Ratio.	1.94	1.18	1.96	1.01	2.1	1.26	2.00	SLA
42	Ascertain the value of credit purchases for the period.	4.04	1.15	3.45	1.47	3.9	1.26	3.81	AVA
43	Compute the average of trade creditors for the accounting period.	2.02	1.14	2.15	0.84	2.16	1.27	2.11	SLA
44	Obtain Creditors Turnover Ratio by dividing credit purchases by average trade debtors.	1.86	1.08	2.27	1.37	2.26	2.17	2.10	SLA
45	Divide average trade debtors by credit sales and multiply by 365 days to ascertain Debtors Collection Period.	1.86	1.12	2.02	1.01	1.75	1.07	1.87	NA
46	Divide average trade creditors by credit purchases and multiply by 365 days to ascertain Creditors Payment Period	1.95	1.19	1.96	0.87	1.75	0.9	1.89	NA
47	Divide sales by net assets to obtain Net Assets Turnover Ratio.	1.92	1.24	1.89	0.98	2.14	1.18	1.98	NA
48	Divide sales by current assets to obtain Current Assets Turnover Ratio.	2.07	0.77	1.73	1.09	2.02	1.05	1.94	NA
49	Divide sales by fixed assets to obtain Fixed Assets Turnover Ratio.	4.2	1.13	3.63	1.19	3.81	1.14	3.87	AVA
50	Divide sales by total assets to obtain Total Assets Turnover Ratio.	4.16	1.11	1.85	1.21	3.98	1.14	3.30	AVA
51	Compare Activity Ratios of current year to previous year's ratios obtained by the	1.96	1.24	1.89	1.25	1.98	1.39	1.94	NA

	Business organization.								
52	Compare Activity Ratios of current year to previous year's ratios with that of similar business in the same industry.	1.89	1.21	2.00	1.26	2.06	1.35	1.98	NA

Cluster mean ($\bar{x}$) of 2.66

Data presented in Table 7 shows that 7 out of 17 items had their grand mean ($\bar{x}$) values ranging from 3.22 ÷ 3.98. This reveals that the means were above the cut-off point of 3.00; indicating that the respondents agreed as follows: that they averagely compute cost of goods sold for the accounting period ($\bar{x}$ = 3.26), determine the value of average inventory for the year end ($\bar{x}$ = 3.98), divide cost of goods sold by average inventory to find stock turnover ratio ($\bar{x}$ = 3.22), ascertain the value of credit sales for the period ($\bar{x}$ = 3.98), ascertain the value of credit purchases for the period ($\bar{x}$ = 3.81), divide sales by fixed assets to obtain fixed assets turnover ratio ($\bar{x}$ = 3.87), and divide sales by total assets to obtain total assets turnover ratio

($\bar{x}$ = 3.30) as they relate to measurement of efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State.

Table 7 also indicates that the remaining 10 items had grand mean values ranging from 1.87 ÷ 2.11 which were below the cut-off point of 3.00. This showed that the respondents agreed that they slightly: divide credit sales by average trade debtors to determine debtors turnover ratio ($\bar{x}$ = 2.00), compute the average of trade creditors for the accounting period ($\bar{x}$ = 2.11), obtain creditors turnover ratio by dividing credit purchases by average trade debtors ($\bar{x}$ = 2.10). They also agreed that they do not: calculate the average of trade debtors for the accounting period ($\bar{x}$ = 1.99), Divide average trade debtors by credit sales and multiply by 365 days to ascertain debtors collection period ($\bar{x}$ = 1.87), divide average trade creditors by credit purchases and multiply by 365 days to ascertain creditors payment period ($\bar{x}$ = 1.89), divide sales by net assets to obtain net assets turnover ratio ($\bar{x}$ = 1.98), divide sales by current assets to obtain current assets turnover ratio ($\bar{x}$ = 1.94), compare activity ratios of current year to previous year's ratios obtained by the business organization ($\bar{x}$ = 1.94), and compare activity ratios of current year to previous year's ratios with that of similar business in the same industry ($\bar{x}$ = 1.98) as they relate to measurement of efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State. With a cluster mean ($\bar{x}$) of 2.66 obtained in respect of research question 4, it shows that activity (efficiency) ratios are not applied in measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State. In another perspective, Table 7 shows that the standard deviations of the groups in item 36 ranged from 1.28 ÷ 1.41 and the grand mean is 3.26. This uncovers that, more respondents of Palm oil factories (SD = 1.28) agreed that they apply the item more than respondents of Wood processing (SD = 1.41) and Bread baking factories (SD = 1.31).

Table 7 also indicates that the standard deviations of the groups in item 37 ranged from 0.98 ÷ 1.34 with a grand mean of 3.22. This points that, more respondents of Wood processing factories (SD = 0.98) agreed that they apply the item more than respondents of Palm oil (SD = 1.33) and Bread baking factories (SD = 1.34).

In Table 7 also, it is shown that the standard deviations of the groups in item 38 ranged from 1.13 ÷ 1.40 and has a grand mean of 3.22. This suggests that more respondents of Bread baking factories (SD = 1.13) agreed that they apply the item more than respondents of Palm oil (SD = 1.40), and Wood processing factories (SD = 1.18).

The Table further reveals that the standard deviations of the groups in item 39 ranged from 0.97 ÷ 1.41 with a grand mean of 3.98. This shows that more respondents of Bread baking

factories (SD = 0.97) agreed that they apply the item more than respondents of Palm oil factories (SD = 1.21) and Wood processing (SD = 1.41).

In the same vein, data presented in Table 7 also shows that the standard deviations of the groups in item 42 ranged from 1.15 to 1.47 and has a grand mean of 3.81. By implication, it suggests that more respondents of Palm oil (SD = 1.15) agreed that they apply the item more than respondents of Wood processing (SD = 1.47) and Bread baking factories (SD = 1.26). Table 7 further unfolds that the standard deviations of the groups in item 49 ranged from 1.13 to 1.19 with a grand mean of 3.87. This points that, more respondents of Palm oil (SD = 1.13) and Bread baking factories (SD = 1.14) agreed that they apply the item more than respondents of Wood processing factories (SD = 1.19).

Finally, in Table 7 also, it is shown that the standard deviations of the groups in item 50 ranged from 1.11 to 1.21 and has a grand mean of 3.30. This suggests that more respondents of Palm oil (SD = 1.11) agreed that they apply the item more than respondents of Wood processing (SD=1.21) and Bread baking factories (SD=1.14).

Table 8

Percentage ratings of the interview responses of Management staff on Application of Activity Ratios in Measuring Efficiency with which Small Scale Industries in the Manufacturing Sector utilize Assets to Generate Cash Flow in Cross River State.

N = 38 (Management Staff by factory: Palm Oil 15, Wood 13 and Bread 10)

S/N	INTERVIEW QUESTION	FREQUENCY						PERCENTAGE					
		Palm Oil		Wood		Bread		Palm Oil		Wood		Bread	
		A	N	A	N	A	N	A	N	A	N	A	N
12	Does your business organization compute any of the activity ratios to measure efficiency in the utilization of assets to generate cash flow?	3	12	1	12	3	7	20	80	7.69	92.31	30	70
13	Do you measure your company's current efficiency in the utilization of assets to generate cash flow by comparing activity ratios of current year to previous year's ratios obtained by the business organization to ascertain the progress made over the period?	1	14	3	10	2	8	6.67	93.33	23.08	76.92	20	80
14	Does your business outfit compare activity ratios of current year to previous year with that of similar business(es) in the same industry to ascertain the comparative progress made over the period?	2	13	1	12	0	10	13.33	86.67	7.69	92.31	0	100

A = Agreed; N = Not Agreed

Data presented in Table 8 shows that 20%, 7.69% and 30% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that their business organizations compute activity ratios to measure efficiency in the utilization of assets to generate cash flow while 80%, 92.31% and 70% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree. More so, the data presented also points that 6.67%,

23.08% and 20% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that their companies measure current efficiency in the utilization of assets to generate cash flow by comparing activity ratios of current year to previous year's ratios obtained by the business organization to ascertain the progress made over the period while 93.33%, 76.92% and 80% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree. Finally in Table 8 it was again indicated that 13.33%, 7.69% and 0% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that their business outfits compare activity ratios of current year to previous year with that of similar business(es) in the same industry to ascertain the comparative progress made over the period while 86.67%, 92.31% and 100% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree.

Research Question 5

To what extent is cash flow statement applied in reporting cash flow of small scale industries in the manufacturing sector of Cross River State? The data answering the question were presented in Table 9.

Table 9

Mean Ratings of the responses of Accounting Staff on extent of Application of Cash Flow Statement in Reporting the Cash Flow of Small Scale Industries in the Manufacturing Sector of Cross River State.

N = 582 (Accounting staff by factory: Palm oil 310, Wood 151 and Bread 121)

S/N	ITEM STATEMENT	Palm Oil		Wood		Bread		GRAND MEAN	Remarks
		X ₁	SD ₁	X ₂	SD ₂	X ₃	SD ₃		
53	Categorize cash flows into Operating, Investing, and Financing activities, respectively.	1.93	1.28	2.24	1.45	2.38	1.19	2.18	SLA
54	Compute net increase or decrease in cash.	1.72	0.93	1.91	1.19	1.79	1.35	1.81	NA
55	Compute and report net cash provided (used) by Operating Activities.	2.33	0.76	2.22	1.02	2.25	1.1	2.27	SLA

56	Compute and report net cash provided (used) by Investing Activities.	1.96	0.82	1.77	0.81	1.78	1.04	1.84	NA
57	Compute and report net cash provided (used) by Financing Activities.	1.68	0.72	1.83	1.11	1.84	0.95	1.78	NA
58	Compute net cash flow provided (used) by Operating, Investing, and Financing Activities.	1.53	0.57	1.7	1.08	1.63	0.86	1.62	NA
59	Add net cash flow provided (used) by Operating, Investing, and Financing Activities to the beginning cash balance to show that it equals the ending cash balance.	1.72	0.81	1.62	1.03	2.02	0.93	1.79	NA

Cluster Mean ($\bar{x}$) = 1.91

Data presented in Table 9 shows that all the items listed had grand mean values ranging from 1.62 to 2.27 which were below the cut-off point of 3.00. This indicated that the respondents agreed that they slightly: categorize cash flows into operating, investing, and financing activities, respectively ($\bar{x}$ = 2.18), and compute and report net cash provided (used) by operating activities ($\bar{x}$ = 2.27).

It was however noted that they do not: compute net increase or decrease in cash ($\bar{x}$ = 1.81), compute and report net cash provided (used) by investing activities ($\bar{x}$ = 1.84), compute and report net cash provided (used) by financing activities ($\bar{x}$ = 1.78), compute net cash flow provided (used) by operating, investing, and financing activities ($\bar{x}$ = 1.62); and add net cash flow provided (used) by operating, investing, and financing activities to the beginning cash balance to show that it equals the ending cash balance ($\bar{x}$ = 1.79) as they relate to reporting the cash flow of Small Scale Industries in the Manufacturing Sector of Cross River State. With a cluster mean ($\bar{x}$) of 1.91 obtained in respect of research question 5, it shows that cash flow statement is not applied in reporting cash flow of small scale industries in the manufacturing sector of Cross River State.

Table 10

Percentage ratings of the interview responses of Management staff on Application of Cash Flow Statement in Reporting the Cash Flow of Small Scale Industries in the Manufacturing Sector of Cross River State.

N = 38 (Management Staff by factory: Palm Oil 15, Wood 13 and Bread 10)

S/N	INTERVIEW QUESTION	FREQUENCY						PERCENTAGE					
		Palm Oil		Wood		Bread		Palm Oil		Wood		Bread	
		A	N	A	N	A	N	A	N	A	N	A	N
15	Does your business organization prepare cash flow statement?	1	14	0	13	0	10	6.67	93.33	0	100	0	100
16	Do you categorize cash flows into operating, investing and financing activities in your organization?	0	15	0	13	0	10	0	100	0	100	0	100

A = Agreed; N = Not Agreed

The data presented in Table 10 reveals that 6.67%, 0% and 0% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that their business organizations prepare cash flow statement while 93.33%, 100% and 100% of the interviewees in Palm oil,

wood and bread baking factories respectively, did not agree. Again, the Table shows that 0%, 0% and 0% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that their organizations do categorize cash flows into operating, investing and financing activities while 100%, 100% and 100% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree.

Research Question 6

What are the Bookkeeping procedures followed and accounting records kept by small scale industries in the manufacturing sector of Cross River State? The data answering the question were presented in Table 11.

Table 11

Mean Ratings of the responses of Accounting Staff on Bookkeeping Procedures and accounting records kept by small scale industries in the Manufacturing Sector of Cross River State.

N = 582 (Accounting staff by factory: Palm oil 310, Wood 151 and Bread 121)

S/N	ITEM STATEMENT	Palm oil		Wood		Bread		GRAND MEAN	Remarks
		X ₁	SD ₁	X ₂	SD ₂	X ₃	SD ₃		
60	Transfer Production cost in Manufacturing Account to Trading Account	1.66	0.81	1.74	1.08	1.83	1.07	1.74	NA
61	Determine Gross profit/loss in Trading Account	1.83	1.02	2.04	0.98	1.89	1.11	1.92	NA
62	Determine Net profit/loss in Profit and Loss Account	1.80	0.87	1.98	1.11	2.08	1.19	1.95	NA
63	Transfer Net profit to Capital Account	1.89	0.91	2.00	0.89	1.8	1.13	1.91	NA
64	Determine cost of production in Manufacturing Account	1.70	0.77	1.99	1.23	2.02	1.07	1.89	NA
65	Determine Prime cost of production in Manufacturing Account	2.34	1.05	2.54	1.08	2.23	1.17	2.37	SLA
66	Deduct depreciation value from cost of assets to obtain Net Book Value in the Balance Sheet	3.03	1.14	3.68	1.44	3.90	1.32	3.54	AVA
67	Classify Assets into fixed and current assets in the Balance Sheet	4.15	1.22	2.66	1.35	3.81	1.49	3.54	AVA
68	Classify Liabilities into long-term and current liabilities in the Balance Sheet	4.12	1.11	2.65	1.03	3.94	1.28	3.57	AVA
69	Transfer value of Debtors from Sales Account to the Balance Sheet	3.87	1.35	2.65	1.16	4.11	1.21	3.58	AVA
70	Transfer value of Creditors from Purchases Account to the Balance Sheet	3.94	1.07	4.06	0.91	2.43	1.36	3.51	AVA

Cluster Mean ($\bar{x}$) = 2.68

Data presented in Table 11 shows that 5 out of 11 items had their grand mean values ranging from 3.51 to 3.58. This reveals that the means were above the cut-off point of 3.00; indicating that the respondents agreed as follows: that they classify liabilities into long-term and current liabilities in the balance sheet ($\bar{x}$ = 4.05), transfer value of debtors from sales account to the balance sheet ($\bar{x}$ = 4.04) and transfer value of creditors from purchases account to the balance sheet ($\bar{x}$ = 4.00).

They also agreed that they: averagely deduct depreciation value from cost of assets to obtain net book value in the balance sheet ($\bar{x} = 3.54$), classify assets into fixed and current assets in the balance sheet ($\bar{x} = 3.54$) as they relate to the Bookkeeping procedures and accounting records kept by small scale industries in the manufacturing sector of Cross River State.

Table 11 also indicates that the remaining 6 items had grand mean values ranged from 1.74 to 2.37 which were below the cut-off point of 3.00. This showed that the respondents agreed that they slightly determine prime cost of production in manufacturing account ($\bar{x} = 2.37$). They however agreed that they do not: transfer production cost in manufacturing account to trading account ($\bar{x} = 1.74$), determine gross profit/loss in trading account ($\bar{x} = 1.92$), determine net profit/loss in profit and loss account ($\bar{x} = 1.95$), transfer net profit to capital account ($\bar{x} = 1.91$); and determine cost of production in manufacturing account ($\bar{x} = 1.89$) as they relate to the Bookkeeping procedures and accounting records kept by small scale industries in the manufacturing sector of Cross River State. With a cluster mean ($\bar{x}$) of 2.68 obtained in respect of research question 6, it shows that bookkeeping procedures are not followed and accounting records are not kept by small scale industries in the Manufacturing Sector of Cross River State.

Again, Table 11 shows that the standard deviations of the groups in item 66 ranged from 1.14 to 1.44 and the grand mean is 3.54. This points to the effect that more respondents of Palm oil factories (SD = 1.14) agreed that they apply the item more than respondents of Wood Processing (SD = 1.44) and Bread baking factories (SD = 1.32).

Table 11 also points that the standard deviations of the groups in item 67 ranged from 1.22 to 1.49 with a grand mean of 3.54. This suggests that, more respondents of Palm oil factories (SD = 1.22) agreed that they apply the item more than respondents of Wood processing factories (SD = 1.35), and Bread baking (SD = 1.49).

For item 68, Table 11 further uncovers that the standard deviations of the groups ranged from 1.11 to 1.28 and has a grand mean of 3.57. This implies that more respondents of Palm oil Factories (SD = 1.11) agreed that they apply the item more than respondents of Wood processing (SD = 1.03), and Bread baking factories (SD = 1.28).

Table 11 also indicates that the standard deviations of the groups in item 69 ranged from 1.16 to 1.35 with a grand mean of 3.58. This reveals that more respondents of Wood processing factories (SD = 1.16) agreed that they apply the item more than respondents of Palm oil (SD = 1.35), and Bread baking factories (SD = 1.21).

Finally, in item 70 of Table 11, the standard deviations of the group of respondents ranged from 0.91 to 1.36 with a grand mean of 3.51. This explains that more respondents of Wood processing factories (SD = 0.91) agreed that they apply the item more than respondents of Palm oil (SD=1.07), and Bread baking factories (SD = 1.36).

Table 12

Percentage ratings of the interview responses of Management staff on Bookkeeping Procedures and accounting records kept by small scale industries in the Manufacturing Sector of Cross River State.

N = 38 (Management Staff by factory: Palm Oil 15, Wood 13 and Bread 10)

S/N	INTERVIEW QUESTION	FREQUENCY						PERCENTAGE					
		Palm Oil		Wood		Bread		Palm Oil		Wood		Bread	
		A	N	A	N	A	N	A	N	A	N	A	N
17	Does your organization keep accounting records that could be used to analyze performance and effectiveness over time?	5	10	6	7	4	60	33.33	66.67	46.15	53.85	40	60
18	Do you follow the double entry principle in preparing the financial statements of your business organization?	3	12	7	6	3	7	20	80	53.85	46.15	30	70
19	Which of these books are kept by your organization?												
	- Trading, Profit & Loss A/c	6	9	8	5	4	6	40	60	61.54	38.46	40	60
	- Balance Sheet	3	12	2	11	2	8	20	80	15.38	84.62	20	80
	- Cash Book	15	0	13	0	10	0	100	0	100	0	100	0

A = Agreed; N = Not Agreed

Data presented in Table 12 indicates that 33.33%, 46.15% and 40% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that their organizations keep accounting records that could be used to analyze performance and effectiveness over time while 66.67%, 53.85% and 60% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree. In the same Table, it was found that 20%, 53.85% and 30% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that they follow the double entry principle in preparing the financial statements of their business organization while 80%, 46.15% and 70% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree.

Table 12 also shows that 40%, 61.54% and 40% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that they keep Trading, Profit and Loss Account while 60%, 38.45% and 60% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree. Furthermore, it was shown that 20%, 15.38% and 20% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that they prepare Balance sheet while 80%, 84.62% and 80% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree. Finally, in Table 12 it was indicated that 100%, 100% and 100% of the interviewees in Palm oil, wood and bread baking

factories respectively, agreed that they prepare cash books while 0%, 0% and 0% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree.

Research Question 7

What are the problems associated with the application of accounting ratios in Small Scale Industries? The data answering the question were presented in Table 13.

Table 13

Mean Ratings of the responses of Accounting Staff on Problems Associated with Application of Accounting Ratios in Small Scale Industries.

N = 582 (Accounting staff by factory: Palm oil 310, Wood 151 and Bread 121)

S/N	ITEM STATEMENT	Palm Oil		Wood		Bread		GRAND MEAN	Remarks
		X ₁	SD ₁	X ₂	SD ₂	X ₃	SD ₃		
71	Differences in accounting policies adopted make inter-business comparison difficult.	2.57	1.48	3.26	1.54	3.23	1.53	3.02	AVA
72	Lack of qualified accounting staff mar the application of ratios.	3.59	1.58	3.56	1.62	3.55	1.67	3.56	AVA
73	On their own, ratios cannot show whether performance	2.43	1.29	3.75	1.43	3.41	1.51	3.21	AVA

	is good or bad.								
74	Ratios based on information from historical cost convention are not very useful for decision making.	3.66	1.46	3.94	1.45	2.58	1.42	3.41	AVA
75	Accounting staff lack Book-keeping experience.	3.27	1.40	2.56	1.37	3.42	1.58	3.08	AVA
76	Accounting records are not properly maintained.	3.71	1.34	3.71	1.46	2.28	1.64	3.05	AVA
77	Management does not consider accounting ratios as useful tools for measuring solvency.	3.59	1.51	3.76	1.29	2.42	1.11	3.26	AVA
78	Differences in capital structure of companies make comparison difficult.	3.54	1.61	2.13	1.52	3.26	1.48	3.11	AVA
79	Window dressed financial statements affects accounting ratios.	2.56	1.47	3.87	1.26	3.56	1.66	3.33	AVA

Cluster Mean ($\bar{x}$) = 3.23

Data presented in Table 13 shows that all items listed had their grand mean values ranging from 3.02 to 3.41. This reveals that the means were above the cut-off point of 3.00; indicating that the respondents agreed as follows: that they averagely differences in accounting policies adopted make inter-business comparison difficult ($\bar{x}$ = 3.02), lack of qualified accounting staff mar the application of ratios ($\bar{x}$ = 3.56), on their own, ratios cannot show whether performance is good or bad ($\bar{x}$ = 3.21), ratios based on information from historical cost convention are not very useful for decision making ($\bar{x}$ = 3.41), accounting staff lack book-keeping experience ($\bar{x}$ = 3.08), accounting records are not properly maintained ($\bar{x}$ = 3.05), management does not consider accounting ratios as useful tools for measuring solvency ($\bar{x}$ = 3.26), differences in capital structure of companies make comparison difficult ($\bar{x}$ = 3.11); and window dressed financial statements affects accounting ratios ($\bar{x}$ = 3.33) as they relate to Problems associated with application of accounting ratios by small scale industries in the manufacturing sector of Cross River State. With a cluster mean ($\bar{x}$) of 3.23 obtained in respect of research question 7, it shows that the respondents agreed that the items listed are problems associated with the application of accounting ratios in measuring solvency of small scale industries in the manufacturing sector of Cross River State.

In another dimension, Table 13 shows that the standard deviations of the groups in item 71 ranged from 1.48 to 1.54 and the grand mean is 3.02. This uncovers that, more respondents of

Palm oil factories (SD = 1.48) agreed that they apply the item more than respondents of Wood Processing (SD=1.54) and Bread baking factories (SD = 1.53).

Table 13 also indicates that the standard deviations of the groups in item 72 ranged from 1.58 ÷ 1.67 with a grand mean of 3.56. This points that, more respondents of Palm oil (SD = 1.58) agreed that they apply the item more than respondents of Wood processing (SD = 1.62) and Bread baking factories (SD = 1.67).

In Table 13 again, it is shown that the standard deviations of the groups in item 73 ranged from 1.29 ÷ 1.51 and has a grand mean of 3.21. This suggests that more respondents of Palm oil (SD = 1.29) agreed that they apply the item more than respondents of Wood processing factories (SD = 1.43), and Bread baking factories (SD = 1.51).

The Table further reveals that the standard deviations of the groups in item 74 ranged from 1.42 ÷ 1.46 with a grand mean of 3.41. This shows that more respondents of Bread baking factories (SD = 1.42) agreed that they apply the item more than respondents of Palm oil factories (SD = 1.46) and Wood processing (SD = 1.42).

In the same vein, data presented in Table 13 shows that the standard deviations of the groups in item 75 ranged from 1.37 ÷ 1.58 and has a grand mean of 3.08. By implication, it suggests that more respondents of Wood processing (SD = 1.37) agreed that they apply the item more than respondents of Palm oil (SD = 1.40) and Bread baking factories (SD = 1.58).

Table 13 further unfolds that the standard deviations of the groups in item 76 ranged from 1.34 ÷ 1.64 with a grand mean of 3.05. This points that, more respondents of Palm oil (SD = 1.34) agreed that they apply the item more than respondents of Wood processing (SD = 1.46) and Bread baking factories (SD = 1.64).

The Table also points that the standard deviations of the groups in item 77 ranged from 1.11 ÷ 1.51 with a grand mean of 3.26. This suggests that, more respondents of Bread baking (SD = 1.11) agreed that they apply the item more than respondents of Palm oil processing (SD = 1.51), and Wood processing factories (SD = 1.29).

With respect to standard deviations in item 78, the Table further reveals that the deviations of the groups ranged from 1.48 ÷ 1.61 and has a grand mean of 3.11. This implies that more respondents of Bread baking (SD = 1.48) agreed that they apply the item more than respondents of Palm oil factories (SD = 1.61), and Wood processing factories (SD = 1.52).

Finally, in Table 13 also, it is shown that the standard deviations of the groups in item 79 ranged from 1.26 ÷ 1.66 and has a grand mean of 3.33. This suggests that more respondents of Wood processing (SD = 1.26) agreed that they apply the item more than respondents of Palm oil (SD = 1.47), and Bread baking factories (SD = 1.66).

Table 14

Percentage ratings of the interview responses of Management staff on Problems Associated with Application of Accounting Ratios in Small Scale Industries.

N = 38 (Management Staff by factory: Palm Oil 15, Wood 13 and Bread 10)

S/N	INTERVIEW QUESTION	FREQUENCY						PERCENTAGE					
		Palm Oil		Wood		Bread		Palm Oil		Wood		Bread	
		A	N	A	N	A	N	A	N	A	N	A	N
20	Which among these are problems associated with the application of accounting ratios by your business organization? - Differences in accounting	9	6	10	3	5	5	60	40	76.92	23.08	50	50

polices adopted by businesses.	13	2	12	1	8	2	86.67	13.33	92.31	7.69	80	20
- Lack of staff with fair accounting background.	10	5	11	2	7	3	66.67	33.33	84.62	15.38	70	30
- Improper recording of accounting transactions.	12	3	9	4	9	1	80	20	69.23	30.77	90	10
- Differences in the capital structure of businesses.	14	1	7	6	6	4	93.33	6.67	53.85	46.15	60	40
- Window dressing of financial statements.	8	7	6	7	4	6	53.33	46.67	46.15	53.85	40	60
- Inability of ratios to show whether management is good or bad.	15	0	11	2	8	2	100	0	84.62	15.38	80	20
- Management does not consider ratios as useful tools that can measure business efficiency and performance.												

A = Agreed; N = Not Agreed

Data presented in Table 14 reveals that 60%, 76.92% and 50% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that differences in accounting policies adopted by businesses is a problem associated with the application of accounting ratios while 40%, 23.08% and 50% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree. Again, the Table shows that 86.67%, 92.31% and 80% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that lack of staff with fair accounting background businesses is a problem associated with the application of accounting ratios while 13.33%, 7.69% and 20% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree.

Table 14 also shows that 66.67%, 84.62% and 70% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that improper recording of accounting transactions is a problem associated with the application of accounting ratios while 33.33%, 15.38% and 30% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree. Similarly, the Table indicates that 80%, 69.23% and 90% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that differences in the capital structure of businesses is a problem associated with the application of accounting ratios while 20%, 30.77% and 10% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree.

Table 14 further reveals that 93.33%, 53.85% and 60% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that window dressing of financial statements is a problem associated with the application of accounting ratios

while 6.67%, 46.15% and 40% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree.

More so, the Table indicates that 53.33%, 46.15% and 40% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that inability of ratios to show whether management is good or bad is a problem associated with the application of accounting ratios while 46.67%, 53.85% and 60% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree. Finally, in Table 14 it was shown that 100%, 84.62% and 80% of the interviewees in Palm oil, wood and bread baking factories respectively, agreed that management does not consider ratios as useful tools that can measure business efficiency and performance while 0%, 15.38% and 20% of the interviewees in Palm oil, wood and bread baking factories respectively, did not agree.

Testing Hypotheses

Null Hypothesis 1

There is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of liquidity ratios in measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State.

Table 15

Item-by-item Analysis of Variance (ANOVA) on Mean responses of Accounting Staff on extent of Application of Liquidity Ratios in measuring Short-term Solvency of Small Scale Industries in the Manufacturing Sector of Cross River State.

S/N	Item Statement	Residual	SST	F-Cal	E ²	Remarks
2	Compute the value of total current assets for the accounting period.	1.129	272.760	7.77	0.0723	Sig.
3	Compute the value of total current liabilities for the accounting period.	1.178	285.886	8.39	0.0740	Sig.
4	Divide total current assets by total current liabilities for the accounting period to obtain Current Ratio.	1.478	338.472	1.48	0.0851	Not Sig.
5	Less the value of Stock from Current Assets to determine Quick Assets for the accounting Period.	1.293	292.786	0.25	0.0749	Not Sig.
6	Conduct analysis of Debtors to ascertain					

	doubtful balances for the accounting period.	1.293	294.646	0.945	0.0751	Not Sig.
7	Subtract doubtful balances from closing value of Debtors.	1.797	403.437	0.657	0.0885	Not Sig.
8	Divide Net Quick assets by current liabilities for the accounting period to obtain Quick (Acid-test) Ratio.	1.388	321.590	2.880	0.0785	Not Sig.
9	Ascertain the value of cash and cash equivalents for every accounting year end.	1.560	367.109	4.664	0.0839	Sig.
10	Divide the value of cash and cash equivalents by current liabilities for the accounting year end to get Cash Ratio.	1.231	281.563	1.395	0.0734	Not Sig.
11	Compare Liquidity Ratios of current year to previous year's ratios obtained by the Business organization.	1.664	376.210	0.69	0.0849	Not Sig.
12	Compare Liquidity Ratios of current year to previous year's ratios with that of similar business(es) in the same industry.	1.748	395.214	0.04	0.0870	Not Sig.

F-tab = 3.00, df = 2 and 579, P > .05

From the F-ratio distribution in Table 15, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the calculated value of 7.77 is more than the critical value of 3.00, in item 2, we have good reason not to reject that, there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on extent of computing the value of total current assets for the accounting period when measuring short-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State. This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the computation of the value of total current assets for the accounting period when measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State. For item 2, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of liquidity ratios in measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore rejected.

Table 16

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 2

Groups	N	Subset for alpha = 0.05	
		A	B
3	121	3.8679	

2	151	3.9444	
1	310		4.4590
		.680	1.000
Sig.			

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 2 of Table 15 whose ANOVA result is significant, indicates that the means of Wood processing factories ($\bar{x} = 3.94$) and Bread baking factories ($\bar{x} = 3.87$) do not differ significantly but both means differ significantly from the mean of Palm oil factories ($\bar{x} = 4.46$). A critical observation of the means of the three groups also shows that the mean of Palm oil factories is the highest. Therefore, it is the group showing the major source of the difference.

In item 3 of Table 15, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the calculated value of 8.39 is more than the critical value of 3.00, we have good reason not to reject that, there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on extent of computing the value of total current liabilities for the accounting period when measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the computation of the value of total current liabilities for the accounting period when measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State. For item 3, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of liquidity ratios in measuring short-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State is therefore rejected.

Table 17

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 3

Groups	N	Subset for alpha = 0.05	
		A	B
2	151	3.6296	
3	121	4.0000	4.0000
1	310		4.3443
Sig.		.051	.070

1 = Palm oil, 2 = Wood, 3 = Bread Factories

The Duncan Post Hoc Tests in respect of item 3 of Table 15 whose ANOVA result is also significant, indicates that the means of Wood processing factories ($\bar{x} = 3.63$) and Bread baking factories ($\bar{x} = 4.00$) do not differ significantly, and the means of Palm oil factories ($\bar{x} = 4.34$) and Bread baking factories ($\bar{x} = 4.00$) do not also differ; but the means of Wood processing factories ($\bar{x} = 3.63$) and Palm oil factories ($\bar{x} = 4.34$) differ significantly from one another. Since the means of palm oil and wood factories differ significantly, but that of wood and bread factories do not, palm oil factories is the group reflecting the source of major difference with the highest mean.

Finally, on item 9 of Table 15, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that, the calculated value of 4.66 is more than the critical value of 3.00, we therefore, have good reason not to reject that, there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of ascertaining the value of cash and cash equivalents for every accounting year end when measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the ascertainment of the value of cash and cash equivalents for every accounting year end when measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State. For item 9, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of liquidity ratios in measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore rejected.

Table 18

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 9

Groups	N	Subset for alpha = 0.05	
		A	B
3	121	3.2075	
1	310		3.7787
2	151		3.8519
Sig.		1.0000	.737

1 = Palm oil, 2 = Wood, 3 = Bread Factories

The Duncan Post Hoc Tests in respect of item 9 of Table 15 whose ANOVA result is again significant, indicates that the means of Palm oil processing ($\bar{x}$ = 3.78) and Wood processing

factories ($\bar{x} = 3.85$) do not differ significantly but both means differ significantly from the mean of Bread baking factories ($\bar{x} = 3.21$). Therefore, Bread baking factories is the group showing the major source of the difference.

On the other hand, on item 4 of Table 15, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution reveals that the calculated value of 1.48 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of dividing total current assets by total current liabilities for the accounting period to obtain current ratio when measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the dividing total current assets by total current liabilities for the accounting period to obtain current ratio when measuring short-term solvency of Small Scale industries in the manufacturing sector of Cross River State. For item 4, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of liquidity ratios in measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

On item 5 of Table 15, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution reveals that the calculated value of 0.25 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of deducting the value of stock from current assets to determine quick assets for the accounting period when measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the deduction of the value of stock from current assets to determine quick assets for the accounting period when measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State. For item 5, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of liquidity ratios in measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

More so, on item 6 of Table 15, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution reveals that the calculated value of 0.95 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of conducting analysis of debtors to ascertain doubtful balances for the accounting period when measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the deduction of the value of stock from current assets to determine quick assets for the accounting period when measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State. For item 6, the null hypothesis which states that

there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of liquidity ratios in measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 7 of Table 15, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution indicates that the calculated value of 0.66 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of deducting doubtful balances from closing value of debtors when measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the deduction of doubtful balances from closing value of debtors when measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State. For item 7, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of liquidity ratios in measuring short-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State is therefore upheld.

Similarly, in item 8 of Table 15, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that, the calculated value of 2.88 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of dividing net quick assets by current liabilities for the accounting period to obtain quick (acid-test) ratio; when measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the division of net quick assets by current liabilities for the accounting period to obtain quick (acid-test) ratio; when measuring short-term solvency of Small Scale industries in the manufacturing sector of Cross River State. For item 8, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of liquidity ratios in measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 10 of Table 15, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution indicates that, the calculated value of 1.41 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of dividing the value of cash and cash equivalents by current liabilities for the accounting year end to get cash ratio; when measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the division of the value of cash and cash equivalents by current liabilities for the accounting year end to get cash ratio; when measuring short-term solvency of Small Scale industries in the manufacturing sector of Cross River State. For item 10, the null hypothesis which states

that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of liquidity ratios in measuring short-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State is therefore upheld.

In item 11 of Table 15 also, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution indicates that, the calculated value of 0.69 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of comparing liquidity ratios of current year to previous year's ratios obtained by the business organization; when measuring short-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the comparison of liquidity ratios of current year to previous year's ratios obtained by the business organization; when measuring short-term solvency of Small Scale industries in the manufacturing sector of Cross River State. For item 11, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of liquidity ratios in measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

Finally, in item 12 of Table 15, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution indicates that, the calculated value of 0.04 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of comparing liquidity ratios of current year to previous year's ratios with that of similar business(es) in the same industry; when measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the comparison of liquidity ratios of current year to previous year's ratios with that of similar business(es) in the same industry; when measuring short-term solvency of Small Scale industries in the manufacturing sector of Cross River State. For item 12, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of liquidity ratios in measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

Table 19

Cluster Analysis of Variance (ANOVA) on the mean responses of accounting staff on the application of liquidity ratios in measuring short-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State.

Sources of variation	df	Sum of squares	Mean squares	F-cal	F-tab	Sig.	Decision
Between groups	2	2341.89	1170.95	0.90	3.00	NS	Do not reject H ₀
Within groups	579	752298.21	2735.04				

Total	581	754640.10		
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From the F-ratio distribution in Table 19, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the calculated value of 0.90 is less than the critical value of 3.00, we have good reason not to reject the null hypotheses (Ho). Therefore, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the application of liquidity ratios in measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State.

Null Hypothesis 2

There will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of gearing ratios in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State.

Table 20

Item-by-item Analysis of Variance (ANOVA) on Mean responses of Accounting Staff on extent of Application of Gearing Ratios in measuring Long-term Solvency of Small Scale Industries in the Manufacturing Sector of Cross River State.

S/N	Item Statement	Residual	SST	F-Cal	E ²	Remarks
13	Determine the value of total assets for the accounting year.	1.477	360.961	9.22	0.0832	Sig.
14	Calculate the value of total liabilities for the accounting year.	1.843	521.310	28.45	0.0999	Sig.
15	Divide total liabilities by total assets to obtain Debt Ratio.	1.775	371.652	2.69	0.0934	Not Sig.
16	Ascertain equity capital from total capital for the yearend.	1.893	492.645	17.59	0.0976	Sig.
17	Divide total liabilities by equity capital to get Debt/Equity Ratio.	1.788	395.432	2.08	0.0906	Not Sig.
18	Deduct expenses from Gross Profit to determine Net (Operating) Profit for the accounting period.	1.794	509.951	30.65	0.1001	Sig.
19	Determine interest payable on the amount borrowed by the Business.	1.557	470.571	37.14	0.0941	Sig.
20	Divide operating profit (Net profit) by interest expense to ascertain Interest Coverage Ratio.	1.257	280.960	0.22	0.0743	Not Sig.
21	Divide total assets by net worth (owner's equity) to determine Capital Employed to Net worth Ratio.	1.417	306.749	0.64	0.0802	Not Sig.

22	Divide interest charges by operating (Net) profit (when interest and taxes are not deducted) for the year end to obtain Income Gearing Ratio.	0.874	186.440	0.17	0.0634	Not Sig.
23	Compare Gearing Ratios of current year to previous year's ratio obtained by the Business organization.	0.796	176.554	0.36	0.0595	Not Sig.
24	Compare Gearing Ratios of current year to previous year's ratios with that of similar business(es) in the same industry.	0.755	161.484	0.01	0.0587	Not Sig.

F-tab = 3.00, df = 2 and 579, P > .05

From the F-ratio distribution in Table 20, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the calculated value of 9.22 is more than the critical value of 3.00, in item 13, we have good reason not to reject that, there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of determining the value of total assets for the accounting year; when measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the determination of the value of total assets for the accounting year; when measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State. For item 13, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of gearing ratios in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore rejected.

Table 21

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 13

Groups	N	Subset for alpha = 0.05	
		A	B
2	151	3.4630	3.9057
3	121		
1	310		
Sig.		1.000	.062

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 13 of Table 20 whose ANOVA result is significant, indicates that the means of Palm oil factories ($\bar{x} = 4.30$) and Bread baking factories ($\bar{x} = 3.91$) do not differ significantly but both means differ significantly from the mean of Wood processing factories ($\bar{x} = 3.46$). Therefore, Wood processing factories is the group showing the major source of the difference.

In item 14 of Table 20, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the calculated value of 28.45 is more than the critical value of 3.00, we have good reason not to reject that, there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on extent of calculation of the value of total liabilities for the accounting year; when measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the calculation of the value of total liabilities for the accounting year; when measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State. For item 14, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of liquidity ratios in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore rejected.

Table 22

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 14

Groups	N	Subset for alpha = 0.05	
		A	B
1	310	2.6230	
2	151		3.8704
3	121	1.000	4.0755
Sig.			.387

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 14 of Table 20 whose ANOVA result is also significant indicates that, the means of Wood processing factories ($\bar{x} = 3.87$) and Bread Baking Factories ($\bar{x} = 4.08$) do not differ significantly, but both means differ significantly from the mean of Palm oil factories ($\bar{x} = 2.62$). Since the means of Wood processing factories and Bread baking factories differ significantly, but that of Palm oil processing factories do not therefore, palm oil factories is the group reflecting the source of major difference with the least mean.

In item 16 of Table 20, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 17.59 is more than the critical value of 3.00, we have good reason not to reject that, there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the

extent of ascertaining equity capital from total capital for the year end; when measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning ascertainment of equity capital from total capital for the year end; when measuring long-term solvency of Small Scale industries in the manufacturing sector of Cross River State. For item 16, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of gearing ratios in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore rejected.

Table 23

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 16

Groups	N	Subset for alpha = 0.05	
		A	B
3	121	2.6269	3.7083
2	151		
1	310		
Sig.		1.000	.552

1 = Palm oil, 2 = Wood, 3 = Bread Factories

The Duncan Post Hoc Tests in respect of item 16 of Table 20 whose ANOVA result is significant, indicates that the means of Palm oil factories ($\bar{x}$ = 3.85) and Wood processing factories ($\bar{x}$ = 3.71) do not differ significantly but both means differ significantly from the mean of Bread baking factories ($\bar{x}$ = 2.63). Therefore, Bread baking factories is the group showing the major source of the difference.

In item 18 of Table 20, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the calculated value of 30.65 is more than the critical value of 3.00, we have good reason not to reject that, there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of deducting expenses from gross profit to determine net (operating) profit for the accounting period; when measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the deduction of expenses from gross profit to determine net (operating) profit for the accounting period;

when measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State. For item 18, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of liquidity ratios in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore rejected.

Table 24

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 18

Groups	N	Subset for alpha = 0.05		
		A	B	C
2	151	2.3600	3.6071	4.1250
3	121			
1	310	1.000		
Sig.			1.000	1.000

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 18 of Table 20 whose ANOVA result is also significant, indicates that the means of Wood processing factories ($\bar{x} = 2.36$), Bread baking factories ($\bar{x} = 3.61$); and Palm oil factories ($\bar{x} = 4.13$) differ significantly from one another.

This being the case, the three groups are the sources of major difference with Wood processing factories having the least mean and Palm oil factories having the highest mean. In item 19 of Table 20, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution reveals that the calculated value of 37.14 is more than the critical value of 3.00, we have good reason not to reject that, there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of determining interest payable on the amount borrowed by the Business; when measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions

concerning the determination of interest payable on the amount borrowed by the business; when measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State. For item 19, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of gearing ratios in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore rejected.

Table 25

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 19

Groups	N	Subset for alpha = 0.05	
		A	B
2	151	2.3934	3.9057
3	121		
1	310		
Sig.		1.000	.547

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 19 of Table 20 whose ANOVA result is significant, indicates that the means of Palm oil factories ($\bar{x} = 4.03$) and Bread baking factories ($\bar{x} = 3.91$) do not differ significantly but both means differ significantly from the mean of Wood processing factories ($\bar{x} = 2.39$). Therefore, Wood processing factories is the group showing the major source of the difference.

Alternatively, in item 15 of Table 20, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution indicates that, the calculated value of 2.69 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of dividing total liabilities by total assets to obtain debt ratio; when measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the division of total liabilities by total assets to obtain debt ratio; when measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State. For item 15, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of gearing ratios in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 17 of Table 20, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution indicates that the calculated value of 2.08 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of division of total liabilities by equity capital to

get debt/equity ratio; when measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the division of total liabilities by equity capital to get debt/equity ratio; when measuring long-term solvency of Small Scale industries in the manufacturing sector of Cross River State. For item 17, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of gearing ratios in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 20 of Table 20, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 0.22 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of dividing operating profit (net profit) by interest expense to ascertain interest coverage ratio; when measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the division of operating profit (net profit) by interest expense to ascertain interest coverage ratio; when measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State. For item 20, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of gearing ratios in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 21 of Table 20, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution reveals that the calculated value of 0.64 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of dividing total assets by net worth (owner's equity) to determine capital employed to net worth ratio; when measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the division of total assets by net worth (owner's equity) to determine capital employed to net worth ratio; when measuring long-term solvency of Small Scale industries in the manufacturing sector of Cross River State. For item 21, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of gearing ratios in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 22 of Table 20, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution reveals that the calculated value of 0.17 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent interest charges is divided by operating (net) profit (when interest and taxes are not deducted) for the year end to obtain income gearing

ratio; when measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the division of interest charges by operating (net) profit (when interest and taxes are not deducted) for the year end to obtain income gearing ratio; when measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State. For item 22, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of gearing ratios in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 23 of Table 20, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution reveals that the calculated value of 0.36 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of comparing gearing ratios of current year to previous year's ratio obtained by the business organization; when measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the comparison of gearing ratios of current year to previous year's ratio obtained by the business organization; when measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State. For item 23, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of gearing ratios in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

Finally, in item 24 of Table 20, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution reveals that, the calculated value of 0.01 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of comparing gearing ratios of current year to previous year's ratios with that of similar business(es) in the same industry; when measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the comparison of gearing ratios of current year to previous year's ratios with that of similar business(es) in the same industry; when measuring long-term solvency of Small Scale industries in the manufacturing sector of Cross River State. For item 24, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on application of gearing ratios in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

Table 26

Cluster Analysis of Variance (ANOVA) on the mean responses of accounting staff on the application of gearing ratios in measuring long-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State.

Sources of variation	df	Sum of squares	Mean squares	F-cal	F-tab	Sig.	Decision
Between groups	2	938.54	469.27	0.54	3.00	NS	Do not reject H_0
Within groups	579	507269.08	876.11				
Total	581	508207.62					

The F ï ratio distribution shows that the critical value of F with 2 and 579 degrees of freedom at 0.05 level of probability is 3.00. For the fact that the computed value of 0.54 is less than the critical value of 3.00, we have good reason not to reject the null hypothesis (H_0). Hence, the staff do not differ in their opinions. This implies that, there is no significant difference among the three categories of staff with respect to their opinions regarding the application of gearing ratios in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State. The null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the application of gearing ratios in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

Null Hypothesis 3

There will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.

Table 27

Item-by-item Analysis of Variance (ANOVA) on Mean responses of Accounting Staff on extent of Application of Profitability Ratios in measuring Performance and Effectiveness of Small Scale Industries in the Manufacturing Sector of Cross River State.

S/N	Item Statement	Residual	SST	F-Cal	E ²	Remarks
25	Divide operating (net) profit by total assets to obtain Return on Capital Employed Ratio.	1.486	338.000	2.74	0.0819	Not Sig.
26	Determine gross profit for the accounting period.	1.649	441.041	24.72	0.0952	Sig.
27	Compute total value of sales for the accounting period.	1.627	418.770	23.68	0.0963	Sig.
28	Divide gross profit by sales to find Gross Profit (Margin) Ratio.	1.631	373.929	3.63	0.0861	Sig.
29	Ascertain net profit for the period.	1.456	333.440	3.54	0.0813	Sig.
30	Divide net profit by sales to get Net Profit (Margin) Ratio.	1.586	365.611	3.79	0.0848	Sig.
31	Divide operating (General) expenses by sales to determine Operating Expenses Ratio.	1.427	305.622	0.61	0.0811	Not Sig.
32	Divide individual item of expense by total expenses to obtain Expenses Ratios.	1.372	302.995	0.90	0.0786	Not Sig.
33	Divide Individual expense by sales to ascertain Expenses to Sales Ratio.	1.252	270.986	0.79	0.0753	Not Sig.
34	Compare Profitability Ratios of current year to previous year's ratios obtained by the Business organization.	1.290	286.246	0.46	0.0757	Not Sig.
35	Compare Profitability Ratios of current year to previous year's ratios with that of similar business(es) in the same industry.	1.474	324.996	0.26	0.0810	Not Sig.

F-tab = 3.00, df = 2 and 579, P > .05

From the F-ratio distribution in Table 27, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since in item 26 the

calculated value of 24.72 is greater than the critical value of 3.00, we have good reason not to reject that, there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of determining gross profit for the accounting period; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the determination of gross profit for the accounting period; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. For item 26, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is therefore rejected.

Table 28

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 26

Groups	N	Subset for alpha = 0.05	
		A	B
2	151	2.6346	3.9750
1	310		
3	121		
Sig.		1.000	.279

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 26 of Table 27 whose ANOVA result is significant, indicates that the means of Palm oil factories ($\bar{x} = 3.98$) and Bread Baking factories ($\bar{x} = 4.22$) do not differ significantly but both means differ significantly from the mean of Wood processing factories ($\bar{x} = 2.63$). Therefore, Wood processing factories is the group showing the major source of the difference.

In item 27 of Table 27, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 23.68 is greater than the critical value of 3.00, we have good reason not to reject that, there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of computing total value of sales for the accounting period; when measuring

performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the computation of total value of sales for the accounting period; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. For item 27, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is therefore rejected.

Table 29

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 27

Groups	N	Subset for alpha = 0.05	
		A	B
3	121	2.6731	
2	151		3.7800
1	310		4.1441
Sig.		1.000	.113

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 27 of Table 27 whose ANOVA result is significant, indicates that the means of Palm oil ($\bar{x} = 4.14$) and Wood processing factories ($\bar{x} = 3.78$) do not differ significantly but both means differ significantly from the mean of Bread baking factories ($\bar{x} = 2.67$). Therefore, Bread baking factories is the group showing the major source of the difference.

In item 28 of Table 27, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 5.92 is greater than the critical value of 3.00, we have good reason not to reject that, there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of dividing gross profit by sales to find gross profit (margin) ratio; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the division of gross profit by sales to find gross profit (margin) ratio; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. For item 28, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is therefore rejected.

Table 30

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 28

Groups	N	Subset for alpha = 0.05	
		A	B
2	151	3.6981	
1	310	4.0083	4.0083
3	121		4.3725
Sig.		.170	.108

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 28 of Table 27 whose ANOVA result is also significant, indicates that the means of Palm oil factories ($\bar{x} = 4.01$) and Wood processing factories ($\bar{x} = 3.71$) do not differ significantly, and the means of Palm oil factories ($\bar{x} = 4.01$) and Bread baking factories ($\bar{x} = 4.37$) do not also differ; but the means of Wood processing factories ($\bar{x} = 3.71$) and Bread baking factories ($\bar{x} = 4.37$) differ significantly from one another. Since the means of wood factories and bread factories differ significantly, but that of wood and palm oil do not, Bread factories is the group reflecting the source of major difference with the highest mean.

In item 29 of Table 27, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 3.54 is greater than the critical value of 3.00, we have good reason not to reject that, there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of ascertaining net profit for the period; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the ascertainment of net profit for the period; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. For item 29, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is therefore rejected.

Table 31

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 29

Groups	N	Subset for alpha = 0.05	
		A	B
2	151	3.5185	
1	310		3.9833
3	121		4.0784
Sig.		1.000	.655

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 29 of Table 27 whose ANOVA result is significant, indicates that the means of Palm oil ($\bar{x} = 3.98$) and Bread baking factories ($\bar{x} = 4.08$) do not differ significantly but both means differ significantly from the mean of Wood processing factories ($\bar{x} = 3.52$). Therefore, Wood processing factories is the group showing the major source of the difference.

In item 30 of Table 27, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 6.01 is greater than the critical value of 3.00, we have good reason not to reject that, there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the

extent of dividing net profit by sales to get net profit (margin) ratio; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the division of net profit by sales to get net profit (margin) ratio; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. For item 30, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is therefore rejected.

Table 32

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 30

Groups	N	Subset for alpha = 0.05	
		A	B
2	151	3.4151	3.9587
1	310		
3	121		
Sig.		1.000	.990

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 30 of Table 27 whose ANOVA result is significant, indicates that the means of Palm oil ($\bar{x} = 3.96$) and Bread baking factories ($\bar{x} = 3.96$) do not differ significantly but both means differ significantly from the mean of Wood processing factories ($\bar{x} = 3.42$). Therefore, Wood processing factories is the group showing the major source of the difference.

From the F-ratio distribution in Table 27, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since in item 25 the calculated value of 2.74 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of dividing operating (net) profit by total assets to obtain return on capital employed ratio; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the division of operating (net) profit by total assets to obtain return on capital employed ratio; when measuring performance and effectiveness of small scale industries in the

manufacturing sector of Cross River State. For item 25, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 31 of Table 27, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 0.61 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of dividing operating (general) expenses by sales to determine operating expenses ratio; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the division of operating (general) expenses by sales to determine operating expenses ratio; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. For item 31, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 32 of Table 27, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 0.90 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of dividing individual item of expense by total expenses to obtain expenses ratios; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the division of individual item of expense by total expenses to obtain expenses ratios; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. For item 32, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 33 of Table 27, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 0.24 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of dividing individual expense by sales to ascertain expenses to sales ratio; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the division of individual expense by sales to ascertain expenses to sales ratio; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross

River State. For item 33, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 34 of Table 27, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 0.46 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of comparing profitability ratios of current year to previous year's ratios obtained by the business organization; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the comparison of profitability ratios of current year to previous year's ratios obtained by the business organization; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. For item 34, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

Finally, in item 35 of Table 27, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 0.26 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of comparing profitability ratios of current year to previous year's ratios with that of similar business(es) in the same industry; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the comparison of profitability ratios of current year to previous year's ratios with that of similar business(es) in the same industry; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. For item 35, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

Table 33

Cluster Analysis of Variance (ANOVA) on the mean responses of accounting staff on application of profitability ratios in measuring performance and effectiveness of Small Scale Industries in the Manufacturing Sector of Cross River State.

Sources of variation	df	Sum of squares	Mean squares	F-cal	F-tab	Sig.	Decision
Between groups	2	1032.67	516.34				

Within groups	579	457303.65	789.82	0.65	3.00	NS	Do not reject H_0
Total	581	458336.32					

The F-ratio distribution reveals that the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the calculated value of 0.65 is less than the critical value of 3.00, we have good reason not to reject the null hypothesis (H_0). This implies that the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff concerning the application of profitability ratios in measuring the performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. Therefore, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the application of profitability ratios in measuring the performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is upheld.

Null Hypothesis 4

There will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of activity ratios in measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State.

Table 34

Item-by-item Analysis of Variance (ANOVA) on Mean responses of Accounting Staff on Extent of Application of Activity Ratios in measuring Efficiency with which Small Scale Industries in the Manufacturing Sector utilize Assets to Generate Cash Flow in Cross River State.

S/N	Item Statement	Residual	SST	F-Cal	E ²	Remarks
36	Compute cost of goods sold for the accounting period.	1.758	561.722	49.78	0.1065	Sig.
37	Determine the value of average inventory for the year end.	1.536	472.371	41.62	0.1153	Sig.
38	Divide cost of goods sold by average inventory to find Stock Turnover Ratio.	1.453	464.388	49.31	0.0964	Sig.
39	Ascertain the value of credit sales for the period.	1.563	362.249	4.14	0.0848	Sig.
40	Calculate the average of trade debtors for the accounting period.	1.587	354.778	2.79	0.0854	Not Sig.
41	Divide credit sales by average trade debtors to determine Debtors Turnover Ratio.	1.366	295.927	0.34	0.0787	Not Sig.
42	Ascertain the value of credit purchases for the period.	1.600	363.212	3.99	0.0860	Sig.
43	Compute the average of trade creditors for the accounting period.	1.252	276.547	0.44	0.0747	Not Sig.
44	Obtain Creditors Turnover Ratio by dividing credit purchases by average trade debtors.	1.569	350.887	2.33	0.0846	Not Sig.
45	Divide average trade debtors by credit sales and multiply by 365 days to ascertain Debtors Collection Period.	1.182	258.436	0.80	0.0732	Not Sig.
46	Divide average trade creditors by credit purchases and multiply by 365 days to ascertain Creditors Payment Period	1.139	252.206	0.69	0.0714	Not Sig.
47	Divide sales by net assets to obtain Net Assets Turnover Ratio.	1.387	308.638	0.77	0.0786	Not Sig.

48	Divide sales by current assets to obtain Current Assets Turnover Ratio.	1.322	293.928	1.66	0.0774	Not Sig.
49	Divide sales by fixed assets to obtain Fixed Assets Turnover Ratio.	1.609	362.778	3.72	0.0864	Sig.
50	Divide sales by total assets to obtain Total Assets Turnover Ratio.	1.208	452.009	79.11	0.0973	Sig.
51	Compare Activity Ratios of current year to previous year's ratios obtained by the Business organization.	1.565	349.363	0.09	0.0829	Not Sig.
52	Compare Activity Ratios of current year to previous year's ratios with that of similar business in the same industry.	1.591	357.559	0.35	0.0835	Not Sig.

F-tab = 3.00, df = 2 and 579, P > .05

From the F-ratio distribution in Table 34, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since in item 36 the calculated value of 49.78 is greater than the critical value of 3.00, we have good reason not to reject that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of computing cost of goods sold for the accounting period; when measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the computation of cost of goods sold for the accounting period; when measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State. For item 36, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of activity ratios in measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State is therefore rejected.

Table 35

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 36

Groups	N	Subset for alpha = 0.05	
		A	B
3	121	1.8627	3.9231
2	151		
1	310		
		1.000	.771
Sig.			

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 36 of Table 34 whose ANOVA result is significant, indicates that the means of Palm oil ($\bar{x} = 3.99$) and Wood processing factories ($\bar{x} = 3.92$) do not differ significantly but both means differ significantly from the mean of Bread baking factories ($\bar{x} = 1.86$). Therefore, Bread baking factories is the group showing the major source of the difference.

In item 37 of Table 34, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 41.62 is greater than the critical value of 3.00, we have good reason not to reject that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of determining the value of average inventory for the year end; when measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the determination of the value of average inventory for the year end; when measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State. For item 37, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of activity ratios in measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State is therefore rejected.

Table 36

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 37

Groups	N	Subset for alpha = 0.05
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		A	B
3	121	1.9612	
2	151		3.8114
1	310		3.8801
Sig.		1.000	.561

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 37 of Table 34 whose ANOVA result is significant, indicates that the means of Palm oil ($\bar{x}$ = 3.88) and Wood processing factories ($\bar{x}$ = 3.81) do not differ significantly but both means differ significantly from the mean of Bread baking factories ($\bar{x}$ = 1.96). Therefore, Bread baking factories is the group showing the major source of the difference.

In item 38 of Table 34, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 41.62 is greater than the critical value of 3.00, we have good reason not to reject that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of dividing cost of goods sold by average inventory to find stock turnover ratio; when measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the dividing cost of goods sold by average inventory to find stock turnover ratio; when measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State. For item 38, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of activity ratios in measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State is therefore rejected.

Table 37

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 38

Groups	N	Subset for alpha = 0.05	
		A	B
3	121	1.9615	
2	151		3.8077
1	310		3.8750
Sig.		1.000	.752

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 38 of Table 34 whose ANOVA result is significant, indicates that the means of Palm oil ($\bar{x} = 3.88$) and Wood processing factories ($\bar{x} = 3.81$) do not differ significantly but both means differ significantly from the mean of Bread baking factories ($\bar{x} = 1.96$). Therefore, Bread baking factories is the group showing the major source of the difference.

In item 39 of Table 34, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 4.14 is greater than the critical value of 3.00, have good reason not to reject that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of ascertaining the value of credit sales for the period; when measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the ascertainment of the value of credit sales for the period; when measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State. For item 39, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of activity ratios in measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State is therefore rejected.

Table 38

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 39

Groups	N	Subset for alpha = 0.05	
		A	B
2	151	3.7115	4.3725 1.000
1	310	3.8607	
3	121	.503	
Sig.			

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 39 of Table 34 whose ANOVA result is significant, indicates that the means of Palm oil ($\bar{x} = 3.86$) and Wood processing factories ($\bar{x} = 3.71$) do not differ significantly but both means differ significantly from the mean of Bread baking factories ($\bar{x} = 4.37$). Therefore, Bread baking factories is the group showing the major source of the difference.

In item 42 of Table 34, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 3.99 is greater than the critical value of 3.00, we have good reason not to reject that there is a

significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of ascertaining the value of credit purchases for the period; when measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the ascertainment of the value of credit purchases for the period; when measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State. For item 42, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of activity ratios in measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State is therefore rejected.

Table 39

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 42

Groups	N	Subset for alpha = 0.05	
		A	B
2	151	3.4528	
3	121		3.9020
1	310		4.0424
Sig.		1.000	.531

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 42 of Table 34 whose ANOVA result is significant, indicates that the means of Palm oil ($\bar{x} = 4.04$) and Bread baking factories ($\bar{x} = 3.90$) do not differ significantly but both means differ significantly from the mean of Wood processing factories ($\bar{x} = 3.45$). Therefore, Wood processing factories is the group showing the major source of the difference.

In item 49 of Table 34, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 3.72 is greater than the critical value of 3.00, we have good reason not to reject that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of dividing sales by fixed assets to obtain fixed assets turnover ratio; when measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the division of sales by fixed assets to obtain fixed assets turnover ratio; when measuring efficiency with which Small Scale Industries in the Manufacturing

Sector utilize assets to generate cash flow in Cross River State. For item 49, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of activity ratios in measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State is therefore rejected.

Table 40

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 49

Groups	N	Subset for alpha = 0.05	
		A	B
2	151	3.6327	
3	121	3.8113	3.8113
1	310		4.1765
Sig.		.430	.531

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 49 of Table 34 whose ANOVA result is also significant, indicates that the means of Wood processing factories ($x = 3.63$) and Bread baking factories ($x = 3.81$) do not differ significantly, and the means of Palm oil factories ($x = 4.18$) and Bread baking factories ($x = 3.81$) do not also differ; but the means of Wood processing factories ($x = 3.63$) and Palm oil factories ($x = 4.18$) differ significantly from one another. Since the means of palm oil and wood factories differ significantly, but that of wood and bread factories do not, palm oil factories is the group reflecting the source of major difference.

In item 50 of Table 34, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 79.11 is greater than the critical value of 3.00, we have good reason not to reject that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of dividing sales by total assets to obtain total assets turnover ratio; when measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the division of sales by total assets to obtain total assets turnover ratio; when measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State. For item 50, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of activity ratios in measuring efficiency with

which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State is therefore rejected.

Table 41

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 50

Groups	N	Subset for alpha = 0.05	
		A	B
2	151	1.8542	
3	121		3.9811
1	310		4.1610
Sig.		1.000	.362

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 50 of Table 34 whose ANOVA result is also significant, indicates that the means of Palm oil factories ($\bar{x} = 4.16$) and Bread Baking Factories ($\bar{x} = 3.98$) do not differ significantly; but both means differ significantly from the mean of Wood processing factories ($\bar{x} = 1.85$). Since the means of palm oil and Bread factories differ significantly, but that of wood factories do not, Wood factories is the group reflecting the source of major difference.

In the other hand, in item 40 of Table 34, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 2.79 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of calculating the average of trade debtors for the accounting period; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the calculation of average of trade debtors for the accounting period; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. For item 40, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 41 of Table 34, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 0.34 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of division of credit sales by average trade debtors to determine debtors turnover ratio; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the division of credit sales by average trade debtors to determine debtors turnover ratio; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. For item 41, the null hypothesis which states that there will be no

significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 43 of Table 34, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 0.44 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of computing the average of trade creditors for the accounting period; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the computation of the average of trade creditors for the accounting period; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. For item 43, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 44 of Table 34, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 2.33 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of obtaining creditors turnover ratio by dividing credit purchases by average trade debtors; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning obtaining creditors turnover ratio by dividing credit purchases by average trade debtors; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. For item 44, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 45 of Table 34, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 0.80 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of dividing average trade debtors by credit sales and multiply by 365 days to ascertain debtors collection period; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the division of average trade debtors by credit sales and multiply by 365 days to ascertain debtors collection period; when measuring performance and effectiveness of small scale

industries in the manufacturing sector of Cross River State. For item 45, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of Small Scale Industries in the Manufacturing Sector of Cross River State is therefore upheld.

In item 46 of Table 34, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 0.69 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of dividing average trade creditors by credit purchases and multiply by 365 days to ascertain creditors payment period; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the division of average trade creditors by credit purchases and multiply by 365 days to ascertain creditors payment period; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. For item 46, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 47 of Table 34, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 0.77 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of dividing sales by net assets to obtain net assets turnover ratio; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the division of sales by net assets to obtain net assets turnover ratio; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. For item 47, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 48 of Table 34, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 1.66 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of dividing sales by current assets to obtain current assets turnover ratio; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the division of sales by current assets to obtain current assets turnover ratio; when measuring

performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. For item 48, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 51 of Table 34, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 0.09 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of comparing activity ratios of current year to previous year's ratios obtained by the business organization; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the comparison of activity ratios of current year to previous year's ratios obtained by the business organization; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. For item 51, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 52 of Table 34, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 0.35 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of comparing activity ratios of current year to previous year's ratios with that of similar business in the same industry; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the comparison of activity ratios of current year to previous year's ratios with that of similar business in the same industry; when measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. For item 52, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

Table 42

Cluster Analysis of Variance (ANOVA) on the Mean responses of accounting staff on application of activity ratios in measuring the efficiency with which Small Scale Industries in the Manufacturing Sector utilize assets to generate cash flow in Cross River State.

Sources of variation	df	Sum of squares	Mean squares	F-cal	F-tab	Sig.	Decision
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Between groups	2	959.66	479.83	0.40	3.00	NS	Do not reject H_0
Within groups	579	686125.39	1185.02				
Total	581	687085.05					

The F-ratio distribution shows that the critical value of F with 2 and 579 degrees of freedom at 0.05 level of probability is 3.00. Since the calculated value of 0.40 is less than the critical value of 3.00, we have good reason not to reject the null hypothesis (H_0). Hence, the staff do not differ in their opinions. This implies that, there is no significant difference among the categories of staff with respect to their opinions concerning the application of activity ratios in measuring the efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State. Therefore, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the application of activity ratios in measuring the efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State is upheld.

Null Hypothesis 5

There will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of cash flow statement in reporting cash flow of small scale industries in the manufacturing sector of Cross River State.

Table 43

Item-by-item Analysis of Variance (ANOVA) on Mean responses of accounting staff on Extent of Application of Cash Flow Statement in Reporting Cash Flow of Small Scale Industries in the Manufacturing Sector of Cross River State.

S/N	Item Statement	Residual	SST	F-Cal	E ²	Remarks
53	Categorize cash flows into Operating, Investing, and Financing activities, respectively.	1.711	395.485	2.58	0.0870	Not Sig.
54	Compute net increase or decrease in cash.	1.127	231.217	0.56	0.0736	Not Sig.
55	Compute and report net cash provided (used) by Operating Activities.	1.150	253.632	0.26	0.0716	Not Sig.
56	Compute and report net cash provided (used) by Investing Activities.	0.700	156.500	1.35	0.0561	Not Sig.
57	Compute and report net cash provided (used) by Financing Activities.	0.781	174.000	0.88	0.0590	Not Sig.
58	Compute net cash flow provided (used) by Operating, Investing, and Financing Activities.	0.748	168.714	0.84	0.0574	Not Sig.
59	Add net cash flow provided (used) by Operating, Investing, and	0.807	184.571	2.91	0.0603	Not Sig.

	Financing Activities to the beginning cash balance to show that it equals the ending cash balance.					
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$$F\text{-tab} = 3.00, df = 2 \text{ and } 579, P > .05$$

In item 53 of Table 43, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 2.58 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of categorizing cash flows into operating, investing, and financing activities, respectively; when reporting cash flow of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the categorization of cash flows into operating, investing, and financing activities, respectively; when reporting cash flow of small scale industries in the manufacturing sector of Cross River State. For item 53, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing Factories on the extent of application of cash flow statement in reporting cash flow of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 54 of Table 43, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution indicates that the calculated value of 0.56 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of computing net increase or decrease in cash; when reporting cash flow of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the computation of net increase or decrease in cash; when reporting cash flow of small scale industries in the manufacturing sector of Cross River State. For item 54, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing Factories on the extent of application of cash flow statement in reporting cash flow of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 55 of Table 43, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution indicates that the calculated value of 0.26 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of computing and reporting net cash provided (used) by operating activities; when reporting cash flow of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the computation and reporting of net cash provided (used) by operating activities; when reporting cash flow of small scale industries in the manufacturing sector of Cross River State. For item 55, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on

the extent of application of cash flow statement in reporting cash flow of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 56 of Table 43, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution indicates that the calculated value of 1.35 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of computing and reporting net cash provided (used) by investing activities; when reporting cash flow of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the computation and reporting of net cash provided (used) by investing activities; when reporting cash flow of small scale industries in the manufacturing sector of Cross River State. For item 56, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of cash flow statement in reporting cash flow of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 57 of Table 43, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution indicates that the calculated value of 0.88 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of computing and reporting net cash provided (used) by financing activities; when reporting cash flow of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the computation and reporting of net cash provided (used) by financing activities; when reporting cash flow of small scale industries in the manufacturing sector of Cross River State. For item 57, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of cash flow statement in reporting cash flow of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

In item 58 of Table 43, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution indicates that the calculated value of 0.84 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of computing net cash flow provided (used) by operating, investing, and financing activities; when reporting cash flow of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the computation of net cash flow provided (used) by operating, investing, and financing activities; when reporting cash flow of small scale industries in the manufacturing sector of Cross River State. For item 58, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of cash flow statement in reporting cash flow of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

Finally, in item 59 of Table 43, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution indicates that the calculated value of 2.91 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of adding net cash flow provided (used) by operating, investing, and financing activities to the beginning cash balance to show that it equals the ending cash balance; when reporting cash flow of small scale industries in the manufacturing sector of Cross River State.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the addition of net cash flow provided (used) by operating, investing, and financing activities to the beginning cash balance to show that it equals the ending cash balance; when reporting cash flow of small scale industries in the manufacturing sector of Cross River State. For item 59, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of cash flow statement in reporting cash flow of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

Table 44

Cluster Analysis of Variance (ANOVA) on mean responses of accounting staff on extent of application of cash flow statement in reporting cash flow of small scale industries in the manufacturing sector of Cross River State.

Sources of variation	df	Sum of squares	Mean squares	F-cal	F-tab	Sig.	Decision
Between groups	2	837.54	418.77	0.31	3.00	NS	Do not reject H ₀
Within groups	579	767324.31	1325.26				
Total	581	768161.85					

The F-ratio distribution shows that the critical value of F with 2 and 579 degrees of freedom at 0.05 level of probability is 3.00. Since the calculated value of 0.31 is less than the critical value of 3.00, we have good reason not to reject the null hypothesis (H₀). Hence, the staff do not differ in their opinions. This implies that, there is no significant difference among the categories of staff with respect to their opinions concerning the application of cash flow statement in reporting cash flow of small scale industries in the manufacturing sector of Cross River State. Therefore, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of cash flow statement in reporting cash flow of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

Null Hypothesis 6

There will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the Bookkeeping procedures followed and accounting records kept by Small Scale Industries in the Manufacturing Sector of Cross River.

Table 45

Item-by-item Analysis of Variance (ANOVA) on mean responses of accounting staff on the Bookkeeping procedures followed and accounting records kept by Small Scale Industries in the Manufacturing Sector of Cross River.

S/N	Item Statement	Residual	SST	F-Cal	E ²	Remarks
60	Transfer Production cost in Manufacturing Account to Trading Account	0.901	193.853	0.60	0.0643	Not Sig.
61	Determine Gross profit/loss in Trading Account	1.077	237.405	0.76	0.0696	Not Sig.
62	Determine Net profit/loss in Profit and Loss Account	1.031	233.049	1.50	0.0677	Not Sig.
63	Transfer Net profit to Capital Account	0.936	202.986	0.42	0.0652	Not Sig.
64	Determine cost of production in Manufacturing Account	0.936	206.055	2.62	0.0660	Not Sig.
65	Determine Prime cost of production in Manufacturing Account	1.296	294.224	1.04	0.0754	Not Sig.
66	Deduct depreciation value from cost of assets to obtain Net Book Value in the Balance Sheet	2.215	529.509	7.58	0.1019	Sig.
67	Classify Assets into fixed and current assets in the Balance Sheet	1.874	487.249	20.99	0.1001	Sig.
68	Classify Liabilities into long-term and current liabilities in the Balance Sheet	1.624	445.181	25.07	0.0932	Sig.
69	Transfer value of Debtors from	1.926	496.099	18.80	0.1001	Sig.

	Sales Account to the Balance Sheet					
70	Transfer value of Creditors from Purchases Account to the Balance Sheet	1.433	419.80	33.97	0.0901	Sig.

F-tab = 3.00, df = 2 and 579, P > .05

From the F-ratio distribution in Table 45, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since in item 66 the calculated value of 7.58 is greater than the critical value of 3.00, we have good reason not to reject that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of deducting depreciation value from cost of assets to obtain net book value in the balance sheet; when keeping accounting records in the manufacturing sector of Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the deduction of depreciation value from cost of assets to obtain net book value in the balance sheet; when keeping accounting records in the manufacturing sector of Cross River. For item 66, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the bookkeeping procedures followed and accounting records kept by Small Scale in the manufacturing sector of Cross River, is therefore rejected.

Table 46

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 66

Groups	N	Subset for alpha = 0.05	
		A	B
1	310	3.0331	
2	151		3.6792
3	121		3.9038
Sig.		1.000	.392

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 66 of Table 45 whose ANOVA result is significant, indicates that the means of Wood processing factories ($\bar{x} = 3.68$) and Bread baking factories ($\bar{x} = 3.90$) do not differ significantly but both means differ significantly from the mean of Palm oil factories ($\bar{x} = 3.03$). Therefore, Palm oil factories is the group showing the major source of the difference.

In item 67 of Table 45, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that, the calculated value of 20.99 is greater than the critical value of 3.00, we have good reason not to reject that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of classifying assets into fixed and current assets in the balance sheet; when keeping accounting records in the manufacturing sector of Cross River.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the classification of assets into fixed and current assets in the balance sheet; when keeping accounting records in the manufacturing sector of Cross River. For item 67, the null hypothesis which states that,

there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the procedures followed by small scale industries in keeping accounting records in the manufacturing sector of Cross River, is therefore rejected.

Table 47

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 67

Groups	N	Subset for alpha = 0.05	
		A	B
2	151	2.6600	3.8113
3	121		
1	310		
Sig.		1.000	.162

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 67 of Table 45 whose ANOVA result is significant, indicates that the means of Palm oil factories ($x = 4.15$) and Bread baking factories ($x = 3.81$) do not differ significantly but both means differ significantly from the mean of Wood processing factories ($x = 2.66$). Therefore, Wood processing factories is the group showing the major source of the difference.

In item 68 of Table 45, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that, the calculated value of 25.07 is greater than the critical value of 3.00, we have good reason not to reject that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of classifying liabilities into long-term and current liabilities in the balance sheet; when keeping accounting records in the manufacturing sector of Cross River.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the classification of liabilities into long-term and current liabilities in the balance sheet; when keeping accounting records in the manufacturing sector of Cross River. For item 68, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the procedures followed by small scale industries in keeping accounting records in the manufacturing sector of Cross River, is therefore rejected.

Table 48

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 68

Groups	N	Subset for alpha = 0.05	
		A	B
2	151	2.6538	3.9434
3	121		
1	310		
Sig.		1.000	.423

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 68 of Table 45 whose ANOVA result is significant, indicates that the means of Palm oil factories ($x = 4.12$) and Bread baking factories ($x = 3.94$) do not differ significantly but both means differ significantly from the

mean of Wood processing factories ($\bar{x} = 2.65$). Therefore, Wood processing factories is the group showing the major source of the difference.

In item 69 of Table 45, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that, the calculated value of 18.80 is greater than the critical value of 3.00, we have good reason not to reject that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of transferring value of debtors from sales account to the balance sheet; when keeping accounting records in the manufacturing sector of Cross River.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the transferring of the value of debtors from sales account to the balance sheet; when keeping accounting records in the manufacturing sector of Cross River. For item 69, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the procedures followed by small scale industries in keeping accounting records in the manufacturing sector of Cross River, is therefore rejected.

Table 49

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 69

Groups	N	Subset for alpha = 0.05	
		A	B
2	151	2.6538	
1	310		3.8667
3	121		4.1961
Sig.		1.000	.182

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 69 of Table 45 whose ANOVA result is significant, indicates that the means of Palm oil factories ($\bar{x} = 3.87$) and Bread baking factories ($\bar{x} = 4.21$) do not differ significantly but, both means differ significantly from the mean of Wood processing factories ($\bar{x} = 2.65$). Therefore, Wood processing factories is the group showing the major source of the difference.

Finally, in item 70 of Table 45, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that, the calculated value of 33.97 is greater than the critical value of 3.00, we have good reason not to reject that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of transferring value of creditors from purchases account to the balance sheet; when keeping accounting records in the manufacturing sector of Cross River.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the transferring of the value of creditors from purchases account to the balance sheet; when keeping accounting records in the manufacturing sector of Cross River. For item 70, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the procedures followed by small scale industries in keeping accounting records in the manufacturing sector of Cross River, is therefore rejected.

Table 50*Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 70*

Groups	N	Subset for alpha = 0.05	
		A	B
3	121	2.4340	
1	310		3.9421
2	151		4.0556
Sig.		1.000	.588

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 70 of Table 45 whose ANOVA result is significant, indicates that the means of Palm oil factories ($\bar{x} = 3.94$) and Wood processing factories ($\bar{x} = 4.06$) do not differ significantly but, both means differ significantly from the mean of Bread baking factories ($\bar{x} = 2.43$). Therefore, Bread baking factories is the group showing the major source of the difference.

On the contrary, in item 60 of Table 45, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution indicates that the calculated value of 0.60 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of transferring production cost in manufacturing account to trading account; when keeping accounting records in the manufacturing sector of Cross River.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the transferring production cost in manufacturing account to trading account; when keeping accounting records in the manufacturing sector of Cross River. For item 60, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the procedures followed by small scale industries in keeping accounting records in the manufacturing sector of Cross River, is therefore upheld.

In item 61 of Table 45, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution indicates that the calculated value of 0.76 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of determining gross profit/loss in trading account; when keeping accounting records in the manufacturing sector of Cross River.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the determination of gross profit/loss in trading account; when keeping accounting records in the manufacturing sector of Cross River. For item 61, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the procedures followed by small scale industries in keeping accounting records in the manufacturing sector of Cross River, is therefore upheld.

In item 62 of Table 45, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution indicates that the calculated value of 1.50 is less than the critical value of 3.00, we have good reason not to reject that, there is no

significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of determining net profit/loss in profit and loss account; when keeping accounting records in the manufacturing sector of Cross River. This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the determination of net profit/loss in profit and loss account; when keeping accounting records in the manufacturing sector of Cross River. For item 62, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the procedures followed by Small Scale Industries in keeping accounting records in the Manufacturing Sector of Cross River, is therefore upheld.

In item 63 of Table 45, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 0.42 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of transferring net profit to capital account; when keeping accounting records in the manufacturing sector of Cross River.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the transferring of net profit to capital account; when keeping accounting records in the manufacturing sector of Cross River. For item 63, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the procedures followed by Small Scale Industries in keeping accounting records in the Manufacturing Sector of Cross River, is therefore upheld.

In item 64 of Table 45, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 2.62 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of determining cost of production in manufacturing account; when keeping accounting records in the manufacturing sector of Cross River.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the determination of cost of production in manufacturing account; when keeping accounting records in the manufacturing sector of Cross River. For item 64, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the procedures followed by small scale industries in keeping accounting records in the manufacturing sector of Cross River, is therefore upheld.

Finally, in item 65 of Table 45, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 1.04 is less than the critical value of 3.00, we have good reason not to reject that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of determining prime cost of production in manufacturing account; when keeping accounting records in the manufacturing sector of Cross River.

This means that, the staff do not differ in their opinions. That is, there is no significant difference among the three categories of staff with respect to their opinions concerning the determination of prime cost of production in manufacturing account; when keeping accounting records in the manufacturing sector of Cross River. For item 65, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the procedures followed by small scale industries in keeping accounting records in the manufacturing sector of Cross River, is therefore upheld.

Table 51

Cluster Analysis of Variance (ANOVA) on mean responses of accounting staff on the Bookkeeping procedures followed and accounting records kept by Small Scale Industries in the Manufacturing Sector of Cross River.

Sources of variation	df	Sum of squares	Mean squares	F-cal	F-tab	Sig.	Decision
Between groups	2	498.98	249.49	0.21	3.00	NS	Do not reject H ₀
Within groups	579	698554.65	1206.48				
Total	581	699053.63					

The F-ratio distribution shows that the critical value of F with 2 and 579 degrees of freedom at 0.05 level of probability is 3.00. Since the calculated value of 0.21 is less than the critical value of 3.00, we have good reason not to reject the null hypothesis (H₀). Hence, the staff do not differ in their opinions. This implies that, there is no significant difference among the categories of staff with respect to their opinions concerning the Bookkeeping procedures followed and accounting records kept by small scale industries in the manufacturing sector of Cross River State. Therefore, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the Bookkeeping procedures followed and accounting records kept by Small Scale industries in the Manufacturing Sector of Cross River, is therefore upheld.

Null Hypothesis 7

There will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the problems associated with application of accounting ratios by Small Scale Industries in the manufacturing sector of Cross River State.

Table 52

Item-by-item Analysis of Variance (ANOVA) on mean responses of accounting staff on the problems associated with application of accounting ratios by Small Scale Industries in the manufacturing sector of Cross River State.

S/N	Item Statement	Residual	SST	F-Cal	E ²	Remarks
71	Differences in accounting policies adopted make inter-business comparison difficult.	2.406	567.035	5.32	0.1047	Sig.
72	Lack of qualified accounting staff mar the application of	2.458	631.022	18.34	0.1129	Sig.

	ratios.					
73	On their own, ratios cannot show whether performance is good or bad.	2.216	566.638	17.35	0.1065	Sig.
74	Ratios based on information from historical cost convention are not very useful for decision making.	2.239	570.223	12.34	0.1027	Sig.
75	Accounting staff lack Book-keeping experience.	2.187	518.803	5.61	0.0997	Sig.
76	Accounting records are not properly maintained.	2.023	533.310	18.81	0.1011	Sig.
77	Management does not consider accounting ratios as useful tools for measuring solvency.	2.104	524.717	14.71	0.1031	Sig.
78	Differences in capital structure of companies make comparison difficult.	2.358	605.509	15.91	0.1082	Sig.
79	Window dressed financial statements affects accounting ratios.	2.522	648.316	16.05	0.1119	Sig.

F-tab = 3.00, df = 2 and 579, P > .05

From the F-ratio distribution in Table 52, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since in item 71 the calculated value of 5.32 is greater than the critical value of 3.00, we have good reason not to reject that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the fact that, differences in accounting policies adopted make inter-business comparison difficult for small scale industries in the manufacturing sector of Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the fact that, differences in accounting policies adopted make inter-business comparison difficult for small scale industries in the manufacturing sector of Cross River. For item 71, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the problems associated with application of accounting ratios by small scale industries in the manufacturing sector of Cross River State, is therefore rejected.

Table 53

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 71

Groups	N	Subset for alpha = 0.05	
		A	B
1	310	2.5738	
3	121		3.2308
2	151		3.2593
Sig.		1.000	.917

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 71 of Table 52 whose ANOVA result is significant, indicates that the means of Wood processing factories ($\bar{x} = 3.26$) and Bread baking factories ($\bar{x} = 3.23$) do not differ significantly but both means differ significantly from the mean of Palm oil factories ($\bar{x} = 2.57$). Therefore, Palm oil factories is the group showing the major source of the difference.

In item 72 of Table 52, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 18.34 is greater than the critical value of 3.00, we have good reason not to reject that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the fact that, lack of qualified accounting staff mar the application of ratios in small scale industries in the manufacturing sector of Cross River. This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the fact that, lack of qualified accounting staff mars the application of ratios in small scale industries in the manufacturing sector of Cross River. For item 72, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the problems associated with application of accounting ratios by small scale industries in the manufacturing sector of Cross River State, is therefore rejected.

Table 54

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 72

Groups	N	Subset for alpha = 0.05		
		A	B	C
2	151	2.0370	3.0408	3.5917
3	121			
1	310			
Sig.		1.000	1.000	1.000

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 72 of Table 52 whose ANOVA result is significant, indicates that the means of Wood processing factories ($\bar{x} = 2.04$), Bread baking factories ($\bar{x} = 3.04$); Palm oil factories ($\bar{x} = 3.59$) differ significantly from one another. Therefore, the three groups show the major source of the difference.

In item 73 of Table 52, the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the F-ratio distribution shows that the calculated value of 17.35 is greater than the critical value of 3.00, we have good reason not to reject that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the fact that, on their own, ratios cannot show whether performance is good or bad when computing ratios for small scale industries in the manufacturing sector of Cross River.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the fact that, on their own, ratios cannot show whether performance is good or bad when computing ratios for small scale industries in the Manufacturing Sector of Cross River. For item 73, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the problems associated with application of accounting ratios by small scale industries in the manufacturing sector of Cross River State, is therefore rejected.

Table 55*Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 73*

Groups	N	Subset for alpha = 0.05	
		A	B
1	310	2.4298	
3	121		3.4118
2	151		3.7500
Sig.		1.000	.201

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 73 of Table 52 whose ANOVA result is significant, indicates that the means of Wood processing factories ($\bar{x} = 3.75$) and Bread baking factories ($\bar{x} = 3.41$) do not differ significantly but both means differ significantly from the mean of Palm oil factories ($\bar{x} = 2.43$). Therefore, Palm oil factories is the group showing the major source of the difference.

In item 74 of Table 52, the F-ratio distribution shows that the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the calculated value of 12.34 is greater than the critical value of 3.00, we have good reason not to reject that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the fact that, ratios based on information from historical cost convention are not very useful for decision making in small scale industries in the manufacturing sector of Cross River.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the fact that, ratios based on information from historical cost convention are not very useful for decision making in small scale industries in the manufacturing sector of Cross River. For item 74, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the problems associated with application of accounting ratios by small scale industries in the manufacturing sector of Cross River State, is therefore rejected.

Table 56*Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 74*

Groups	N	Subset for alpha = 0.05	
		A	B
3	121	2.5833	
1	310		3.6557
2	151		3.9365
Sig.		1.000	.279

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 74 of Table 52 whose ANOVA result is significant, indicates that the means of Wood processing factories

($x = 3.94$) and Palm oil factories ($x = 3.66$) do not differ significantly but both means differ significantly from the mean of Bread baking factories ($x = 2.58$). Therefore, Bread baking factories is the group showing the major source of the difference.

In item 75 of Table 52, the F-ratio distribution shows that the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the calculated value of 5.61 is greater than the critical value of 3.00, we have good reason not to reject that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the fact that, accounting staff lack book-keeping experience in small scale industries in the manufacturing sector of Cross River State. This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the fact that, accounting staff lack book-keeping experience in small scale industries in the manufacturing sector of Cross River State. For item 75, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the problems associated with application of accounting ratios by small scale industries in the manufacturing sector of Cross River State, is therefore rejected.

Table 57

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 75

Groups	N	Subset for alpha = 0.05	
		A	B
2	151	2.5556	
1	310		3.2705
3	121		3.4151
Sig.		1.000	.575

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 75 of Table 52 whose ANOVA result is significant, indicates that the means of Palm oil factories ($x = 3.27$) and Bread baking factories ($x = 3.42$) do not differ significantly but both means differ significantly from the mean of Wood processing factories ($x = 2.56$). Therefore, Wood processing factories is the group showing the major source of the difference.

In item 76 of Table 52, the F-ratio distribution shows that the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the calculated value of 18.81 is greater than the critical value of 3.00, we have good reason not to reject that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the fact that, accounting records are not properly maintained by small scale industries in the manufacturing sector of Cross River State. This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the fact that, accounting records are not properly maintained by small scale industries in the manufacturing sector of Cross River State. For item 76, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread

baking, Palm oil, and Wood processing factories on the problems associated with application of accounting ratios by small scale industries in the manufacturing sector of Cross River State, is therefore rejected.

Table 58

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 76

Groups	N	Subset for alpha = 0.05		
		A	B	C
3	121	2.2830		
2	151		3.1667	
1	310			3.7131
Sig.		1.000	1.000	1.000

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 76 of Table 52 whose ANOVA result is significant, indicates that the means of Palm oil factories ($\bar{x} = 3.71$), Bread baking factories ($\bar{x} = 2.28$); and Wood processing factories ($\bar{x} = 3.17$) differ significantly from one another. Therefore, the three groups show the major source of the difference.

In item 77 of Table 52, the F-ratio distribution shows that the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the calculated value of 14.71 is greater than the critical value of 3.00, we have good reason not to reject that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the fact that, management does not consider accounting ratios as useful tools for measuring solvency in small scale industries in the manufacturing sector of Cross River.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the fact that, management does not consider accounting ratios as useful tools for measuring solvency in small scale industries in the manufacturing sector of Cross River. For item 77, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing Factories on the problems associated with application of accounting ratios by small scale industries in the manufacturing sector of Cross River State, is therefore rejected.

Table 59

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 77

Groups	N	Subset for alpha = 0.05	
		A	B
3	121	2.4151	
1	310		3.5862
2	151		3.7593
Sig.		1.000	.496

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 77 of Table 52 whose ANOVA result is significant, indicates that the means of Palm oil factories ($\bar{x} = 3.59$) and Wood

processing factories ($\bar{x} = 3.76$) do not differ significantly but both means differ significantly from the mean of Bread baking factories ($\bar{x} = 2.42$). Therefore, Bread baking factories is the group showing the major source of the difference.

In item 78 of Table 52, the F-ratio distribution shows that the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the calculated value of 15.91 is greater than the critical value of 3.00, we have good reason not to reject that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the fact that, differences in capital structure of companies make comparison difficult in small scale industries in the manufacturing sector of Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the fact that, differences in capital structure of companies make comparison difficult in small scale industries in the manufacturing sector of Cross River State. For item 78, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the problems associated with application of accounting ratios by small scale industries in the manufacturing sector of Cross River State, is therefore rejected.

Table 60

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 78

Groups	N	Subset for alpha = 0.05	
		A	B
2	151	2.1296	3.2642
3	121		
1	310		
Sig.		1.000	.309

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 78 of Table 52 whose ANOVA result is significant, indicates that the means of Palm oil factories ($\bar{x} = 3.54$) and Bread baking factories ($\bar{x} = 3.26$) do not differ significantly but both means differ

significantly from the mean of Wood processing factories ($\bar{x} = 2.13$). Therefore, Wood processing factories is the group showing the major source of the difference.

Finally, in item 79 of Table 52, the F-ratio distribution shows that the critical value of F with 2 and 579 degrees of freedom at 0.05 level of significance is 3.00. Since the calculated value of 16.05 is greater than the critical value of 3.00, we have good reason not to reject that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the fact that, window dressed financial statements affects accounting ratios in small scale industries in the manufacturing sector of Cross River State.

This means that, the staff differ in their opinions. That is, there is a significant difference among the three categories of staff with respect to their opinions concerning the fact that, window dressed financial statements affects accounting ratios in small scale industries in the manufacturing sector of Cross River. For item 79, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing Factories on the problems associated with application of accounting ratios by small scale industries in the manufacturing sector of Cross River State, is therefore rejected.

Table 61

Duncan Post Hoc Test: Means for Groups in Homogenous subsets in Item 79

Groups	N	Subset for alpha = 0.05	
		A	B
1	310	2.5625	3.5577
3	121		
2	151		
Sig.		1.000	.243

1 = Palm oil, 2 = Wood, 3 = Bread factories

The Duncan Post Hoc Tests in respect of item 79 of Table 52 whose ANOVA result is significant, indicates that the means of Bread baking factories ($\bar{x} = 3.56$) and Wood processing factories ($\bar{x} = 3.88$) do not differ significantly but both means differ significantly from the mean of Palm oil factories ($\bar{x} = 2.56$). Therefore, Palm oil factories is the group showing the major source of the difference.

Table 62

Cluster Analysis of Variance (ANOVA) on mean responses of accounting staff on the problems associated with application of accounting ratios by Small Scale Industries in the manufacturing sector of Cross River State.

Sources of variation	df	Sum of squares	Mean squares	F-cal	F-tab	Sig.	Decision
Between groups	2	5448.23	2724.12	26.88	3.00	S	Reject H_0
Within groups	579	58679.91	101.35				

Total	581	64128.14		
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The F-ratio distribution shows that the critical value of F with 2 and 579 degrees of freedom at 0.05 level of probability is 3.00. Since the calculated value of 26.88 is more than the critical value of 3.00, we have good reason to reject the null hypothesis (Ho). Hence, the staff differ in their opinions. This implies that, there is a significant difference among the categories of staff with respect to their opinions concerning the problems associated with application of accounting ratios by small scale industries in the manufacturing sector of Cross River State. Therefore, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the problems associated with application of accounting ratios by small scale industries in the manufacturing sector of Cross River State, is therefore rejected.

Findings of the Study

The following are the findings arising from the analysis of the data presented in Tables 1 - 7.

- 1. Liquidity Ratios:** Based on the mean responses of the items presented in Table 1, it was found that:
 - (i) The following liquidity ratios processes are applied by small scale industries in the manufacturing sector of Cross River State to measure short-term solvency.
 - (a) Computing the value of total current assets for the accounting period.
 - (b) Computing the value of total current liabilities for the accounting period.
 - (c) Conducting analysis of Debtors to ascertain doubtful balances for the accounting period.
 - (d) Ascertaining the value of cash and cash equivalents for every accounting year end.
 - (ii) Liquidity ratios processes not applied are:
 - (a) Dividing total current assets by total current liabilities for the accounting period to obtain Current Ratio.
 - (b) Deducting the value of Stock from Current Assets to determine Quick Assets for the accounting Period.
 - (c) Deducting doubtful balances from closing value of Debtors.
 - (d) Dividing Net Quick assets by current liabilities for the accounting period to obtain Quick (Acid-test) Ratio.
 - (e) Dividing the value of cash and cash equivalents by current liabilities for the accounting year end to get Cash Ratio.

- (f) Comparing Liquidity Ratios of current year to previous year's ratios obtained by the Business organization.
 - (g) Comparing Liquidity Ratios of current year to previous year's ratios with that of similar business(es) in the same industry.
- 2. Gearing/Stability Ratios:** Based on the mean responses of the items presented in Table 2, it was revealed that:
- (i) The following stability ratios processes are applied by small scale industries in the manufacturing sector of Cross River State; to measure long-term solvency.
 - (a) Determining the value of total assets for the accounting year.
 - (b) Calculating the value of total liabilities for the accounting year.
 - (c) Ascertaining equity capital from total capital for the year end.
 - (d) Deducting expenses from Gross Profit to determine Net (Operating) Profit for the accounting period.
 - (e) Determining interest payable on the amount borrowed by the Business.
 - (ii) Stability ratios processes not applied are:
 - (a) Dividing total liabilities by total assets to obtain Debt Ratio.
 - (b) Dividing total liabilities by equity capital to get Debt/Equity Ratio.
 - (c) Dividing operating profit (Net profit) by interest expense to ascertain Interest Coverage Ratio.
 - (d) Dividing total assets by net worth (owner's equity) to determine Capital Employed to Net worth Ratio.
 - (e) Dividing interest charges by operating (Net) profit (when interest and taxes are not deducted) for the year end to obtain Income Gearing Ratio.
 - (f) Comparing Gearing Ratios of current year to previous year's ratio obtained by the Business organization.
 - (g) Comparing Gearing Ratios of current year to previous year's ratios with that of similar business(es) in the same industry.
- 3. Profitability Ratios:** Based on the mean responses of the items presented in Table 3, it was revealed that:
- (i) The following profitability ratios processes are applied by small scale industries in the manufacturing sector of Cross River State; to measure performance and effectiveness.
 - (a) Determining gross profit for the accounting period.
 - (b) Computing total value of sales for the accounting period.
 - (c) Dividing gross profit by sales to find Gross Profit (Margin) Ratio.
 - (d) Ascertaining net profit for the period.
 - (e) Dividing net profit by sales to get Net Profit (Margin) Ratio.
 - (ii) Profitability ratios processes not applied are:
 - (a) Dividing operating (net) profit by total assets to obtain Return on Capital Employed Ratio.

- (b) Dividing operating (General) expenses by sales to determine Operating Expenses Ratio.
- (c) Dividing individual item of expense by total expenses to obtain Expenses Ratios.
- (d) Divide Individual expense by sales to ascertain Expenses to Sales Ratio.
- (e) Comparing Profitability Ratios of current year to previous year's ratios obtained by the Business organization.
- (f) Comparing Profitability Ratios of current year to previous year's ratios with that of similar business(es) in the same industry.

4. Activity Ratios: Based on the mean responses of the items presented in Table 4, it was discovered that:

- (i) The following activity ratios processes are applied by small scale industries in the manufacturing sector of Cross River State; to measure efficiency in assets utilization.
 - (a) Computing cost of goods sold for the accounting period.
 - (b) Determining the value of average inventory for the year end.
 - (c) Dividing cost of goods sold by average inventory to find Stock Turnover Ratio.
 - (d) Ascertaining the value of credit sales for the period.
 - (e) Ascertaining the value of credit purchases for the period.
 - (f) Dividing sales by fixed assets to obtain Fixed Assets Turnover Ratio.
 - (g) Dividing sales by total assets to obtain Total Assets Turnover Ratio.
- (ii) Activity ratios processes not applied are:
 - (a) Calculating the average of trade debtors for the accounting period.
 - (b) Dividing credit sales by average trade debtors to determine Debtors Turnover Ratio.
 - (c) Computing the average of trade creditors for the accounting period.
 - (d) Obtaining Creditors Turnover Ratio by dividing credit purchases by average trade debtors.
 - (e) Dividing average trade debtors by credit sales and multiply by 365 days to ascertain Debtors Collection Period.
 - (f) Dividing average trade creditors by credit purchases and multiply by 365 days to ascertain Creditors Payment Period.
 - (g) Dividing sales by net assets to obtain Net Assets Turnover Ratio.
 - (h) Dividing sales by current assets to obtain Current Assets Turnover Ratio.
 - (i) Comparing Activity Ratios of current year to previous year's ratios obtained by the Business organization.
 - (j) Comparing Activity Ratios of current year to previous year's ratios with that of similar business in the same industry.

5. Cash Flow Statement: Based on the mean responses of the items presented in Table 5, it was discovered that:

- (i) The following Cash Flow Statement processes are not applied by small scale industries in the manufacturing sector of Cross River State; to report cash flow.
 - (a) Categorizing cash flows into operating, investing, and financing activities, respectively.

- (b) Computing net increase or decrease in cash.
- (c) Computing and report net cash provided (used) by operating activities.
- (d) Computing and report net cash provided (used) by investing activities.
- (e) Computing and report net cash provided (used) by financing activities.
- (f) Computing net cash flow provided (used) by operating, investing, and financing activities.
- (g) Adding net cash flow provided (used) by operating, investing, and financing activities to the beginning cash balance to show that it equals the ending cash balance.

6. Bookkeeping Procedures and Accounting Records: Based on the mean responses of the items presented in Table 6, it was discovered that:

- (i) The following bookkeeping procedures and accounting records are kept by small scale industries in the manufacturing sector of Cross River State.
 - (a) Deducting depreciation value from cost of assets to obtain Net Book Value in the Balance Sheet.
 - (b) Classifying Assets into fixed and current assets in the Balance Sheet.
 - (c) Classifying Liabilities into long-term and current liabilities in the Balance Sheet.
 - (d) Transferring value of Debtors from Sales Account to the Balance Sheet.
 - (e) Transferring value of Creditors from Purchases Account to the Balance Sheet.
- (ii) Bookkeeping procedures and accounting records not kept:
 - (a) Transferring Production cost in Manufacturing Account to Trading Account.
 - (b) Determining Gross profit/loss in Trading Account.
 - (c) Determining Net profit/loss in Profit and Loss Account.
 - (d) Transferring Net profit to Capital Account.
 - (e) Determining cost of production in Manufacturing Account.
 - (f) Determining Prime cost of production in Manufacturing Account.
 - (g) Trading, Profit and Loss Account.
 - (h) Balance Sheet.
 - (i) Manufacturing Account.

7. Problems of Applying Accounting Ratios: Based on the mean responses of the items presented in Table 7, it was shown that:

- (i) The following are problems associated with the application of accounting ratios by small scale industries in the manufacturing sector of Cross River State.
 - (a) Differences in accounting policies adopted by individual businesses.
 - (b) Lack of qualified accounting staff employed by small scale industries.
 - (c) On their own, ratios cannot show whether performance is good or bad.
 - (d) Ratios based on information from historical cost convention are not very useful for decision making.
 - (e) Accounting staff lack Book-keeping experience.
 - (f) Accounting records are not properly maintained.
 - (g) Management does not consider accounting ratios as useful tools for measuring solvency.
 - (h) Differences in capital structure of companies make comparison difficult.
 - (i) Window dressed financial statements affects accounting ratios.

Null Hypotheses

H0₁ i the item-by-item analysis of variance (ANOVA) pertaining to hypothesis 1 reveals that there is a significant difference in the mean responses of Accounting staff in Bread baking, Palm Oil, and Wood Processing factories on 4 items relating to extent of application of liquidity ratios in measuring short-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State. The items are: computing the value of total current assets for the accounting period, computing the value of total current liabilities for the accounting period; and ascertaining the value of cash and cash equivalents for every accounting year end.

For these items that show significant difference, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm Oil, and Wood processing factories on application of liquidity ratios in measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State is therefore rejected.

On the other hand, the item-by-item analysis of variance (ANOVA) pertaining to hypothesis 1 also reveals that, there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on 8 items relating to extent of application of liquidity ratios in measuring short-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State. The items are: dividing total current assets by total current liabilities for the accounting period to obtain current ratio, deducting the value of stock from current assets to determine quick assets for the accounting period, conducting analysis of debtors to ascertain doubtful balances for the accounting period, deducting doubtful balances from closing value of debtors, dividing net quick assets by current liabilities for the accounting period to obtain quick (acid-test) ratio, dividing the value of cash and cash equivalents by current liabilities for the accounting year end to get cash ratio, comparing liquidity ratios of current year to previous year's ratios obtained by the business organization; and comparing liquidity ratios of current year to previous year's ratios with that of similar business(es) in the same industry.

For these items that show no significant difference, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing Factories on application of liquidity ratios in measuring short-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State is therefore upheld.

The cluster analysis of variance (ANOVA) pertaining to hypothesis 1 reveals that there is no significant difference in the mean responses of Accounting staff in Bread Baking, Palm Oil, and Wood Processing Factories on application of liquidity ratios in measuring short-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State. The null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing Factories on application of liquidity ratios in measuring short-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State is therefore upheld.

H0₂ i the item-by-item analysis of variance (ANOVA) pertaining to hypothesis 2 shows that there is a significant difference in the mean responses of Accounting staff in Bread Baking, Palm Oil, and Wood Processing Factories on 5 items relating to extent of application of gearing ratios in measuring long-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State. The items are: determining the value of total assets for the accounting year, calculating the value of total liabilities for the accounting year, ascertaining equity capital from total capital for the year end, deducting expenses from gross

profit to determine net (operating) profit for the accounting period; and determining interest payable on the amount borrowed by the business.

For these items that show significant difference, the null hypothesis which states that, there will be no significant difference in the mean responses of Accounting staff in Bread Baking, Palm Oil, and Wood Processing Factories on the application of gearing ratios in measuring long-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State is therefore rejected.

Alternatively, the item-by-item analysis of variance (ANOVA) pertaining to hypothesis 2 shows that there is no significant difference in the mean responses of Accounting staff in Bread Baking, Palm Oil, and Wood Processing factories on 7 item relating to extent of application of gearing ratios in measuring long-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State. These items are: dividing total liabilities by total assets to obtain debt ratio, dividing total liabilities by equity capital to get debt/equity ratio, dividing operating profit (net profit) by interest expense to ascertain interest coverage ratio, dividing total assets by net worth (owner's equity) to determine capital employed to net worth ratio, dividing interest charges by operating (net) profit (when interest and taxes are not deducted) for the year end to obtain income gearing ratio, comparing gearing ratios of current year to previous year's ratio obtained by the business organization; and comparing gearing ratios of current year to previous year's ratios with that of similar business(es) in the same industry.

For these items that show no significant difference, the null hypothesis which states that, there will be no significant difference in the mean responses of Accounting staff in Bread Baking, Palm Oil, and Wood Processing Factories on the application of gearing ratios in measuring long-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State is therefore upheld.

The cluster analysis of variance (ANOVA) pertaining to hypothesis 2 shows that there is no significant difference in the mean responses of Accounting staff in Bread Baking, Palm Oil, and Wood Processing Factories on the application of gearing ratios in measuring long-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State. The null hypothesis which states that, there will be no significant difference in the mean responses of Accounting staff in Bread Baking, Palm Oil, and Wood Processing Factories on the application of gearing ratios in measuring long-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State is therefore upheld.

H₀₃ i the item-by-item analysis of variance (ANOVA) pertaining to hypothesis 3 reveals that there is a significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing factories on 5 items relating to application of profitability ratios in measuring the performance and effectiveness of Small Scale Industries in the Manufacturing Sector of Cross River State. These items are: determining gross profit for the accounting period, computing total value of sales for the accounting period, dividing gross profit by sales to find gross profit (margin) ratio, ascertaining net profit for the period; and dividing net profit by sales to get net profit (margin) ratio.

For these items that show significant difference, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing Factories on the application of profitability ratios in measuring the performance and effectiveness of Small Scale Industries in the Manufacturing Sector of Cross River State is therefore rejected.

On the other perspective, the item-by-item analysis of variance (ANOVA) pertaining to hypothesis 3 reveals that there is no significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing factories on 6 items relating to application of profitability ratios in measuring the performance and effectiveness of Small Scale Industries in the Manufacturing Sector of Cross River State. These items are: dividing operating (net) profit by total assets to obtain return on capital employed ratio, dividing operating (general) expenses by sales to determine operating expenses ratio, dividing individual item of expense by total expenses to obtain expenses ratios, dividing individual expense by sales to ascertain expenses to sales ratio, comparing profitability ratios of current year to previous year's ratios obtained by the business organization; and comparing profitability ratios of current year to previous year's ratios with that of similar business(es) in the same industry.

For these items that show no significant difference, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the application of profitability ratios in measuring the performance and effectiveness of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

The cluster analysis of variance (ANOVA) pertaining to hypothesis 3 reveals that there is no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the application of profitability ratios in measuring the performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. The null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing Factories on the application of profitability ratios in measuring the performance and effectiveness of Small Scale Industries in the Manufacturing Sector of Cross River State is therefore upheld.

H₀₄ the item-by-item analysis of variance (ANOVA) pertaining to hypothesis 4 indicates that there is a significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing Factories on 7 items relating to extent of application of activity ratios in measuring the efficiency with which Small Scale Industries in the Manufacturing Sector utilize assets to generate cash flow in Cross River State. These items include: computing cost of goods sold for the accounting period, determining the value of average inventory for the year end, dividing cost of goods sold by average inventory to find stock turnover ratio, ascertaining the value of credit sales for the period, ascertaining the value of credit purchases for the period, dividing sales by fixed assets to obtain fixed assets turnover ratio; and dividing sales by total assets to obtain total assets turnover ratio.

For these items that show a significant difference, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing Factories on the application of activity ratios in measuring the efficiency with which Small Scale Industries in the Manufacturing Sector utilize assets to generate cash flow in Cross River State is therefore rejected.

Moreso, the item-by-item analysis of variance (ANOVA) pertaining to hypothesis 4 indicates that there is no significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing Factories on 10 items relating to extent of application of activity ratios in measuring the efficiency with which Small Scale Industries in the Manufacturing Sector utilize assets to generate cash flow in Cross River State. These items include: calculating the average of trade debtors for the accounting period, dividing credit sales by average trade debtors to determine debtors turnover ratio, computing the average of trade creditors for the accounting period, obtaining creditors turnover ratio by dividing credit purchases by average trade debtors, dividing average trade debtors by credit sales and multiply by 365 days to ascertain debtors collection period, dividing average trade creditors by credit purchases and multiply by 365 days to ascertain creditors payment period, dividing sales by net assets to obtain net assets turnover ratio, dividing sales by current assets to obtain current assets turnover ratio, comparing activity ratios of current year to previous year's ratios obtained by the business organization; and comparing activity ratios of current year to previous year's ratios with that of similar business in the same industry.

For these items that show no significant difference, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing Factories on the application of activity ratios in measuring the efficiency with which Small Scale Industries in the Manufacturing Sector utilize assets to generate cash flow in Cross River State is therefore upheld.

The cluster analysis of variance (ANOVA) pertaining to hypothesis 4 indicates that there is no significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing Factories on the application of activity ratios in measuring the efficiency with which Small Scale Industries in the Manufacturing Sector utilize assets to generate cash flow in Cross River State. The null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing Factories on the application of activity ratios in measuring the efficiency with which Small Scale Industries in the Manufacturing Sector utilize assets to generate cash flow in Cross River State is therefore upheld.

Ho₅ - the item-by-item analysis of variance (ANOVA) pertaining to hypothesis 5 indicates that there is no significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing factories on all the listed items relating to extent of application of cash flow statement in reporting cash flow of Small Scale Industries in the Manufacturing Sector of Cross River State. The items include: categorizing cash flows into operating, investing, and financing activities, respectively, computing net increase or decrease in cash, computing and report net cash provided (used) by operating activities, computing and report net cash provided (used) by investing activities, computing and report net cash provided (used) by financing activities, computing net cash flow provided (used) by operating, investing, and financing activities; and adding net cash flow provided (used) by operating, investing, and financing activities to the beginning cash balance to show that it equals the ending cash balance.

Therefore, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing Factories on the extent of application of cash flow statement in reporting cash flow of Small Scale Industries in the Manufacturing Sector of Cross River State is therefore upheld.

The cluster analysis of variance (ANOVA) pertaining to hypothesis 5 indicates that there is no significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing factories on the application of cash flow statement in reporting

cash flow of small scale industries in the manufacturing sector of Cross River State. Therefore, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the extent of application of cash flow statement in reporting cash flow of small scale industries in the manufacturing sector of Cross River State is therefore upheld.

Ho₆ - the item-by-item analysis of variance (ANOVA) pertaining to hypothesis 6 indicates that there is a significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing factories on 5 items relating to the Procedures followed by Small Scale Industries in keeping accounting records in the Manufacturing Sector of Cross River. These items are: deducting depreciation value from cost of assets to obtain net book value in the balance sheet, classifying assets into fixed and current assets in the balance sheet, classifying liabilities into long-term and current liabilities in the balance sheet, transferring value of debtors from sales account to the balance sheet; and transferring value of creditors from purchases account to the balance sheet.

For these items that show a significant difference, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing Factories on the Procedures followed by Small Scale Industries in keeping Accounting Records in the Manufacturing Sector of Cross River is therefore rejected.

Similarly, the item-by-item analysis of variance (ANOVA) pertaining to hypothesis 6 indicates that there is no significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing factories on 5 items relating to the Procedures followed by Small Scale Industries in keeping accounting records in the Manufacturing Sector of Cross River. These items are: transferring production cost in manufacturing account to trading account, determining gross profit/loss in trading account, determining net profit/loss in profit and loss account, transferring net profit to capital account, determining cost of production in manufacturing account; and determining prime cost of production in manufacturing account.

For these items that show no significant difference, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the procedures followed by small scale industries in keeping accounting records in the manufacturing sector of Cross River is therefore upheld.

The cluster analysis of variance (ANOVA) pertaining to hypothesis 6 indicates that there is no significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing factories on the Bookkeeping procedures followed and accounting records kept by small scale industries in the manufacturing sector of Cross River State.

Therefore, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the Bookkeeping procedures followed and accounting records kept by Small Scale industries in the Manufacturing Sector of Cross River, is therefore upheld.

Ho₇ - the item-by-item analysis of variance (ANOVA) pertaining to hypothesis 7 indicates that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on all the items listed on the problems associated with application of accounting ratios by small scale industries in the manufacturing sector of Cross River State. The items include: differences in accounting policies adopted make inter-business comparison difficult, lack of qualified accounting staff mar the application of ratios, on their own, ratios cannot show whether performance is good or bad, ratios based on information from historical cost convention are not very useful for

decision making, accounting staff lack book-keeping experience, accounting records are not properly maintained, management does not consider accounting ratios as useful tools for measuring solvency, differences in capital structure of companies make comparison difficult; and window dressed financial statements affects accounting ratios.

Therefore, the null hypothesis which states that, there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the problems associated with application of accounting ratios by small scale industries in the manufacturing sector of Cross River State is rejected.

The cluster analysis of variance (ANOVA) pertaining to hypothesis 7 indicates that there is a significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing factories on the problems associated with application of accounting ratios by Small Scale Industries in the manufacturing sector of Cross River State. Therefore, the null hypothesis which states that there will be no significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on the problems associated with application of accounting ratios by Small Scale Industries in the manufacturing sector of Cross River State, is therefore rejected.

Discussion of Findings

The findings of this study are discussed according to the seven research questions and seven hypotheses of the study as follows.

Application of Liquidity Ratios by Small Scale Industries

Four out of eleven processes listed under short-term liquidity ratios in the questionnaire are applied by Small Scale Industries in the Manufacturing Sector of Cross River State to measure short-term solvency. These include: computing the value of total current assets and total current liabilities for the accounting period, analyzing trade debtors to ascertain doubtful balances; and ascertaining the value of cash and cash equivalents for every accounting period.

The findings of this study with respect to liquidity ratios applied were in agreement with the opinion of Olatunji (2002) who contended that current assets are those usually held for a short period of time for the purpose of conversion in the ordinary course of business, adding that, they are expected to be used within one accounting period, say one year. The findings were also in consonance with the position of Wood and Sangster (2002a) who explained that current liabilities are items that have to be paid within a year of the balance sheet date. Again, the findings agreed with the view of Pandey (2005) who stated that the collection period ratio helps an analyst in determining the collectability of debtors and thus, the efficiency of collection efforts.

Furthermore, the processes with regard to liquidity ratios not applied include: dividing total current assets by total current liabilities to obtain current ratio, deducting the value of stock from current assets to determine Quick Assets, deducting doubtful balances from closing value of debtors; and dividing net quick assets by current liabilities for the accounting period to obtain quick (Acid-test) ratio. Other processes not applied are dividing the value of cash

and cash equivalents by current liabilities for the accounting year end to get cash ratio, comparing liquidity ratios of current year to previous year's ratios obtained by the business organization; and comparing liquidity ratios of current year to previous year's ratios with that of similar business(es) in the same industry.

Similarly, findings obtained through the interview shows that the respondents do not: compute any of the liquidity ratios to measure short term solvency, measure the company's current short term debts paying ability by comparing liquidity ratios of current year to previous year's ratios obtained by the business organization to ascertain the progress made over the period and do not compare liquidity ratios of current year to previous year with that of similar business(es) in the same industry to ascertain the comparative progress made over the period.

The findings of this study with respect to liquidity ratios not applied were in disagreement with the opinion of Essien (2004) who stated that current ratio is obtained by dividing current assets by current liabilities. The findings were also in disagreement with the contention of Asaolu (2005) who mentioned that quick (acid test or liquidity) ratio considers only the current assets that can quickly be turned into cash should creditors press for immediate payment.

The researcher thinks that the liquidity ratios and processes not applied such as current ratio, acid-test ratio; and inter/intra company comparison of ratios of the Business organization should be applied by Small Scale Industries. This is because; liquidity ratios express the ability of a firm to liquidate its current financial obligations as they fall due. A well managed business always has enough current assets to cover current liabilities. Without liquidity ratio analysis, many assets may remain idle which is a waste to business. Quick ratio expresses the relative amount of cash and other assets that can be easily converted to cash that are available to meet current liabilities. Quick (acid test or liquidity) ratio considers only the current assets that can quickly be turned into cash should creditors press for immediate payment. Cash ratio which is a liquidity ratio is a measure of the adequacy of available cash. Cash ratio should be used to compare comparable companies. To determine whether current ratio is high or low or just right, comparisons should be made with current ratio of previous periods and of similar businesses. From the above discussion, it suffices that the liquidity ratio processes applied by Small Scale Industries cannot on their own assist any business to ascertain its short-term liquidity without recourse to the processes not applied.

The analysis of variance (ANOVA) result in respect of hypothesis 1 shows that accounting staff in Bread baking, Palm oil, and Wood processing factories differ significantly in their rating of 4 items relating to extent of application of liquidity ratios in measuring short-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State.

However, the analysis of variance (ANOVA) pertaining to hypothesis 1 also reveals that, there is no significant difference in the mean responses of Accounting staff in Bread Baking, Palm Oil, and Wood Processing factories on 8 items relating to extent of application of liquidity ratios in measuring short-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State. The items are: dividing total current assets by total current liabilities for the accounting period to obtain current ratio, deducting the value of stock from current assets to determine quick assets for the accounting period, conducting analysis of debtors to ascertain doubtful balances for the accounting period, deducting doubtful balances from closing value of debtors, dividing net quick assets by current liabilities for the accounting period to obtain quick (acid-test) ratio, dividing the value of cash and cash equivalents by current liabilities for the accounting year end to get cash ratio, comparing liquidity ratios of current year to previous year's ratios obtained by the business

organization; and comparing liquidity ratios of current year to previous year's ratios with that of similar business(es) in the same industry.

The need therefore arises to apply liquidity ratios in measuring solvency of Small Scale Industries in the Manufacturing sector of Cross River State; to determine the ability to pay debts at short notice without having to close business. Anthony and Reece (2002) maintained that a firm should ensure that it does not suffer from lack of liquidity, and also that it does not have excess liquidity. The failure of a company to meet its obligations due to lack of sufficient liquidity, will result in poor credit worthiness, loss of credit confidence, or even in legal tangles resulting in the closure of a company.

Application of Gearing/Stability Ratios by Small Scale Industries

Five out of twelve processes listed under gearing/stability ratios are applied by Small Scale Industries in the Manufacturing sector of Cross River State to measure long-term solvency. The processes applied include: Determining the value of total assets, calculating the value of total liabilities, ascertaining equity capital from total capital, deducting expenses from gross profit to determine net (operating) profit; and determining interest payable on the amount borrowed by the business for the accounting period.

The findings of this study with regard to gearing ratios were in agreement with the opinion of Olatunji (2002) who asserted that assets are the resources, properties or possession of a firm. Olatunji also added that assets are owned by business and are expected to be of some future benefits. The findings were also in consonance with the view of Oguobi (2003) who stated that liabilities are values or amount which a business is legally bound to pay within a certain period. Furthermore, the findings of this study were in agreement with the position of Aborode (2006) who contended that Debt/Equity ratio expresses total funds generated from outside sources as a percentage of shareholders or owner's interest. Agreeing with the opinion of Aborode (2006), Omorokpe (2006) also noted that when Debt ratio is high, it indicates that the company is having stability problems.

On the contrary, the processes not applied are: Dividing total liabilities by total assets to obtain debt ratio, dividing total liabilities by equity capital to get debt/equity ratio, dividing operating profit (net profit) by interest expense to ascertain interest coverage ratio; and dividing total assets by net worth (owner's equity) to determine capital employed to net worth ratio. Other processes not applied are: Dividing interest charges by operating (net) profit (when interest and taxes are not deducted) for the year end to obtain Income gearing ratio, comparing gearing ratios of current year to previous year's ratio obtained by the business organization; and comparing gearing ratios of current year to previous year's ratios with that of similar business(es) in the same industry.

Similarly, findings obtained through the interview shows that the respondents do not: compute any of the gearing ratios to measure long term solvency, measure the company's current long term debts paying ability by comparing gearing ratios of current year to previous year's ratios obtained by the business organization to ascertain the progress made over the period and do not compare gearing ratios of current year to previous year with that of similar business(es) in the same industry to ascertain the comparative progress made over the period.

The findings of this study with respect to gearing ratios and processes not applied are in disagreement with the view of Agara (2005) who asserted that debt ratio shows long-term solvency of the firm. The findings of the study were also in disagreement with the view of Omorokpe (2006) who stated that debt ratio is the simplest way of measuring a company's gearing or leverage as it indicates what percentage of total funds employed is generated from outside sources.

There is also a disagreement in the findings of the study with the position of Igben (2004) who maintained that Debt ÷ Equity ratio is a measure of the solvency of a business and indicates the extent of cover for external liabilities. Moreover, the findings of this study differ with the opinion of Peterson (2007) who maintained that, interest coverage measure the amount of interest paid by a company on its borrowings against its operating profit in the same period.

In the opinion of the researcher, the gearing ratios not applied should be applied as part of the accounting practices of Small Scale industries in the manufacturing sector. This is because, All accounting ratios are products of book-keeping and accounting processes. When one process is faulty or absent, a ratio cannot be computed and where it is so computed, it will be misleading. The fact that not all the processes involved in the computation of gearing ratios are applied as revealed from the findings of this study is enough to conclude that small scale Industries do not apply gearing ratios to measure ability to pay debts at the long run.

It should be noted at this point that, short-term creditors, like bankers and suppliers of raw materials are more concerned with the firm's current debt-paying ability. On the other hand, long-term creditors, like debenture holders, financial institutions etc. are more concerned with the firm's long-term financial strength. In fact, a firm should have a strong short-term as well as long-term financial position. Heavy indebtedness leads to creditors' pressures and constraints on the management's independent functioning and energies. During the periods of low profits, a highly debt-financed company suffers great strains. It cannot even pay the interest charges of creditors as a result; their pressure and control are further tightened. A high level of debt introduces inflexibility in the firm's operations due to the increasing interference and pressures from creditors. A high-debt company is able to borrow funds on very restrictive terms and conditions. The loan agreements may require a firm to maintain a certain level of working capital, or a minimum current ratio, or restrict the payment of dividends, or fix limits to the officers and employees' salaries and so on.

The ratios of a firm by themselves do not reveal anything. For meaningful interpretation, the ratios of a firm should be compared with the ratios of similar firms and industry. This comparison will reveal whether the firm is significantly out of line with its competitors, if it is significantly out of line, the firm should undertake a detailed analysis to spot out the trouble areas. The preceding discussion shows that the gearing ratios processes applied cannot give the desired light as to the ability of any business to meet long-term financial obligations without having to incorporate other processes not applied by Small Scale Industries under study.

The analysis of variance (ANOVA) result in respect of hypothesis 2 indicates that accounting staff in Bread baking, Palm oil, and Wood processing factories differ significantly in their rating of 5 items relating to extent of application of gearing ratios in measuring long-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State. The items are: determining the value of total assets for the accounting year, calculating the value of total liabilities for the accounting year, ascertaining equity capital from total capital for the year end, deducting expenses from gross profit to determine net (operating) profit for the accounting period; and determining interest payable on the amount borrowed by the business.

Furthermore, the analysis of variance (ANOVA) pertaining to hypothesis 2 shows that there is no significant difference in the mean responses of Accounting staff in Bread Baking, Palm Oil, and Wood Processing factories on 7 items relating to extent of application of gearing ratios in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State. These items are: dividing total liabilities by total assets to obtain debt ratio, dividing total liabilities by equity capital to get debt/equity ratio, dividing operating profit (net profit) by interest expense to ascertain interest coverage ratio, dividing total assets by net worth (owner's equity) to determine capital employed to net worth ratio, dividing interest charges by operating (net) profit (when interest and taxes are not deducted) for the year end to obtain income gearing ratio, comparing gearing ratios of current year to previous year's ratio obtained by the business organization; and comparing gearing ratios of current year to previous year's ratios with that of similar business(es) in the same industry. Therefore, the need arises to apply gearing ratios in measuring solvency of Small Scale Industries in the Manufacturing sector of Cross River State; to determine the ability to pay debts at the long run and continue in business. Gearing or stability ratios are usually employed to predict the stability of business overtime (Merret and Sykes, 2003). Aborode (2006) reported that in accounting it is often said that the extent to which a business is financed by loan capital is gearing. Gearing ratios show the proportion of debt and equity in financing a business's assets (Martin, Petty, Keown and Scott, 2005).

Application of Profitability Ratios by Small Scale Industries

Five out of eleven processes listed under profitability ratios are applied by Small Scale Industries in the Manufacturing sector of Cross River State to measure performance and effectiveness. The processes applied are: Determining gross profit, computing total value of sales, dividing gross profit by sales to find gross profit (margin) ratio, ascertaining net profit; and dividing net profit by sales to get net profit (margin) ratio for the accounting period.

These findings are in agreement with the view of Jones (2004) who opined that Gross profit margin can be expressed as sales less cost of sales divided by sales or as gross profit divided by sales. It is also in agreement with the opinion of Weston (2001) who stated that gross profit margin is a key ratio for most types of businesses, and it is simply the gross profit expressed as a percentage of sales (or turnover). The findings of this study also conformed with the view of Agara (2006) who opined that, Net profit margin indicates the firm's ability to turn every naira of sales into profit, which will increase the shareholders fund.

Conversely, the following processes are not applied: Dividing operating (net) profit by total assets to obtain return on capital employed ratio, dividing operating (general) expenses by sales to determine operating expenses ratio, dividing individual item of expense by total expenses to obtain expenses ratios, dividing individual expense by sales to ascertain expenses to sales ratio, comparing profitability ratios of current year to previous year's ratios obtained

by the business organization; and comparing profitability ratios of current year to previous year's ratios with that of similar business(es) in the same industry.

Similarly, findings obtained through the interview shows that the respondents do not: compute any of the profitability ratios to measure performance and effectiveness, measure the company's current performance and effectiveness by comparing profitability ratios of current year to previous year's ratios obtained by the business organization to ascertain the progress made over the period and do not compare profitability ratios of current year to previous year with that of similar business(es) in the same industry to ascertain the comparative progress made over the period

The findings of this study with regard to profitability ratios not applied are in disagreement with the position of Agara (2005) who stated that operating expenses ratio compares operating expenses to sales and is however affected by the controllability of the expenses considered, the variability in sales, change in the selling and administrative expenses, and change in task and demand for the product. The findings also disagreed with the opinion of Asaolu (2005) who noted that expenses to sales ratio helps to highlight the source of the improvement or deterioration in the net profit to sales percentage.

The researcher thinks that the profitability ratios not applied should be applied by Small Scale Industries because, where profitability cannot be established, the business runs into complexities. Besides management of the company, creditors and owners are also interested in the profitability of the firm. Creditors want to get interest and repayment of principal regularly. Owners want to get a required rate of return on their investment.

Profitability ratios measure the effectiveness of the management as shown by the returns obtained on sales and capital invested. Profitability measures indicate whether the company is performing satisfactory. They should be used, among other things, to measure the performance of management, to identify whether a company may be a worthwhile investment opportunity, and to determine a company's performance relative to its competitors. Profitability ratios measure the overall performance and effectiveness of the firm.

The analysis of variance (ANOVA) result in respect of hypothesis 3 unfolds that accounting staff in Bread baking, Palm oil, and Wood processing factories differ significantly in their rating of 5 items relating to application of profitability ratios in measuring the performance and effectiveness of Small Scale Industries in the Manufacturing Sector of Cross River State. These items are: determining gross profit for the accounting period, computing total value of sales for the accounting period, dividing gross profit by sales to find gross profit (margin) ratio, ascertaining net profit for the period; and dividing net profit by sales to get net profit (margin) ratio.

However, the analysis of variance (ANOVA) pertaining to hypothesis 3 reveals that there is no significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing factories on 6 items relating to application of profitability ratios in measuring the performance and effectiveness of Small Scale Industries in the Manufacturing Sector of Cross River State. These items are: dividing operating (net) profit by total assets to obtain return on capital employed ratio, dividing operating (general) expenses by sales to determine operating expenses ratio, dividing individual item of expense by total expenses to obtain

expenses ratios, dividing individual expense by sales to ascertain expenses to sales ratio, comparing profitability ratios of current year to previous year's ratios obtained by the business organization; and comparing profitability ratios of current year to previous year's ratios with that of similar business(es) in the same industry.

Therefore, the need arises to apply profitability ratios in measuring profit of Small Scale Industries in the Manufacturing sector of Cross River State; to determine performance and effectiveness. Omorokpe (2006) contended that profitability ratios measure the adequacy of profit by comparing with one or more primary activities or factors that are measured in the financial statements. According to Ogler (2003), profitability is used, among other things, to measure the performance of management, to identify whether a business may be a worthwhile investment opportunity, and to determine a business performance relative to its competitors.

Application of Activity Ratios by Small Scale Industries

Seven out of seventeen processes listed under activity ratios are applied by Small Scale Industries in the Manufacturing sector of Cross River to measure efficiency in assets utilization. The processes applied are: Computing cost of goods sold, determining the value of average inventory, dividing cost of goods sold by average inventory to find stock turnover ratio; and ascertaining the value of credit sales for the period. Other processes applied are: ascertaining the value of credit purchases for the period, dividing sales by fixed assets to obtain fixed assets turnover ratio; and dividing sales by total assets to obtain total assets turnover ratio.

The findings of this study were in agreement with the view of Igben (2005) who pointed that, stock-turnover (stock turn) ratio measures the physical turnover. The findings were also in consonance with the assertion of Agara (2005) who buttressed that stock (inventory) turnover indicates the efficiency of the firm in producing and selling its products. More so, the findings of this study were in agreement with the position of Longe and Kazeem (2006) who stated that average inventory (Average stock) is obtained by adding stock to closing stock and dividing by two, while closing stock (closing inventory) is the stock available at the end of the trading period.

Contrary to the above, the processes not applied are: Calculating the average of trade debtors, dividing credit sales by average trade debtors to determine debtors turnover ratio, computing the average of trade creditors, obtaining creditors turnover ratio by dividing credit purchases by average trade debtors; and dividing average trade debtors by credit sales and multiply by 365 days to ascertain debtor's collection period. Other processes not applied are: Dividing average trade creditors by credit purchases and multiply by 365 days to ascertain creditors payment period, dividing sales by net assets to obtain net assets turnover ratio, dividing sales by current assets to obtain current assets turnover ratio, comparing activity ratios of current year to previous year's ratios obtained by the business organization; and comparing activity ratios of current year to previous year's ratios with that of similar business in the same industry.

Similarly, findings obtained through the interview shows that the respondents do not: compute any of the activity ratios to measure efficiency in the utilization of assets to generate cash flow, measure your company's current efficiency in the utilization of assets to generate cash flow by comparing activity ratios of current year to previous year's ratios obtained by the business organization to ascertain the progress made over the period, and do not compare activity ratios of current year to previous year with that of similar business(es) in the same industry to ascertain the comparative progress made over the period.

The findings of this study with regard to activity ratios not applied disagree with the view of Igben (2000) who concluded that Debtors turnover expresses the number of times trade debtors are turned over during the reporting period. The findings also differ with the view of Udi and Omorokpe (2006) who noted that creditor's turnover ratio is used to monitor how long it takes to pay supplies. There is also a disagreement between the findings of this study and the opinion of Wood and Sangster (2002b) who noted that, Debtors Collection Period (DCP) ratio measures the average number of days for which trade debts remain uncollected. The researcher thinks that the activity ratios not applied by Small Scale Industries should be so applied because, profitability is affected by the way that the assets of a business are used. If plant and machinery are used only for a few hours a day, the business is failing to utilize these assets efficiently. This may be because; there is limited demand for the product produced. It could be due to the business restricting supply in order to maximize profitability per unit produced.

On the other hand, it could be that there is shortage of skilled labour and that there is no one to operate the plant and machinery the rest of the time. Alternatively, it could be that the plant and machinery is unreliable, breaking down a lot, and that the limited level of use is a precautionary measure designed to ensure that production targets are met. Activity ratios measure the firm's efficiency in utilizing its assets to generate cash flow, that is, how efficient the firm converts its current assets to cash.

The analysis of variance (ANOVA) result in respect of hypothesis 4 shows that accounting staff in Bread baking, Palm oil, and Wood processing factories differ significantly in their rating of 7 items relating to extent of application of activity ratios in measuring the efficiency with which Small Scale Industries in the Manufacturing Sector utilize assets to generate cash flow in Cross River State. These items include: computing cost of goods sold for the accounting period, determining the value of average inventory for the year end, dividing cost of goods sold by average inventory to find stock turnover ratio, ascertaining the value of credit sales for the period, ascertaining the value of credit purchases for the period, dividing sales by fixed assets to obtain fixed assets turnover ratio; and dividing sales by total assets to obtain total assets turnover ratio.

The analysis of variance (ANOVA) pertaining to hypothesis 4 indicates that there is no significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing Factories on 10 items relating to extent of application of activity ratios in measuring the efficiency with which Small Scale Industries in the Manufacturing Sector utilize assets to generate cash flow in Cross River State. These items include: calculating the average of trade debtors for the accounting period, dividing credit sales by average trade debtors to determine debtors turnover ratio, computing the average of trade creditors for the accounting period, obtaining creditors turnover ratio by dividing credit purchases by average trade debtors, dividing average trade debtors by credit sales and multiply by 365 days to ascertain debtors collection period, dividing average trade creditors by credit purchases and multiply by 365 days to ascertain creditors payment period, dividing sales by net assets to obtain net assets turnover ratio, dividing sales by current assets to obtain current assets

turnover ratio, comparing activity ratios of current year to previous year's ratios obtained by the business organization; and comparing activity ratios of current year to previous year's ratios with that of similar business in the same industry.

Therefore, the need arises to apply activity ratios in measuring efficiency in assets utilization by small scale industries in the manufacturing sector of Cross River State. Udi and Omorokpe (2006) noted that efficiency (activity) ratios provide a measure of how quickly outstanding debts are collected (and payments made to creditors), and how effective management is making money to work for the success of the business.

Application of Cash Flow Statement by Small Scale Industries

All the processes listed under cash flow statement are not applied by small scale industries in the manufacturing sector of Cross River to report cash flow. The processes are: categorizing cash flows into operating, investing, and financing activities respectively, computing net increase or decrease in cash, computing and reporting net cash provided (used) by operating activities, computing and reporting net cash provided (used) by investing activities, computing and reporting net cash provided (used) by financing activities, computing net cash flow provided (used) by operating, investing, and financing activities; and adding net cash flow provided (used) by operating, investing, and financing activities to the beginning cash balance to show that it equals the ending cash balance.

Similarly, findings obtained through the interview shows that the respondents do not: prepare cash flow statement and do not categorize cash flows into operating, investing and financing activities in your organization.

These findings are in disagreement with the opinion of ICAN (2006) who contended that the preparation of a statement of cash flows involves five steps: compute the net increase or decrease in cash, compute and report net cash provided (used) by operating activities (using either direct or indirect method), compute and report net cash provided (used) by investing activities, compute and report net cash provided (used) by financing activities; and compute net cash flow by combining net cash provided (used) by operating, investing, and financing activities and then prove it by adding it to the beginning cash balance to show that it equals the ending cash balance. The findings were also in disagreement with the view of Igben (2004), ICAN (2005) and Aborode (2006) who buttressed that SAS No. 18 classifies cash flows into three broad categories – operating, investing and financing activities.

The researcher thinks that cash flow statement should be applied by Small Scale Industries because, the information provided in a statement of cash flows when used with related disclosures and other information in the financial statements will over a period assist users to assess the impact of an enterprise's current transactions – operating, investing and financial activities – on its performance and financial position, assess the ability of the enterprise to meet its debt obligations, pay dividends and meet other claims, assess the ability of the enterprise to finance ongoing operations and growth from internal sources and determine the amount of external financing required; and assess the ability of the enterprise to generate cash and cash equivalent, which is the key to the continuous survival of the enterprise. Cash flow information provides a better means of intra or inter-firm comparison of reported operating performance because it eliminates the effect of using different accounting treatments for the same transaction. Cash flow statement is useful in examining the relationship between the enterprise's profitability and its net cash position; and historical cash flow information is used as an indicator of amount, timing and certainty of future cash flows.

The analysis of variance (ANOVA) pertaining to hypothesis 5 indicates that there is no significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood processing factories on all the listed items relating to extent of application of cash flow statement in reporting cash flow of small scale industries in the manufacturing sector of Cross River State. The items include: categorizing cash flows into operating, investing, and financing activities, respectively, computing net increase or decrease in cash, computing and report net cash provided (used) by operating activities, computing and report net cash provided (used) by investing activities, computing and report net cash provided (used) by financing activities, computing net cash flow provided (used) by operating, investing, and financing activities; and adding net cash flow provided (used) by operating, investing, and financing activities to the beginning cash balance to show that it equals the ending cash balance.

The findings in respect of hypothesis 5 is in disagreement with ICAN (2005) who buttressed that SAS No. 18 classifies cash flows into three broad categories i operating, investing and financing activities. It also disagrees with (ICAN, 2006) who contended that Prior to the introduction of cash flow statement by statement of accounting standards number 18 (SAS No. 18), companies in Nigeria were preparing statement of sources and application of funds as a parameter for evaluating corporate liquidity.

Bookkeeping Procedures and Accounting Records kept by Small Scale Businesses

Five out of eleven processes listed under accounting records are applied by small scale industries in the manufacturing sector of Cross River. The processes applied are: Deducting depreciation value from cost of assets to obtain net book value in the balance sheet, classifying assets into fixed and current assets in the balance sheet, classifying liabilities into long-term and current liabilities in the balance sheet, transferring value of debtors from sales account to the balance sheet; and transferring value of creditors from purchases account to the balance sheet. Similarly, findings obtained through the interview shows that the respondents do prepare/maintain cash books.

The findings of this study with regard to accounting records maintained were in agreement with the contention of Longe and Kazeem (2006) who upheld that Balance sheet is not an account and it is drawn up at a certain date showing on the left i Capital and Liabilities and on the right i Assets. The findings of the study also agreed with the view of Ekwere (2005) who explained that when posting items from the sales day book, total of sales day book will be transferred to the credit side of sales account in the general ledger and personal account debited. Similarly, the findings of this study also agreed with the position of Olatunji (2002) who contended that the total of purchases day book will be posted to the debit side of the Purchases account and credited to personal ledgers of suppliers at the time of posting items from purchases day book.

Contrarily, the processes not applied are: transferring production cost in manufacturing account to trading account, determining gross profit/loss in trading account, determining net profit/loss in profit and loss account, transferring net profit to capital account, determining cost of production in manufacturing account; and determining prime cost of production in manufacturing account.

Similarly, findings obtained through the interview shows that the respondents do not: organization keep accounting records that could be used to analyze performance and effectiveness over time, follow the double entry principle in preparing the financial statements of their business organizations and do not keep the following books i Trading, Profit and Loss account; and Balance Sheet.

The findings of this study with regard to accounting records not maintained disagreed with the view of Igben (2000) who noted that, a business organization engaged in the manufacture of goods for sale will prepare a manufacturing account in addition to the trading, profit and loss account. The findings of this study with respect to accounting records also disagreed with the view of Longe and Kazeem (2006) who noted that, the purpose of manufacturing accounts is: (a) to ascertain the cost of the goods manufactured; and (b) to ascertain the amount of any profit on the manufacturing process.

The researcher thinks that Small Scale Industries in the manufacturing sector should maintain all relevant accounting records such as manufacturing, trading, profit and loss account because manufacturing accounts are prepared to ascertain the cost of goods manufactured during the financial year. It is an extension of the trading account.

On the other hand, trading account is constructed for the purpose of determining the gross profit or gross loss of the business. It is a revenue account and form part of the double entry system. Similarly, the profit and loss account is constructed by the business organization to ascertain the net profit or net loss. Net profit is normally transferred to the Capital account. The main purpose of Profit and Loss account is to arrive at the net profit after charging all the expenses from the gross profit. It is a continuation of the trading account.

Accounting records are kept to evaluate the performance and profitability position of a business, to enable management make qualitative decision on the finances and operations of the organization, to assess and ascertain the liquidity and financial position of a business; and to assist management in business planning.

The analysis of variance (ANOVA) pertaining to hypothesis 6 indicates that there is a significant difference in the mean responses of accounting staff in Bread Baking,

Palm Oil, and Wood Processing factories on 5 items relating to the Procedures followed by Small Scale Industries in keeping accounting records in the Manufacturing Sector of Cross River. These items are: deducting depreciation value from cost of assets to obtain net book value in the balance sheet, classifying assets into fixed and current assets in the balance sheet, classifying liabilities into long-term and current liabilities in the balance sheet, transferring value of debtors from sales account to the balance sheet; and transferring value of creditors from purchases account to the balance sheet.

Contrarily, the analysis of variance (ANOVA) pertaining to hypothesis 6 indicates that there is no significant difference in the mean responses of accounting staff in Bread Baking, Palm Oil, and Wood Processing factories on 5 items relating to the procedures followed by small scale industries in keeping accounting records in the manufacturing sector of Cross River. These items are: transferring production cost in manufacturing account to trading account, determining gross profit/loss in trading account, determining net profit/loss in profit and loss account, transferring net profit to capital account, determining cost of production in manufacturing account; and determining prime cost of production in manufacturing account. These findings are in disagreement with the view of Igben (2000) who noted that, a business organization engaged in the manufacture of goods for sale will prepare a manufacturing account in addition to the trading, profit and loss account. The findings are also in disagreement with the opinion of Olatunji (2002) who upheld that accounting records are kept to evaluate the performance and profitability position of a business, to enable management make qualitative decision on the finances and operations of the organization, to assess and ascertain the liquidity and financial position of a business; and to assist management in business planning. However, the findings agree with the contention of Ekwere (2005) who stated that the balance sheet is described as a statement drawn up at the end of each financial period setting forth the various assets, liabilities and capital of the organization in a well arranged form

Problems Associated with Application of Accounting Ratios in Small Scale Businesses

From the findings of the study, the problems associated with the application of accounting ratios by small scale industries in the manufacturing sector of Cross River State include: Differences in accounting policies adopted make inter-business comparison difficult, lack of qualified accounting staff, on their own ratios cannot show whether performance is good or bad, ratios based on information from historical cost convention are not very useful for decision making, accounting staff lack book-keeping experience; and accounting records are not properly maintained. Other problems identified are: management does not consider accounting ratios as useful tools for measuring solvency, differences in capital structure of companies make comparison difficult; and window dressing of financial statements affects accounting ratios.

Similarly, findings obtained through the interview shows that the respondents agree to the effect that the following are problems associated with the application of accounting ratios: differences in accounting policies adopted by businesses, lack of staff with fair accounting background, improper recording of accounting transactions, differences in the capital structure of businesses, window dressing of financial statements, inability of ratios to show

whether management is good or bad; and management does not consider ratios as useful tools that can measure business efficiency and performance.

The findings agreed with the opinion of Wood and Sangster (2002a) who stated that some limitations affecting accounting ratios are connected with financial statement analysis while others are associated with ratio analysis. The findings were also in consonance with the view of Alphin and Casler (2005) who explained that window dressing is a technique applied by an entity in order to show a strong financial position. Financial statement analysis is limited by the fact that financial statements are "window dressed" by creative accountants.

The findings were also in agreement with the assertion of Weston (2001) who contended that the choices of accounting policies may distort inter company comparisons. Different companies use different accounting standards for Inventory, Depreciation, etc. Therefore comparing their financial ratios can be misleading. Agreeing with Weston (2001), Butters (2003) asserted that no two companies are the same, even when they are competitors in the same industry or market. Using ratios to compare one company with another could provide misleading information. Businesses may be within the same industry but having different financial and business risk. Aborode (2006) asserted that the differences in the methods adopted by two enterprises may distort the result of analysis and therefore misinforms judgment.

The analysis of variance (ANOVA) pertaining to hypothesis 7 indicates that there is a significant difference in the mean responses of accounting staff in Bread baking, Palm oil, and Wood processing factories on all the items listed on the problems associated with application of accounting ratios by small scale industries in the manufacturing sector of Cross River State. The items include: differences in accounting policies adopted make inter-business comparison difficult, lack of qualified accounting staff mar the application of ratios, on their own, ratios cannot show whether performance is good or bad, ratios based on information from historical cost convention are not very useful for decision making, accounting staff lack book-keeping experience, accounting records are not properly maintained, management does not consider accounting ratios as useful tools for measuring solvency, differences in capital structure of companies make comparison difficult; and window dressed financial statements affects accounting ratios.

These findings are in agreement with the opinion of Weston (2001) who asserted that the choices of accounting policies may distort inter company comparisons. The findings also agree with Butters (2003) who reported that no two companies are the same, even when they are competitors in the same industry or market. Finally, the findings agree with the assertion of Adeniyi (2002) who argued that many things can impact the calculation of ratios and make comparisons difficult. These include: The use of estimates in allocating costs to each period. The ratios will be as accurate as the estimates; the cost principle is used to prepare financial statements. Financial data is not adjusted for price changes or inflation/deflation; companies have a choice of accounting methods (for example, inventory - LIFO against FIFO and depreciation methods). These

differences impact ratios and make it difficult to compare companies using different methods.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter deals with the summary of the research problem, purpose of the study and its methodology. The major findings, conclusions, recommendations and suggestions for further studies are also presented.

Restatement of the Problem

Ratio analysis is a powerful tool for financial analysis. It is a very useful analytical technique to raise pertinent questions on a number of managerial issues affecting business. To this end, there are a good number of accounting ratios that could be applied to determine financial healthiness of any named venture. These ratios can be categorized into four areas according to the specific purposes they tend to serve in a small business organization. They are:

Liquidity ratios which seek to measure the ability of a business to pay maturing obligations in the short-term (such as current, quick (acid-test), and cash ratios, etc.), gearing/stability ratios which tend to determine the ability of a business to pay debts on maturity at the long-term while continuing in business (such as debt, debt/equity, interest coverage; and capital employed to net worth ratios, etc.), profitability ratios which seek to measure profit, operational performance and effectiveness of business enterprises (such as profit margin, assets turnover, return on capital employed, gross profit, net profit, and operating expenses ratios, etc.); and activity ratios which tend to measure the efficiency with which business enterprises utilize assets to generate cash flow (such as stock turnover, debtors turnover, creditors turnover, debtors collection period, creditors payment period; and assets turnover ratios, etc.). Unfortunately, these accounting ratios have not been applied by small scale industries.

Small scale industries are exposed to the danger of mismanagement, low productivity, misapplication of scarce resources, inefficiency, loss of income etc. as a result of not applying accounting ratios. If this situation is not salvaged, the likely consequences would be business failure, loss of job/unemployment, litigation arising from bankruptcy proceedings where part of the capital is sourced externally, etc. Therefore, it becomes imperative for a study to be conducted to determine the accounting ratios applied by small scale industries in the manufacturing sector of Cross River State.

This study was therefore designed specifically to achieve the following purposes:

- (1) Determine the extent of application of liquidity ratios in measuring short-term solvency of Small Scale Industries in the Manufacturing Sector.
- (2) Determine the extent of application of gearing (stability) ratios in measuring long-term solvency of Small Scale Industries in the Manufacturing Sector.
- (3) Determine the extent of application of profitability ratios in measuring the performance and effectiveness of Small Scale Industries in the Manufacturing Sector.
- (4) Determine the extent of application of activity (efficiency) ratios in measuring the efficiency with which Small Scale Industries in the Manufacturing Sector utilize assets to generate cash flow.
- (5) Determine the extent of application of cash flow statement in reporting the cash flow of Small Scale Industries in the Manufacturing Sector.
- (6) Determine the bookkeeping procedures followed and accounting records kept by Small Scale Industries in the Manufacturing Sector.
- (7) Determine the problems associated with application of accounting ratios in Small Scale Industries.

Seven research questions and seven hypotheses were formulated and tested respectively. The hypotheses were tested at 0.05 level of significance.

Summary of the Procedures Used

A 79-item structured questionnaire and a structured interview were developed and used to collect data for the study. The population comprised of 667 respondents (Accounting staff) made up of 345 staff working in Palm oil processing factories, 163 staff working in Wood processing factories and 159 staff working in Bread baking factories. The entire population was studied. The questionnaire designed for data collection was divided into seven sections, A to H. Section A dealt with bio-data of the respondents. Section B dealt with Liquidity ratios applied by Small Scale Industries; C was on Gearing ratios applied by Small Scale Industries; D was on profitability ratios applied by small scale industries, E dealt with activity ratios

applied by small scale industries, F was on cash flow statement applied by small scale industries, G dealt with bookkeeping procedures followed and accounting records kept by small scale industries and H was on problems associated with applying accounting ratios. Sections B - H were scaled on five points count. A total of 667 copies of the instrument were distributed to the respondents of which 582 copies were duly completed and returned, representing 87.26% return.

Similarly, the interview was divided into eight sections, I ÷ VIII. Section I provided information on the background of the respondents. Section II provided information on application of liquidity ratios in measuring short-term solvency of small scale industries in the manufacturing sector of Cross River State. Section III provided information on application of gearing ratios in measuring long-term solvency of small scale industries in the manufacturing sector of Cross River State. Section IV provided information on application of profitability ratios in measuring performance and effectiveness of small scale industries in the manufacturing sector of Cross River State. Section V provided information on application of activity ratios in measuring efficiency with which small scale industries in the manufacturing sector utilize assets to generate cash flow in Cross River State. Section VI provided information on application of cash flow statement in reporting cash flow of small scale industries in the manufacturing sector of Cross River State. Section VII provided information on bookkeeping procedures followed and accounting records kept by small scale industries in the manufacturing sector of Cross River State. Finally, Section VIII provided information on problems associated with application of accounting ratios by small scale industries in the manufacturing sector of Cross River State.

Data collected with the questionnaire were analyzed using the mean for answering research questions and the analysis of variance (ANOVA) in testing the seven null hypotheses.

Major Findings of the Study

The summary of the major findings of the study is as follows:

- A. The following processes relating to accounting ratios are applied by small scale industries in the manufacturing sector of Cross River State.
 - 1. Computing the value of total current assets and current liabilities for the accounting period.
 - 2. Conducting analysis of debtors to ascertain doubtful balances for the accounting period.
 - 3. Determining the value of total assets and liabilities for the accounting year.
 - 4. Ascertaining equity capital from total capital for the year end.
 - 5. Determining gross and net profits for the accounting period.
 - 6. Ascertaining the value of credit sales and credit purchases for the period
 - 7. Computing cost of goods sold for the accounting period.
 - 8. Determining the value of average inventory for the year end.
- B. The following accounting ratios and processes are not applied by small scale industries in the manufacturing sector of Cross River State.
 - 1. Current Ratio
 - 2. Quick (Acid-test) Ratio.
 - 3. Interest Coverage Ratio.
 - 4. Capital Employed to Net worth Ratio.

5. Return on Capital Employed Ratio.
6. Operating Expenses Ratio.
7. Net Assets Turnover Ratio.
8. Current Assets Turnover Ratio.
9. Comparing Liquidity Ratios of current year to previous year's ratios obtained by the Business organization.
10. Comparing Liquidity Ratios of current year to previous year's ratios with that of similar business(es) in the same industry.
11. Comparing Gearing Ratios of current year to previous year's ratio obtained by the Business organization.
12. Comparing Gearing Ratios of current year to previous year's ratios with that of similar business(es) in the same industry.
13. Comparing Profitability Ratios of current year to previous year's ratios obtained by the Business organization.
14. Comparing Profitability Ratios of current year to previous year's ratios with that of similar business(es) in the same industry.
15. Comparing Activity Ratios of current year to previous year's ratios obtained by the Business organization.
16. Comparing Activity Ratios of current year to previous year's ratios with that of similar business in the same industry.
17. Ninety-two percent of accounting staff working in these Small Scale Industries have qualifications less than National Diploma (ND) and Nigeria Certificate in Education (NCE) while only 8% have ND and NCE.

Conclusion

The following conclusions were drawn based on the findings of this study. Inability of the management of Small Scale Industries to apply accounting ratios in measuring solvency and operational efficiency of their ventures may be responsible for the preponderance of business failure. Without the application of accounting ratios the financial condition and operational efficiency may not be readily determined and this would go a long way to impact on the business.

There are a good number of accounting ratios that can be used to measure financial condition and efficiency of management; depending on the needs of the business. These include: current ratio, quick (acid-test) ratio, interest coverage ratio, capital employed to net worth ratio, return on capital employed ratio, operating expenses ratio, net assets turnover ratio; and current assets turnover ratio. If the management of small scale industries in the manufacturing sector of Cross River State could make use of these accounting ratios, they would be able to determine the solvency and operational efficiency statuses of their ventures at any given time thereby overcoming the dangers of insolvency and inefficiency.

Implications of the Study

The implications of this study are discussed under the following sub-headings:

1. Implications for Management and Staff of Small Scale Industries.
2. Implications for Ministry of Trade and Investment.
3. Implications for Business education.
4. Implications for Education
5. Implications for the Public.
- 1. Implications for Management and Staff of Small Scale Industries**

The findings of this study revealed some deficiencies in the skill of applying accounting ratios among management and accounting staff of small scale industries. This constitutes a major problem that deserves attention. The staff's knowledge needed to apply accounting ratios and determine managerial efficiency is very important and critical to business growth. The problem may be attributed to the quality of staff employed and the training given them. Therefore, this study has implication for further training of management and accounting staff of small scale industries through seminars and workshops to update their knowledge. This would help position them on the task of financial statement analysis and interpretation for the betterment of the business.

2. Implications for Ministry of Trade and Investment

The findings of this study have implications for Ministry of Trade and Investment being the supervisory Ministry responsible for the operations of small scale industries in Cross River State. The Ministry should be more committed to the administration of small scale industries by way of Government assistance. Management and accounting staff should be encouraged to embark on refresher courses, workshops and seminars organized by the Ministry to improve their level of operational efficiency and increase productivity. When this is done, small scale industries would have a platform upon which business growth can be sustained and consolidated at the long run.

3. Implications for Business education

The findings of this study have implications for Business education curriculum in general and accounting education curriculum in particular. One of the sources of curriculum is the needs of the society. Therefore, it is imperative for analysis and interpretation of financial statements with a view to measuring business solvency to be emphasized in the course content of financial accounting so as to expose students in that knowledge domain; being potential entrepreneurs and beneficiaries of the business system. Where business educators are well informed on the subject of accounting ratios, it would go a long way to overhaul small scale industries by way of rendering advice to them and effectively managing their own businesses. With these, the existence of small scale industries and the subsequent provision of quality goods and services to the society would be guaranteed.

4. Implications for Education

The findings of this study have far-reaching implications for education. Since accounting staff of small scale industries in the manufacturing sector are not applying accounting ratios in measuring business solvency, management of these businesses should engage their accounting staff on training and retraining programmes. This should be aimed at their mental development. Again, education should be one of the factors to be considered when employing accounting staff so that, only those with requisite book-keeping and accounting knowledge should be given placement.

5. Implications for the Public

One of the social responsibilities of business to the society is welfare. This can be in many forms including creating employment opportunities, providing goods and services, etc. It is only a prosperous and expanding business that can cater for the welfare of the people. Therefore, the progress of small scale industries resulting from application of accounting ratios would impact positively on the welfare of the

general public. On the other perspective, businesses are established in communities and the public need to show concern on such businesses by giving assistance such as security.

Recommendations

Based on the findings of this study, it is recommended that:

1. Only personnel with at least fair accounting knowledge should be employed in Palm oil, wood and bread baking industries in Cross River State.
2. Accounting ratios should be applied by management of small scale industries to improve the financial situation and operational efficiency of small scale industries in Cross River State.
3. Agencies and Ministries in-charge of small scale industries should be committed to the success of the system and at the same time be concerned on the mental development of staff through training and retraining programmes.

Suggestions for Further Studies

The following suggestions are made for further research. Studies should be conducted:

1. To determine the effectiveness of the accounting ratios procedures identified as applied by small scale industries in measuring solvency and operational efficiency.
2. To determine the efficiency of small scale industries in preparing financial statements.
3. To determine how small scale industries manage cash flow for optimal customer service delivery.

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APPENDIX A

RESEARCH QUESTIONNAIRE

INSTRUCTION:

Please tick (ã) the under listed statements as you conceive applicable to Small Scale Industries in the Manufacturing sector of Cross River State. The items are designed to determine the extent to which they are applied in your organization.

SECTION A

1. Status of Respondent:

a. Educational Qualification

☐	CE	☐	/NECO
☐		☐	s
☐	At ND in Accounting or its equivalent		

b. Industrial Sub-sector employed

☐	oil processing	☐	baking
☐	processing		

Use the following guideline and respond to sections B ï G:

Greatly Applied/Strongly Agreed (VGA/SA)	-	5
Applied/Agreed (GA/A)	-	4
Averagely Applied/Undecided (AA/U)	-	3
Slightly Applied/Disagreed (SA/D)	-	2
Not Applied/Strongly Disagreed (NA/SD)	-	1

SECTION B: Use the guideline in Section A and respond to the under listed statements on the Liquidity Ratios applied in measuring short-term solvency of Small Scale Industries in the Manufacturing sector; by ticking (ã) the option that best represents your opinion. The items are designed to determine the extent to which they are applied in your organization.

S/N	ITEM STATEMENT	VGA 5	GA 4	AA 3	SA 2	NA 1
2	Compute the value of total current assets for the accounting period.					
3	Compute the value of total current liabilities for the accounting period.					
4	Divide total current assets by total current liabilities for the accounting period to obtain Current Ratio.					
5	Deduct the value of Stock from Current Assets to determine Quick Assets for the accounting Period.					
6	Conduct analysis of Debtors to ascertain doubtful balances for the accounting period.					
7	Subtract doubtful balances from closing value of Debtors.					

8	Divide Net Quick assets by current liabilities for the accounting period to obtain Quick (Acid-test) Ratio.					
9	Ascertain the value of cash and cash equivalents for the accounting year end.					
10	Divide the value of cash and cash equivalents by current liabilities for the accounting year end to get Cash Ratio.					
11	Compare Liquidity Ratios of current year to previous year's ratios obtained by the Business organization.					
12	Compare Liquidity Ratios of current year to previous year's ratios with that of similar business(es) in the same industry.					

SECTION C: Use the guideline in Section A and respond to the under listed statements on the Stability (Gearing/Leverage) Ratios applied in measuring long-term solvency of Small Scale Industries in the Manufacturing sector; by ticking (ã) the option that best represents your opinion. The items are designed to determine the extent to which they are applied in your organization.

S/N	ITEM STATEMENT	VGA 5	GA 4	AA 3	SA 2	NA 1
13	Determine the value of total assets for the accounting year.					
14	Calculate the value of total liabilities for the accounting year.					
15	Divide total liabilities by total assets to obtain Debt Ratio.					
16	Ascertain equity capital from total capital for the year end.					
17	Divide total liabilities by equity capital to get Debt/Equity Ratio.					
18	Subtract expenses from Gross Profit to determine Net (Operating) Profit for the accounting period.					
19	Determine interest payable on the amount borrowed by the Business.					
20	Divide operating profit (Net profit) by interest expense (interest payable) to ascertain Interest Coverage Ratio.					
21	Divide total assets by net worth (owner's equity) to determine Capital Employed to Net worth Ratio.					
22	Divide interest charges (interest payable) by operating (Net) profit (when interest and taxes are not					

	deducted) for the year end to obtain Income Gearing Ratio.					
23	Compare Gearing (Stability/Leverage) Ratios of current year to previous year's ratios obtained by the Business organization.					
24	Compare Gearing (Stability/Leverage) Ratios of current year to previous year's ratios with that of similar business(es) in the same industry.					

SECTION D: Use the guideline in Section A and respond to the under listed statements on the Profitability Ratios applied in measuring the performance and effectiveness of Small Scale Industries in the manufacturing sector; by ticking (ã) the option that best represents your opinion. The items are designed to determine the extent to which they are applied in your organization.

S/N	ITEM STATEMENT	VGA 5	GA 4	AA 3	SA 2	NA 1
25	Divide operating (net) profit by total assets to obtain Return on Capital Employed Ratio.					
26	Determine gross profit for the accounting period.					
27	Compute total value of sales for the accounting period.					
28	Divide gross profit by sales to find Gross Profit (Margin) Ratio.					
29	Ascertain net profit for the period.					
30	Divide net profit by sales to get Net Profit (Margin) Ratio.					
31	Divide operating expenses (General) expenses by sales to determine Operating Expenses Ratio.					
32	Divide individual item of expense by total expenses to obtain Expenses Ratios.					
33	Divide Individual expense by sales to ascertain Expenses to Sales Ratio.					
34	Compare Profitability Ratios of current year to previous year's ratios obtained by the Business organization.					
35	Compare Profitability Ratios of current year to previous year's ratios with that of similar business(es) in the same industry.					

SECTION E: Use the guideline in Section A and respond to the under listed statements on the Activity (efficiency) Ratios applied in measuring the efficiency with which Small Scale Industries in the manufacturing sector utilize assets to generate cash flow; by ticking (ã) the option that best represents your opinion. The items are designed to determine the extent to which they are applied in your organization.

S/N	ITEM STATEMENT	VGA 5	GA 4	AA 3	SA 2	NA 1
36	Compute cost of goods sold for the accounting period.					
37	Determine the value of average inventory for the year end.					
38	Divide cost of goods sold by average inventory to find Stock Turnover Ratio.					
39	Ascertain the value of credit sales for the period.					
40	Calculate the average of trade debtors for the accounting period.					
41	Divide credit sales by average trade debtors to determine Debtors Turnover Ratio.					
42	Ascertain the value of credit purchases for the period.					
43	Compute the average of trade creditors for the accounting period.					
44	Obtain Creditors Turnover Ratio by dividing credit purchases by average trade debtors.					
45	Divide average trade debtors by credit sales and multiply by 365 days to ascertain Debtors Collection Period (DCP).					
46	Divide average trade creditors by credit purchases and multiply by 365 days to ascertain Creditors Payment Period (CPP).					
47	Divide sales by net assets to obtain Net Assets Turnover Ratio.					
48	Divide sales by current assets to obtain Current Assets Turnover Ratio.					
49	Divide sales by fixed assets to obtain Fixed Assets Turnover Ratio.					
50	Divide sales by total assets to obtain Total Assets Turnover Ratio.					
51	Compare Activity Ratios of current year to previous year's ratios obtained by the Business organization.					
52	Compare Activity Ratios of current year to previous year's ratios with that of similar business(es) in the same industry.					

SECTION F: Use the guideline in Section A and respond to the under listed statements on the cash flow statement applied in reporting the cash flows of small scale industries in the manufacturing sector; by ticking (ã) the option that best represents your opinion. The items are designed to determine the extent to which they are applied in your organization.

S/N	ITEM STATEMENT	VGA 5	GA 4	AA 3	SA 2	NA 1
53	Categorize Cash Flows into Operating, Investing, and Financing activities, respectively.					
54	Compute the net increase or decrease in cash.					
55	Compute and report net cash provided (used) by Operating Activities.					
56	Compute and report net cash provided (used) by Investing Activities.					
57	Compute and report net cash provided (used) by Financing Activities.					
58	Compute net cash flow provided (used) by Operating, Investing, and Financing Activities.					
59	Add net cash flow provided (used) by Operating, Investing, and Financing Activities to the beginning cash balance to show that it equals the ending cash balance.					

SECTION G: Use the guideline in Section A and respond to the under listed statements on the bookkeeping procedures and accounting records kept by small scale industries in the manufacturing sector; by ticking (ã) the option that best represents your opinion. The items are designed to determine the extent to which they are applied in your organization.

S/N	ITEM STATEMENT	VGA 5	GA 4	AA 3	SA 2	NA 1
60	Transfer total of Production cost in the Manufacturing Account to Trading Account					
61	Determine Gross profit or Loss in					

	Trading Account					
62	Determine Net profit or Loss in Profit and Loss Account					
63	Transfer Net profit to Capital Account					
64	Determine cost of production in Manufacturing Account					
65	Determine Prime cost of production in Manufacturing Account					
66	Subtract depreciation value from cost of assets to obtain Net Book Value in the Balance Sheet					
67	Classify Assets into fixed and current assets in the Balance Sheet					
68	Classify Liabilities into long-term and current liabilities in the Balance Sheet					
69	Transfer value of Debtors from Sales Account to the Balance Sheet					
70	Transfer value of Creditors from Purchases Account to the Balance Sheet					

SECTION H: Use the guideline in Section A and respond to the under listed statements on the Problems associated with the application of Accounting Ratios by Small Scale Industries in the Manufacturing Sector; by ticking (ã) the option that best represents your opinion.

S/N	ITEM STATEMENT	SA 5	A 4	U 3	D 2	SD 1
71	Differences in accounting policies adopted make inter-business comparison difficult.					
72	Lack of qualified accounting staff mar the application of ratios.					
73	On their own, ratios cannot show whether performance is good or bad.					
74	Ratios based on information from historical cost convention are not very useful for decision making.					
75	Accounting staff lack Book-keeping experience					
76	Accounting records are not properly maintained					

77	Management does not consider accounting ratios as useful tools for measuring solvency.					
78	Differences in capital structure of companies make comparison difficult.					
79	Window dressed financial statements affects accounting ratios.					

APPENDIX B

INTERVIEW SCHEDULE

SECTION I

Questions on the background of the respondents.

1. May I know your educational background, please!
2. How many years experience do you have in the present business?

SECTION II

Questions on application of liquidity ratios in measuring short-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State.

3. Do your business organization compute any of the liquidity ratios to measure short term solvency?
4. Do you measure your company's current short term debts paying ability by comparing liquidity ratios of current year to previous year's ratios obtained by the business organization to ascertain the progress made over the period?
5. Do your business outfit compare liquidity ratios of current year to previous year with that of similar business(es) in the same industry to ascertain the comparative progress made over the period?

SECTION III

Questions on application of gearing ratios in measuring long-term solvency of Small Scale Industries in the Manufacturing Sector of Cross River State.

6. Does your business organization compute any of the gearing ratios to measure long term solvency?
7. Do you measure your company's current long term debts paying ability by comparing gearing ratios of current year to previous year's ratios obtained by the business organization to ascertain the progress made over the period?
8. Does your business outfit compare gearing ratios of current year to previous year with that of similar business(es) in the same industry to ascertain the comparative progress made over the period?

SECTION IV

Questions on application of profitability ratios in measuring performance and effectiveness of Small Scale Industries in the Manufacturing Sector of Cross River State.

9. Does your business organization compute any of the profitability ratios to measure performance and effectiveness?
10. Do you measure your company's current performance and effectiveness by comparing profitability ratios of current year to previous year's ratios obtained by the business organization to ascertain the progress made over the period?
11. Does your business outfit compare profitability ratios of current year to previous year with that of similar business(es) in the same industry to ascertain the comparative progress made over the period?

SECTION V

Questions on application of activity ratios in measuring efficiency with which small Scale Industries in the Manufacturing Sector utilize assets to generate cash flow in Cross River State.

12. Does your business organization compute any of the activity ratios to measure efficiency in the utilization of assets to generate cash flow?
13. Do you measure your company's current efficiency in the utilization of assets to generate cash flow by comparing activity ratios of current year to previous year's ratios obtained by the business organization to ascertain the progress made over the period?
14. Does your business outfit compare activity ratios of current year to previous year with that of similar business(es) in the same industry to ascertain the comparative progress made over the period?

SECTION VI

Questions on extent of application of cash flow statement in reporting cash flow of Small Scale Industries in the Manufacturing Sector of Cross River State.

15. Does your business organization prepare cash flow statement?
16. Do you categorize cash flows into operating, investing and financing activities in your organization?

SECTION VII

Questions on Accounting Records kept by small scale industries in the Manufacturing Sector of Cross River.

17. Does your organization keep accounting records that could be used to analyze performance and effectiveness over time?
18. Do you follow the double entry principle in preparing the financial statements of your business organization?
19. Which of these books are kept by your organization?
 - Trading, Profit & Loss A/c
 - Balance Sheet
 - Cash Book

SECTION VIII

Questions on problems associated with application of accounting ratios by Small Scale Industries in the manufacturing sector of Cross River State.

20. Which among these are problems associated with the application of accounting ratios by your business organization?

- Differences in accounting policies adopted by businesses.
- Lack of staff with fair accounting background.
- Improper recording of accounting transactions.
- Differences in the capital structure of businesses.
- Window dressing of financial statements.
- Inability of ratios to show whether management is good or bad.
- Management does not consider ratios as useful tools that can measure business efficiency and performance.