

**FIRM CHARACTERISTICS, GOVERNANCE MECHANISMS AND FINANCIAL
PERFORMANCE OF LISTED BUILDING MATERIALS FIRMS IN NIGERIA**

BY

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ZARIA, NIGERIA**

JANUARY, 2016.

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PERFORMANCE OF LISTED BUILDING MATERIALS FIRMS IN NIGERIA**

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**A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES,
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JANUARY, 2016.

Declaration

I declare that the work in this Dissertation entitled FIRM CHARACTERISTICS, GOVERNANCE MECHANISMS AND FINANCIAL PERFORMANCE OF LISTED BUILDING MATERIALS FIRMS IN NIGERIA has been carried out by me in the Department of Accounting, Ahmadu Bello University, Zaria. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this Dissertation was previously presented for another degree or diploma at this or any other Institution.

Murtala Abdullahi

Date

Certification

This Dissertation entitled FIRM CHARACTERISTICS, GOVERNANCE MECHANISMS AND FINANCIAL PERFORMANCE OF LISTED BUILDING MATERIALS FIRMS IN NIGERIA by MURTALA ABDULLAHI meets the regulations governing the award of the Degree of Master of Science in Accounting and Finance of Ahmadu Bello University, Zaria and is approved for its contribution to knowledge and literary presentation.

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Dedication

I hereby dedicate this M.Sc. research work to my parents, my wife and children, and other members of our family for their unending support and encouragement.

Abstract

A common phenomenon in the previous studies is that firm characteristics and corporate governance mechanisms were not combined in one study in Nigeria. This means that the contribution of either of the two in relationship to the effect of the other on financial performance of a firm is not investigated. Therefore, this study investigated the impact of firm characteristics and governance mechanisms on financial performance of listed building materials firms in Nigeria. The study formulated five hypotheses and used generalized least square multiple regression to analyze the secondary data extracted from the annual reports and accounts of the seven sampled firms for the period 2005 to 2014. The study found that leverage and firm size have significant impact on the financial performance of building materials firms in Nigeria. The study also found that liquidity, operating expenses and managerial shareholdings have no significant effect on the financial performance of the firms. In view of the findings, it is recommended among others that the management of listed building materials firms should reduce the level of leverage in their capital structure and focus more attention on equity financing, and decrease their assets and reduce the scope of their activities in order to decrease their size. The regulatory authority should determine the minimum and maximum percentage of firms' equity to be owned by management of listed firms in Nigeria.

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CHAPTER ONE INTRODUCTION

1.1 Background to the Study

Business entities are associated with certain firm characteristics and governance mechanisms which impact on their performance either positively or negatively. Firm characteristics are those attributes such as firm size, leverage, liquidity, capital, firm age, dividend, market share, off balance sheet activities, operating expenses, among others, that affect the operations of a firm. It is concerned with the ability of firms to source for funds to be used as capital to finance their operations and settle their short terms financial obligations as at when due using their current assets in order to gain the confidence of creditors and other lenders of funds as well as minimization of operating expenses for performance improvement.

Most business entities use debt to finance their operations with the hope of improving their performance. By doing so, a company increases its leverages because it can invest in business operations without increasing its equity. Leverage is the amount of debt used to finance firms' assets and other capital expenditure that can improve firms' performance (Lin, Li & Yang, 2006). Tudose (2012) posites that leverages disciplines managers, as the debt level may be used to monitor managers. Thus, it is expected that increasing leverage components of a firm's capital structure may increase the level of efficiency and thereby increasing their performance. Company's managers who are able to identify the level of leverages as components of firms' capital structure are rewarded by reducing firm's cost of finance thereby maximizing the firm's revenue (Zeitun & Tian, 2007). From creditor's points of view, it is possible that debt to equity helps in understanding firms' risk management strategies and how firms determine the likelihood of default associated with firms' financial performance.

Firm size is also expected to have an influence on a firm's performance (Dogan, 2013). Large firms may exercise economies of scale, have good knowledge of markets and are capable of employing competent managers for better performance (Driffield, Mahambare & Pal, 2005). However, large firms can be less efficient than smaller ones, because of the loss of control by managers over strategic and operational activities (Williamson, 1967 & Jensen, 1986). In addition, the amount of cash a company has at hand or can generate quickly reveals how healthy the company is financially. High levels of available cash indicate that the business can pay off debt easily as at when due. The types of assets a company has and the marketability of those assets are where a discussion of financial liquidity begins. Liquidity refers to the firms' ability to convert its current assets into cash in order to meet its day-to-day operations for better financial performance (Tatahi & Heshmati, 2009). Proper utilization of firms' liquidity can improve their financial performance.

Operating expenses is another item in a firm's financial statement that affects its financial performance. It is the amounts of money spend by a firm in running its business operations on daily basis. A company's operating expenses consist of costs of goods sold, selling, general and administrative expenses which enable the company to carry out its production operations without stoppage. Operating expenses affect the financial performance of a firm either negatively or positively. If a firm over spend its cash on operating expenses, its financial performance would be affected negatively. If a firm minimizes its operating cost by properly managing it, its financial performance will increase positively.

Corporate governance mechanisms on the other hand, are the means or ideas by which stakeholders of a firm ensure that firm managers and other insiders take appropriate measures that safeguard their interests due to the separation of ownership from management. The

governance mechanisms involved in the study is the structural aspect of governance. The structural mechanism is concerned with how firms' ownership is structured as well as its sources of funds to finance its assets and other capital expenditures for better performance in such a way it can attract both local and foreign investors (Wahla, Shah & Hussain, 2012).

One of the important structural mechanisms that affect the performance of firms is managerial shareholdings, which represent the interest of managers in the firm's equity shareholding. Managers' equity holdings encourage them to operate in line with the firm's objective in order to maximize the firms' value (Hassan, 2013). Nugroho and Eko (2011) posited that the incentives for the management to act in line with the investors' interest are influenced by the level of firms' equity owned by the management. If the management of a firm owned some percentage of the firms' equity, they will not engage themselves in earnings management and any other types of manipulation of earnings which can negatively affect firms' performance as such firms normally issue certain percentages of their equity to their management. As a result of that the quality of firm accounting information and performance can be improved. Managerial ownership decreases financial frauds and improves firms' performance (Beasley, 1996). When managers owned some certain percentages of firms' equity, their monitoring capacity will improve and make decisions that will increase the wealth of a firm (Booth, Comett & Tehranian 2002). Managerial equity ownership is an incentive to directors to enable them monitor managers effectively (Brickley, Lease & Smith 1988). When managers owned shares in the company, they will like to make decisions that will increase their wealth as well as that of the shareholders for better performance of a company. Jensen and Murphy (1990) and Bhagat, Carey and Elson (1998) are of the view that substantial shares owned by the directors creates a personal based incentive to actively monitor management activities which can improve firms' performance.

Understanding the relationship between firm characteristics and performance of various sectors of an economy is important to all stakeholders. Studies have been conducted in different parts of the world on the role that firm attributes on one hand and corporate governance mechanisms on the other play in determining corporate performance. One sector that is gaining popularity is the building materials subsector of the economy in view of the high demand for ownership of residential and commercial building as well as government infrastructures.

In Nigeria, owing to high demand for personal houses by individuals, in August 2014, the federal government of Nigeria launched the first 10,000 units affordable Housing Mortgage Scheme under the Nigerian Housing Finance Program in an effort to help bridge the housing deficit in the country. The scheme is designed to enable Nigerians who meet specific eligibility requirements to be registered for the 10,000 mortgage for houses valued at between ₦2 million to ₦20 million for mortgage for a period of up to 20 years. The scheme has undoubtedly tasked building materials firms provide the needed building materials for the project. In addition, there is also high demand of the products of building materials firms in Nigeria for expansion of branch network by corporate entities and construction of different types of capital projects by government. Thus building materials firms need to strengthen its operations and widen its scope of activities in order to improve financial performance and maximize shareholders wealth. In view of the fact that stakeholders are now interested in getting more insight into the activities of this subsector in Nigeria, it is desirable to undertake an empirical study that will examine the effect of firm attributes and governance mechanisms on financial performance of building materials subsector in Nigeria.

1.2 Statement of the Problem

Considerable studies have been carried out on the relationship between firm characteristics, governance mechanisms and financial performance of companies particularly in developed nations and some parts of Asia with mixed results (Gibson 2003; Denis & McConnel, 2003; Machold & Vasudevan, 2004; AL-Hussain, 2009; AL-Matari *et al*, 2012; Nandi and Ghosh, 2013). A common phenomenon in the studies is that firm characteristics and corporate governance mechanisms are not combined in one study. This means that the contribution of either of the two in relationship to the effect of the other on performance of a firm is ignored. Considering the role that structural governance mechanisms of a firm play in the sourcing and using of funds in line with the firm's objectives and in compliance with the entire regulatory framework for better performance, the importance of combining these mechanisms with firm attributes in one study is too big to be ignored.

In Nigeria, the areas of firm characteristics and corporate governance as well as their effect on firm performance have attracted a lot of interest by researchers. Many researchers have attempted to examine the effect of either firm attributes or corporate governance mechanisms on financial performance of firms (Duke & Kankpang 2011 and Ibrahim 2014). The studies however suffered two limitations. First, as the case with other foreign-based studies in this area, the Nigerian-based studies ignored the importance of combining both firm attributes and governance mechanisms in examining financial performance of firms. Second, the studies seemed to have focused on financial sector and some subsectors of the manufacturing sector in exclusion of building materials subsector in spite of its strategic importance to the Nigerian economy.

The quest for individuals in Nigeria to own their personal houses, corporate organizations to expand their business operations to different parts of the country by building more branches, and the government to provide the needed infrastructural facilities in all the sectors of the Nigerian economy has made building materials firms an important subsector to be reckoned with in the country. Therefore, the question that requires answer is: What is the effect of firm characteristics and corporate governance mechanisms on financial performance of building materials firms in Nigeria?

In addition to the aforementioned gap, most of the studies on firm characteristics particularly in Nigeria did not include operating expenses as a proxy of firm attributes despite the strong relationship that has been established in the literature between operating expenses and financial performance of firms (Ghasghaee and Fathollahi, 2014). This study is therefore an attempt to fill all these literature gaps.

1.3 Objectives of the Study

The main objective of this study is to investigate the impact of firm characteristics and governance mechanisms on financial performance of listed building materials firms in Nigeria. Specifically, the study seeks to:

- (i) examine the influence of leverage on financial performance of listed building materials firms in Nigeria;
- (ii) ascertain the extent to which firm size affect the financial performance of listed building materials firms in Nigeria;
- (iii) assess the effect of liquidity on financial performance of listed building materials firms in Nigeria;

- (iv) examine the relationship between operating expenses and financial performance of listed building materials firms in Nigeria; and
- (v) evaluate the effect of managerial shareholdings on financial performance of listed building materials firms in Nigeria.

1.4 Hypotheses of the Study

To achieve the above mentioned objectives, the following hypotheses were formulated.

H0₁ Leverage has no significant influence on financial performance of listed building materials firms in Nigeria.

H0₂ Firm size has no significant effect on financial performance of listed building materials firms in Nigeria.

H0₃ Liquidity has no significant impact on financial performance of listed building materials firms in Nigeria.

H0₄ Operating expenses have no significant influence on financial performance of listed building materials firms in Nigeria.

H0₅ Managerial shareholding has no significant impact on financial performance of listed building materials firms in Nigeria.

1.5 Scope of the Study

The study is designed to examine the impact of firm characteristics, corporate governance mechanisms and financial performance of listed building materials firms in Nigeria. The study covers the period of ten (10) years from 2005 to 2014. The period of the study is considered adequate because it is an analysis of the association between the independent variables and the dependent variable over a relatively long period that coincides with the second year of code of

corporate governance introduction in Nigeria and the 2008 through 2009 financial crisis in the country that eroded the performance of many firms.

The study chooses the building materials firms as domain of the study because of increasing demand of their products and the challenges they faced in meeting up with the demand from customers. The study covers only the seven building materials firms listed on the Nigerian Stock Exchange that have complete financial records on their websites or in the office of the Nigerian stock exchange for the period of the study. The independent variables of the study are firm characteristics proxied by leverage, firm size, liquidity and operating expenses, and governance mechanisms proxied by managerial shareholdings. The dependent variable is represented by financial performance, which is proxied by return on assets.

1.6 Significance of the Study

The outcome of this study would immensely contribute to the existing body of knowledge. Because, though there are a lot of studies on firm characteristics, governance mechanisms and performance of firms around the globe, there is dearth of evidence using data from previous researches that empirically investigated the relationship between firm characteristics, governance mechanisms and financial performance of listed building materials firms in Nigeria. The outcome of this study will therefore serve as a reference for further research in this area.

Also, the outcome of this study will be of immense benefit to a number of users of accounting information. Investors will know the relationship between firm characteristics, governance mechanisms and performance of the sub-sector as they invest their funds for expected returns. The industrialist will find this study relevant in identifying the best financing mix which will be more effective at encouraging an efficient operation of the firms. The study

will also make some significant contribution to the field of accounting and finance in Nigeria. Because there is a mixed of opinion in the existing literature between firm characteristics proxied by leverage, firm size, liquidity and operating expenses, governance mechanisms proxied by audit committee independent, audit committee financial expertise and managerial shareholdings and financial performance of quoted firms. For that, the study will be among those that may provide additional evidences for future debates in the field of accounting and finance by students and researchers.

The results of this study will be of benefit to managers in maximizing investors returns as well as performance monitoring by comparing actual and target performance for corrective actions, shareholders in making an informed decision as well as determining management efficiency in managing the affairs of a company; creditors in ascertaining the credit worthiness of a firm and its ability to pay back the principal amount collected as loan and the interest attached to it as at when due; suppliers in determining the firm's ability to pay for the raw materials supplied to them on credit as at when due; employees in demanding for increase in salary and other incentives as well as good working condition, and government for revenue generation in form of taxation from a firm's annual profit. Data would also be available to ascertain the actual contribution of building materials firms as a sub-sector in the manufacturing industry to the Nigerian Gross Domestic Product (GDP) and also improve the employment opportunities once the sector is viable, since the stakeholders are interested in knowing the impact of such decisions on the firms' performance.

The government and its agencies could find the outcome of this study relevant and useful, thereby providing conducive operating environment by putting adequate security in place,

effective supply of electricity and other infrastructural facilities needed by the Nigerian listed building materials firms for efficient operations.

CHAPTER TWO LITERATURE REVIEW

2.1 Introduction

This chapter discusses the concept of firm characteristics, concept of governance mechanisms, and concept and measurement of financial performance. It also reviews empirical literature on the relationship between independent and dependent variables of the study. The chapter finally discusses the theoretical frameworks that underpin the study.

2.2 Conceptual Issues

This section discusses the conceptual issues associated with the study. It covers both the concepts and components of the dependent and independent variables used in the research.

2.2.1 Concept of Firm Characteristics

Firm characteristics can be defined as the wide varieties of information disclosed in the financial statement of business entities that serve as the predictors of the firms' quality of accounting information and performance (Lang & Lundholm, 1993). Firm characteristics can also be defined as the behavioral patterns of company's operation which can enable them to achieve their objectives throughout the period of their operations. Also firm characteristics refer to the various accounting information reported by firms in their financial statements for a particular accounting period which can send a message to various stakeholders of firms about their performance. Company's characteristics vary from one business entity to another. The company's characteristics can be determined based on the relevant information disclosed on its financial statements for a particular accounting period (Stainer, 2006).

Empirical studies have been carried out to examine the relationship between firm characteristics and performance of business entities around the globe. Moh'd (2005) posited that firm characteristics seem to play an important role in determining the overall performance of

corporate entities. Firm characteristics refer to certain advantages that a company enjoys over their competitors in the market for the period of their operation. Wiklund and Shepherd (2005) are of the view that firms that are able to align firm attributes with the environmental characteristics perform better than the other firms. Dean, Bulent and Christopher (2000) posited that firm characteristics are essential determinants of a firm's performance as well as its success in business. Firm characteristics variables used in this study include leverage, firm size, liquidity and operating expenses.

2.2.1.1 Leverage

Leverage finance refers to the funding a company or business entity with debt with the hope of improving the firm's financial performance. Leverage financing is commonly employed by a company to achieve a specific or temporary objective, such as acquisition of another business, to effect a buy-out, to purchase shares or fund a one-time dividend, or to invest in self-sustaining cash-generating assets (Pachori & Tatala, 2012). Leverage financing on the other hand refers to the ratio of debt to equity capital of a company. As a result of the payment of interest and repayment of principal amount of the debt a large part of the firm's cash flow would decrease (Magpayo, 2011). Financial leverage also involved the use of debt to acquire additional assets. It can be financial or operating leverage.

Financial leverage is the use of borrowed money to increase production volume and sales as well as earnings of a company for better performance. It is measured as the ratio of total debt to equity of a firm (Yoon & Jang, 2005). The greater the amount of debt, the greater the financial leverage of a firm. Since interest is a fixed cost which can be written off against revenue, a loan allows an organization to generate more earnings without a corresponding increase in equity capital which will require increase in dividend payment that cannot be written off against the

firm's earnings (Magpayo, 2011). However, high leverage may be beneficial in boom periods; and it may cause serious cash flow problems in recession periods, because there might not be enough sales revenue to cover the interest payment (Tudose, 2012). The use of leverage is the ability of a firm to influence a system, or an environment in a way that multiplies the outcome of one's efforts without a corresponding increase in the consumption of resources. In other words leverage is the advantageous condition of having a relatively small amount of cost yield and a relatively high level of returns (Ojo, 2012).

Operating leverage is the extent to which a firm commits itself to high level of fixed operating costs which vary with time, such as insurance, rent, salary, with no interest attached to it as compared to the level of variable costs which vary with volume of energy, labour and raw materials (Tudose, 2012). Firms with high level of operating leverage have high break-even points, but when the break-even point is crossed, they show a greater increase in operating income with every increase in sales revenue and greater losses with every drop in sales revenue in comparison with firms that have lower operating leverage (Omolehinwa, 2006). Investment leverage is the ability of a firm to control a large value of commodities or securities in a future contract by buying on margin and thus, leveraging a relatively small investment (Omolehinwa, 2006). Leverage is an investment technique in which a firm uses a small amount of its own money to make an investment of much large value. Thus, leverage is a concept of borrowing money to buy an asset that will appreciate in value, so that the ultimate sale will return profits on equity invested and on the borrowed funds. The use of various financial instruments or borrowed capital, such as margin to increase the potential return on investment is also known as leverage (Omolehinwa, 2006).

2.2.1.2 Firm Size

Firm size refers to the speed and extent of growth that is ideal for a specific company. Most companies are intent to expand the size of their business operation for them to grow either in revenue, profit, number of employees, or size of facilities (Pervan & Visic, 2012). Many companies compete in rapidly changing industries, expansion of manufacturing capacity, geographical presence, market shares and so on which may be imperative for survival (Dogan, 2013). Another strategy in retaining growth involves employing employees who like to work in a company. These people tend to enjoy the diversity of the challenges they encountered in the company and they often have a strong interest in the firm's products and can provide their expertise to customers. Schiner (1996) noted that one of the factors influencing firm size is the availability of workers and other resources in the surrounding community where the business is operating. He further suggested that it is possible for the company to outgrow the communities in which they operate, particularly when they are located in a remote area. Some factors that may indicate that a company has outgrown its operating community in size include; growing at a faster rate than the community labour force, providing more than one-third of the local government's funding through taxes, and being responsible for the death of the community, if the company should shut down (Shiner, 1996).

Firm size is measured as the natural logarithm of a firm's total assets, which can be easily regressed in order to determine the influence of the firm's total assets on its performance (Driffield, Mahambare & Pal, 2005). A lot of empirical studies have been conducted using firm size. Some of them used firm size as a control variable while others used it as a predictor variable in their studies. Firm size is used this study as independent variable, because the study is on firm characteristics and size is among the proxies of firm attributes.

2.2.1.3 Liquidity

A company's liquidity position is measured as a ratio of its current assets to current liabilities; it represents the possibility that a firm will be able to meet its financial obligations as fall due (Omolehinwa, 2006). Suppliers, creditors and other short-term lenders of funds require a very sound liquidity position of a firm in order to have confidence in the firm's ability to satisfy their requirements (Kurfi, 2003). This is because a firm with weak liquidity position would scare suppliers and creditors, particularly banks who often impose minimum liquidity constraints in their loan agreements with firms. Empirical studies have shown that financial managers spend much of their time and efforts to daily internal operations relating to the current assets and current liabilities of their firms. Liquidity also represents the amount of cash or current assets that can be easily converted in cash for the day-to-day operations of a company. It represents the amount that is invested in assets that are expected to be realized within a single accounting period. The relationship between current assets and current liabilities should be in such a way that the current assets is twice the size of the current liabilities of firms, hence it is said that the ideal current ratio (current assets/current liabilities) is generally accepted to be 2:1, but this proportion can obviously be varied in practice, depending on the circumstances of an individual company (Akinsulire, 2014).

Liquidity ratios are of how solvent a company is, a company will not become insolvent over night, deterioration in these ratios is an indications of insolvency. If a company is unable to renew its short-term liabilities, there would be a danger of insolvency unless the company is able to realize sufficient amount of its current assets into cash. A current ratio of 2:1 is regarded to be indicative that a company is reasonably well protected against the danger of insolvency through sufficient liquidity. Liquidity is the ability of a company to meet its demand for funds (Biety,

2003). Liquidity management means ensuring that a company maintains sufficient cash and liquid assets to satisfy the interest of suppliers and creditors. Liquidity management involves a daily analysis and detailed estimation of the size and timing of cash flows and out flows within a particular accounting period. A business organization should have a formal liquidity policy that is developed and written by the officials with the assistance of management. The policy should be reviewed and revised as needed, not less than a year and the policy should also be flexible, so that managers may react quickly to any unforeseen events (Omolehinwa, 2006).

2.2.1.4 Operating Expenses

Operating expenses are the costs associated with a company's main operating activities which are reported on its income statement. The expenses constitute the cost of goods sold, selling, general and administrative expenses (Zaman, 2009). Krishnan (2006) viewed operating expenses as a company's expenses related to the production of its goods and services. The payment of employees' wages and funds allocated toward research and development are also part of operating expenses (Shil & Pramanik, 2012).

The expenditure that a business incurred as a result of normal business operation is a challenge faced by a company's management to determine how much operating expenses can be reduced without significantly affecting the firm's ability to compete with its competitors in the market (Zaman, 2009). This is because of the strong association between level of expenditure and a firm's quantum of profit. The more the companies spend much of its cash on operating costs the more it will reduce its financial performance. In the same vein, if a firm is able to reduce its operating expenses to the lowest minimum without affecting its operations, its financial performance will improve. The management team of a company usually reviews these expenses through a budget variance reporting system or trend analysis in order to spot any

expenses spikes that may require action (Ghasghaee & Fathollahi, 2014). In the absence of raising prices or finding new markets or products channels in order to raise profits, some firms attempt to increase the bottom line purely by cutting expenses. While laying off employees may even be necessary in cases where a company has lost its competitiveness, there are other operating expenses that management can cut before the quality of business operations is damaged (Shil & Pramanik, 2012).

2.2.2 Concept of Governance Mechanisms

As a result of corporate financial scandals around the world, there is an increasing attention on corporate governance mechanisms. Investors look for emerging economies with strong governance mechanisms to diversify the risk associated with their investment in order to maximize returns from their investment and at the same time minimize the risks of their investment in those economies. For every financial crisis, regulators and government tend to focus more attention on governance mechanisms more vigorously in order to enhance investors' confidence that would attract more investments (Aguilera & Jackson, 2003). A good corporate governance framework should promote transparent and efficient markets, be consistent with the rule of law and clearly state the division of responsibilities among different supervisory, regulatory and enforcement authorities. Aguilera and Jackson (2003) viewed corporate governance mechanisms as the structure of rights and responsibilities among the parties that have stake in a firm. Corporate governance is a set of process and structures used to direct a company's business operations for better performance. If it is fully implemented, an effective governance mechanism can help to ensure an appropriate division of power among shareholders, board of directors and management. Governance mechanism is not all about management; it is something much broader to include a fair, efficient and transparent administration to meet certain

well defined objectives (Mcconomy, Bujaki & Merridee, 2000). Governance mechanism is a system of structuring, operating and controlling a company with a view to achieving long term strategic goals to satisfy the interest of all stakeholders of a firm, and complying with the legal and regulatory requirements as well as meeting the environmental and local community needs. When it is practiced in a well structured system, it leads to building of a legal, commercial and institutional framework and creates a boundary within which these functions are performed.

In Nigeria, a survey by the Securities and Exchange Commission (SEC) reported in a publication in April 2003, showed that corporate governance was at a rudimentary stage, as only about 40% of listed companies had recognized the Code of Corporate Governance put in place. Poor corporate governance was identified as one of the major factors in virtually all known instances of corporate collapses in the country. As a result of that, in 2003, the Nigerian SEC released a code of best practices on corporate governance for public listed companies; the listed companies were expected to comply with its provisions. In order to improve corporate governance in Nigeria, the SEC in September 2008, inaugurated a national committee to review the 2003 code of corporate governance for public companies in Nigeria so as to address its weakness and to improve the mechanism for its enforceability. Based on the outcome of the committee's report, the Nigerian SEC in 2011 released a new Code of Best Corporate Governance Practice to be used by all listed companies in Nigeria. The governance mechanisms that have direct relationship with the financial performance of firms as documented in the literature is managerial shareholding. This is discussed hereunder.

2.2.2.1 Managerial Shareholdings

Managerial shareholdings represent the interest of managers in a firm's equity shareholdings. Managers' equity holdings encourage them to operate in a way that maximizes

the firm's value. The incentives for the management to act in line with the investors interest is influenced by the level of the firm's equity owned by the management. If the management of a firm owned some percentage of the firm's equity, they will not engage themselves in earnings management and any other type of manipulation of earnings, as a result of that the performance of company can be improved (Alipour & Amjadi, 2011). Managerial ownership increases the financial performance of firms at the same time reducing the agency cost between the shareholders of firms and the management, because the management will try their best to make a decision that will favor the company instead of their personal gain. If the managers hold more equity in the firm, there will be less conflict of interest and the managers will be more likely to manage the affairs of the company in a proper way for better performance (Shukeri, Shin & Shaari, 2012). Therefore, when more shares of firms are being held by the managers, the performance of the company will improved and at the end the profit of the company will increase.

A sufficient high level of managerial shareholdings helps to align the interests of managers and shareholders resulting in good performance. A manager's claim on the performance outcomes and burden on the cost associated with the non-value maximizing behavior increase with his fraction of the equity in the company (Hu & Izumida, 2008). Therefore, a high level of managerial shareholdings increases the probability that the managers will devote more significant effort to creative activities and immunize themselves from mismanagement of company's resources. The managers will act to maximize a firm's value due to their own interests in the firm's equity.

2.2.3 Concept and Measurement of Financial Performance

Firms' performance is of vital importance for investors, stakeholders and the economy at large. Investors are interested in the returns for their investment. Well performing businesses can bring higher returns to their investors. Financial performance of a company will increase the income of its employees, bring quality products to its customers and become more friendly to its operating environment (Mirza & Javed, 2013). A company that has good performance can generate more profits which can lead to future investment that can provide employment opportunities and increase the income of people. Barbosa and Louri (2005) viewed firms' performance as the outcome of a firm's strategy or an assessment of how well a firm accomplished its business goals. In the words of Mirza and Javed (2013), firms' performance is the ability of a firm to achieve its objectives using its available resources. Company's financial performance refers to the measurement of the results of a firm's strategies, policies and operations in monetary terms. Financial performance provides a deductive measure of how well a company can use assets from business operations to generate revenue.

Measuring of firms' financial performance is one of the management strategic functions aimed at satisfying the interest of shareholders and other stakeholders in a company. Firm's performance appraisal is an evaluation which is done periodically and systematically in determining the achievements of the company's objectives (Amelia, 2002). Evaluation of company's performance required certain standards that are either internal or external. Internal standards refer to the ability of a company to achieve its stated objectives, while external standard refers to the comparison i.e. comparing a firm with its competitors in the industry. This will enable the firm to develop a good business strategy that will enable it to defeat its competitors in the market (Mirza & Javed, 2013).

The existing researches on the relationship between firm characteristics and financial performance used different methods of measuring firms' financial performance. Most of the previous studies on firms' financial performance measured firm performance from the accounting based or market based methods of measuring company's financial performance. The work of Fiori, Di-Donato and Izzo(2009) shows that the best measurement indicators of firms' financial performance are profitability, liquidity, solvency, financial efficiency and repayment capacity. Margolis and Walsh (2001) reviewed 95 empirical studies and found that 49 studies out of the 95 used accounting based measures, 12 studies used market based measures and the remaining 34 studies used a combination of both accounting and market based measures in measuring firms' financial performance. The most commonly used performance measures are accounting based which include: ROA, ROE, ROI and Tobin's Q.

Accounting based measurement of performance is the most popularly used. Returns On Assets (ROA) was widely used as was found in the following studies: Okafor (2007), Ilona(2008), and Lee (2009), Aras, Aybars and Kutlu (2010), Desoky and Mousa (2012), Amelia (2012), Amba (2012), Moscu (2013), Amer, Ragab and Shehata (2014), and Nor, Shafee and Shamsuddin (2014). Returns on assets represent the profitability of the firm with respect to the total assets under the firms control (Hull & Rothenberg, 2008). Return on Equity (ROE) is another accounting measure used in measuring firms' performance in the previous studies such as the work of Mahoney and Robert (2007), Lee (2009), Aras, Aybars and Kutlu (2010), and Moscu (2013). Tobin's Q is another accounting measure of firms' financial performance which have been used in the previous empirical studies such as the work of Dowell, Hart, and Yeung (2000), Sanda, Mikailu and Garba (2005), Bhagat and Bolton (2008), and AL-Matari et al (2012). Tobin's Q is used in measuring firms' financial performance because of its ability to

measure long-term investment and it is calculated by the sum of a firm's equity values and its total debt divided by the firm's total assets.

The market based measure of firms' financial performance used in the previous studies is stock return which is measured as the ratio of price and book value of share. This measure was used by Brammer, Brocks and Pavelin (2006) as well as Lin, Yang and Liou (2009).

2.3 Review of Empirical Literature

Different components of firm characteristics and governance mechanisms play a vital role in improving the performance of corporate entities in both developed and emerging countries. Firm characteristics and governance mechanisms and how they relate to performance have been investigated separately in previous studies using various proxies of firm characteristics and governance mechanisms such as the managerial shareholdings (Gugong, Arugu & Dandago 2014), leverage (Sanda, Mikailu & Garba 2005, and Hartono et al 2013), firm size (Adediran, Alade & Oshode 2013), liquidity (Tatahi & Heshmati 2009), and operating expenses (Ghasghaei & Fathollahi, 2014). The results of previous studies on the relationship between various firm characteristics, governance mechanisms and performance are inconclusive. Anderson, Deli and Gillan (2003) studied the relationship between board of directors, audit committees and the information content of earnings using sample of 1200 firms, and their findings revealed that audit committee characteristics influenced the information content of earnings.

Duke and Kankpang (2011) studied the link of corporate governance with organizational performance in Nigeria using both quoted and unquoted companies, the results showed that there is strong relationship between a number of firm characteristics variables and firms' financial performance. Essential firm characteristics such as firm size, leverage and managerial shareholdings are significantly influencing firms' performance (Nina, Gegenfurtner, Kaserer &

Achleitner 2009). Hasan, Francis and Wu (2012) documented that a firm's performance depends on its various characteristics. Noor and Fadzil (2013) studied board characteristics and performance of Malaysian listed firms, their findings showed a positive significant relationship between firm characteristics and organizational performance. Fooladi (2012) too investigated the impact of board characteristics on performance of listed firms in Iran, the results of the findings showed that there is no significant relationship between firm size, leverage, managerial shareholdings and firms' performance. Audit committees with more experienced and financial expertise members influence firm performance positively (Aldamen, Duncan, Kelly McNamara & Nagel 2012). Mirza and Javed (2013) viewed performance as one of the goals of the organization to maximize shareholders' wealth and generate enough profit in order to operate in line with the going concern concept of accounting.

2.3.1 Leverage and Financial Performance

Financial leverage represents the extent to which companies or investors used borrowed money to form part of their capital structure with the hope of better performance. Rehman (2013) investigated the relationship between financial leverage and financial performance of listed sugar companies in Pakistan, and found a positive significant relationship between leverage and firms financial performance. Akhtar, Javed, Maryam and Sadia (2012) too reported a positive significant relationship between leverage and the financial performance of listed fuel and energy companies in Pakistan. Ojo (2012) studied the effect of financial leverage on corporate performance of some selected companies in Nigeria and reported a significant effect between financial leverage and financial performance. However, Magpayo (2011) conducted a study on the relationship between leverage and financial performance, using a sample of 1000 companies

in Philippine for the period of one year (2009), and found a negative significant impact between leverage and the financial performance of the sampled firms.

Sudiyatno, Elen and Kartika (2012), investigated company policy, firm performance and firm value using a sample size of listed manufacturing firm in the Indonesian Stock Exchange for the period of 2008 to 2010, and found a negative significant effect of leverage on firm's financial performance. Their findings is in line with the findings of Salehi (2009) who conducted a research on leverage and financial performance of some selected Iranian companies and found that leverage has a negative significant impact on firm performance. Earlier, Rayan (2008) documented that financial leverage has a negative significant effects on firm's financial performance. Firms with low financial leverage tend to perform better than the firm with high financial leverage (Tan, 2009). Yoon and Jang (2005) studied the effect of financial leverage on profitability and risk of restaurant firms for the period of 1998 to 2003, using ordinary least square regression and found that firms that used equity in financing their operations perform better than those firms that used leverage to finance their operations. Damouri, Khanagha and Kaffash (2013) studied the relationship between changes in the financial leverages and the values of the listed firms in the Tehran Stock Exchange, using a sample of 98 firms for the period of 2001 to 2010. They used multivariate regression in analyzing their data and their results showed that there is no significant relationship between changes in the financial leverages and the financial performance of the selected firms.

Another empirical study conducted by Fosu (2013) on the relationship between capital structure and firm performance using panel data consisting of 257 South African companies for the period of 1998 to 2009, showed that financial leverage has a positive and significant effect on a firm's performance. Low level of leverage can lead to an increased in profit, efficiency as well

as firm performance, while high level of leverage can lead to a decrease in profit efficiency as well as a decrease in firm performance (Skopljak & Luo, 2012). Similarly, Hsu (2013) reported that leverage has a negative effect on the performance of 336 Information Technology companies in Taiwan. Onimisi (2010) examined the effect of capital structure on the performance of listed manufacturing firms in Nigeria, and found a positive relationship between leverages and financial performance of Nigerian listed manufacturing firms. Likewise, Pachori and Tatala (2012) examined the influence of financial leverages on shareholders returns and market capitalization in India, and found that, there is no significant influence of financial leverage on shareholders' returns and market capitalization.

2.3.2 Firm Size and Financial Performance

Empirical studies were conducted on the relationship between firm size and performance using natural logarithms of firm's total assets to measure firm size by various researchers in the field of accounting and finance. Notable among them are Ali (2004), Sustar and Sustar (2005), Safarova (2010) and Shih (2012) among others. Velnampy and Nimalathan (2010) conducted a comparative study on the effect of firm size on profitability of bank of Ceylon and commercial bank of Ceylon limited in Sri Lanka for the period of 1997 to 2006, and found a positive relationship between firm size and financial performance of commercial bank of Ceylon limited and also reported no relationship between firm size and financial performance of bank of Ceylon. Ozgulbas, Koyuncugil & Yilmaz, (2006) examined the effect of firm size on performance of listed firms in Istanbul Stock Sxchange for the period of 2000 to 2005, and reported that large size firms performed better than the small size firms. A similar study conducted by Shih (2012) gave the results of the analysis which showed that large size firms performed better than the small size firms.

Another study was conducted by Saliha and Abdessatar (2011) on the factors affecting profitability of listed firms in Tunisia using a sample of 4 firms for the period of 2004 to 2009, and results revealed a positive relationship between firm size and financial performance. Dogan (2013) too conducted a study, using a sample size of 200 companies for the period of 2008 to 2011, where multiple regressions were used in analyzing the data and showed a positive significant relationship between firm size and financial performance of the sampled firms. Driffield, Mahambare and Pal (2005) have also reported a positive significant relationship between firm size and financial performance. On the contrary, the study of Benchuenvijit (2012) reported a negative relationship between firm size and financial performance of some selected firms used in their studies.

Pervan and Visic (2012) examined the influence of firm size on its business success for the period of 2002 to 2010 and found a positive significant influence of firm size on firm financial performance. The weakness of their research was that, they failed to mention their population and the sample size of their study as well as the method of analysis used in analyzing the data of the study. Another study titled Does size matter in firm performance? Evidence from US public firms was conducted by Lee (2009) used a panel data for a sample of over 7000 US listed firms for the period of 1987 to 2006 and provided evidence that financial performance is positively correlated with firm size in a non-linear manner. Stierwald (2009) examined the factors influencing the profitability of 960 larger firms operating in Australia for the period of 1995 to 2005, the results of the analysis showed that firm size influenced financial performance positively and significantly.

2.3.3 Liquidity and Financial Performance

The relationship between liquidity and firms' performance is frequently discussed in financial literature. Liquidity is measured by the ratio of a firm's current assets to current liabilities in order to determine a firm's ability to settle its short terms financial obligations as at when due and also the firm's ability to provide the needed cash for its day-to-day operation for better performance. Hedander (2005) examined the effect of liquidity and firm value, using a panel data of 39 non-listed Australian firms for the period of 1992 to 2003, and found a significant positive relationship among the variables of the study. Cheung, Chung and Fung (2012) too investigated the impact of stock liquidity, corporate governance and firm performance of US real estate investment trust for the period of 1992 to 2008; the results of their analysis showed a negative significant impact of liquidity on firms' financial performance. But they failed to mention their statistical tool of analysis in their research report.

Liquidity is negatively correlated with firm's financial performance in some studies while other studies reported positive relationship. Hausen and Sunguk (2013) investigated the influence of stock liquidity to firm value in Indonesian Stock Market, and reported that high liquidity firm can generate high operating profit. The study of liquidity is of importance to both internal and external users of accounting information, because of its relationship with the day-to-day operations of firms. Rehemani and Nasr (2007) viewed liquidity management as a desired trade-off between liquidity and profitability of a firm. Owolabi and Obida (2012) examined the relationship between liquidity management and corporate performance of listed manufacturing companies in Nigerian Stock Exchange for the period of 2005 to 2009, using a sample of 12 manufacturing firms. The result of their findings showed a significant impact of liquidity management on corporate financial performance. They used descriptive statistics as their

statistical tool of analysis which is so small compared to ordinary least square regression. Gill and Mathur (2011) reported a positive significant relationship between liquidity and financial performance of 75 Canadian service firms listed on Toronto Stock Exchange for the period of 2008 to 2010.

An empirical study was conducted on the impact of liquidity ratios on profitability of Pakistan oil and gas companies by Saleem and Rehman (2011), the results showed that there is significant impact of liquidity ratios on financial performance. The required liquidity for each company depends on the balance sheet situation of the firm (Saleem & Rehman). Niresh (2012) viewed liquidity ratio as realizable cash on the balance sheet to short term liabilities. Firms with fewer current assets will have problems to operate in line with the going concern concept of accounting while if the current assets are too much, it shows that the return on investment for the company is not in perfect condition. Qi, Subrananyam and Zhang (2010) stated that higher accounting quality is associated with higher liquidity, reducing the cost of debt as well as improving liquidity for future financial performance of company.

A theoretical study on the relationship between liquidity, corporate governance, and firm value was carried out by Pourali and Arasteh (2013), the results of their study shows a positive relation between liquidity and firms' financial performance. But their research was done based on content analysis instead of quantitative research which could have given a better result based on logical conclusion. Niresh (2012) too examined the trade-off between liquidity and profitability of 31 listed manufacturing firms in Sri Lanka for the period of 2007 to 2011. The result of the study shows that there is no significant relationship between liquidity and financial performance of the sampled firms. Dalvi and Baghi (2014) investigated the relationship between company performance and stock market liquidity, using a sample of 154 companies listed in

Tehran Stock Exchange, and found a strong positive relationship between liquidity and financial performance.

2.3.4 Operating Expenses and Financial Performance

A reasonable number of studies were conducted on the relationship between firms' operating expenses and performance in some countries of the world, but only few studies were conducted in Nigeria. Krishnan (2006) examined the applications of activity based costing in higher learning institution. The study used secondary data obtained from the annual reports and accounts of the selected university, and analysed using regression. The finding showed negative significant relationship between operating cost and financial performance. Another survey research was conducted by Zaman (2009) on the impact of activity based costing on firm performance in Australia. He collected primary data and ran regression analysis. His findings revealed positive significant relationship between firms' operating cost and performance.

Gupta, Pevzner and Seethamraju (2010) studied the implications of absorption cost accounting and production decisions for future performance and valuation. The study used secondary data obtained from United State listed manufacturing firms. The results of the study revealed a negative relationship between overhead cost and firms' financial performance proxied by return on assets. Shil, and Pramanik (2012) investigated the application of activity based costing in manufacturing companies in Bangladesh using questionnaire to collect primary data. The result revealed a positive significant relationship between operating cost and performance of the sampled firms. The study ignored secondary data even though for a study on cost and performance, secondary data is considered the most appropriate data to be used.

Another study was conducted by Oluwagbemiga, Olugbenga and Zaccheaus (2014) on cost management practices and firms' performance of manufacturing organizations using a panel

data from 40 listed manufacturing firms in Nigerian Stock Exchange for the period of 2003 to 2012. The data was analysed using t-statistics. The result revealed a positive significant relationship between operating cost and firms' performance. Ghasghaee and Fathollahi (2014) conducted a study on the relationship between cost, quality and financial performance of listed companies in Tehran for the period of 2011 to 2012 using a sample size of 66 firms. The findings of their study revealed a positive significant relationship between operating cost and financial performance of the sampled companies.

Dandago and Zaidi (2014) studied the impact of overhead costs apportionment on selling price determination in Malaysia automobile manufacturing industry. The study collected primary data through interview and the findings of the study revealed a positive significant impact between overhead cost and selling price as well as firms' performance. Ali, Malo-Alain and Haque (2015) examined the impact of activity based costing on firms' performance in Saudi Arabia. The study administered questionnaire to collect primary data and the data was analysed using analysis of variance (ANOVA). The findings revealed a significant relationship between operating cost and firm performance. Temitope, Sunday and Olusesan (2015) studied the effect of accounting information and profit planning of listed manufacturing companies in Nigeria. Questionnaire was administered to 222 top level management Nigerian manufacturing firms. The result revealed significant positive relationship between operating cost and firms' financial performance.

2.3.5 Managerial Shareholdings and Financial Performance

Ownership structure gives rise to agency problems between shareholders and managers of companies. Managerial shareholding is the percentage of a firm's equity owned by the management and it is one of the most important variables that influence performance as well as

enhancing value of the firm. Isik and Soykan (2013) examined the effect of large shareholders and firms' performance using a sample size of 164 firms listed in the Turkey Stock Exchange for the period of 2003 to 2010 and found a significant positive relationship between managerial shareholdings and firms financial performance. Alipour and Amjadi (2011) examined the effect of ownership structure of corporate performance of listed companies in Tehran Stock Exchange using a sample size of 68 firms for the period of 2006 to 2010 and reported a significant negative relationship between managerial shareholdings and firms' financial performance. Fazlzadeh, Hendi and Mahboubi (2011) found that managerial shareholdings do not have any significant effect on the performance of Tehran listed companies.

Wahla, Shah and Hussain (2012) used a panel data for the period of 2008 to 2010 to examine the impact of managerial shareholdings on firm performance and reported a significant positive relationship between the variables of the study. Their results suggested that firm performance depended on managerial shareholdings. Managerial ownership has significant influence on firm performance (Zakaria, Rani & Noorfaiz, 2014). Managerial ownership of up to 80 percent of a firm's total equity has a positive significant impact on the performance of 1300 firms in Germany (Mueller & Spitz, 2002). The companies with higher managerial ownership decrease their earning management, so the conflict of interests between managers and shareholders can be settled. Alipours and Amjadi (2011) stated that higher managerial shareholdings in firms motivate managers to perform well due to the incentives alignment. Managers owning the large fraction of the shares in the firm bear the consequences of managerial actions that either create or destroy the performance of the company.

Empirical literature on the relationship between managerial shareholdings and firms' performance has continued to provide mixed evidences. Din and Javid (2012) reported a positive

relationship between managerial shareholdings and performance of listed firms in Pakistan. As a result of high managerial ownership, a firm's management is likely to work hard and create better investment decision which could result to a better performance of the company (Din & Javid, 2012). Mokhtar, Ali, Hassan and Salmat (2014) examined the relationship between managerial shareholdings and performance of listed companies in Malaysia and found a non-linear relationship between performance and managerial ownership. Hu and Zhou (2006) posited that firms with managerial ownership perform better than those whose managers do not own any portions of a firm's equity.

2.4 Theoretical Framework

Different theories have been used by previous researchers to underpin studies in this area. However, signaling theory and stewardship theory have been found to be the most appropriate theories that underpin this study.

2.4.1 Signaling theory

Signaling theory is concerned with understanding why certain signals are reliable and others are not in terms of decision making. The theory looks at the quality and reliability of accounting information send by a company to its users of accounting information for investment decision making by the potential investors. Spence (1973) posited that a well performing firm distinguishes itself from the nonperforming one by sending a credible signal about its performance to capital markets as well as potential investors. Signals sent by a firm are the results of its operating activities which would inform investors about the company's future prospects. The theory assumed that managers and shareholders of a company differ in terms of getting access to some vital information about firm operation. Some information can only be accessed by the managers while the shareholders do not have access to such information.

Signaling theory was adopted in this study to underpin firm characteristics represented by leverage, firm size, liquidity and operating expenses, because a sound liquidity position of a company is showing its ability to meet up with its short term financial need without stoppages in production. Also, effective cost management would enable a company to minimize its operating costs of production thereby leading to an improvement in firm's financial performance which is showing a good signal to both current and potential investors that the company can continue to operate in line with the going concern concept of accounting as well as satisfying the interest of its stakeholders.

2.4.2 Stewardship Theory

Stewardship theory assumes that managers whose behavior is aligned with the objectives of their principals are steward to their organizations. Donaldson and Davis (1991) viewed steward as a person who essentially wants to do a good job, be a good steward of the corporate assets and his role is seen as a caretaker or an individual for whom the prosperity of the firm is internalized as something good. The theory argues and looks at a different firm motivation for managers drawn from organizational theory. Managers are viewed as loyal to the company and interested in achieving higher performance for the company. The major motive, which directs managers to accomplish their job, is their desire to perform excellently for the organization. Managers are conceived as being motivated by a need to achieve intrinsic satisfaction through successfully performing inherently challenging work, to exercise responsibility and authority thereby gaining recognition from peers and bosses.

Stewardship theory has been structured as the organizational behavior counterbalance to rational action theories of management (Donaldson & Davis, 1991). This theory holds that there is no conflict of interest between managers and shareholders, and the goal of firm characteristics

is to find the mechanisms and structure that facilitate the most effective coordination between the managers and the shareholders (Donaldson, 1990). The theory holds that there is no inherent problem of management control, meaning that organizational managers tend to be honest in their actions (Donaldson, 2008). The major assumption underlying the meaning of stewardship theory is that the behavior of the managers is aligned with the interests of the principals (shareholders). The theory places greater value on corporate goal among the parties involved in managing the affairs of the company than on the manager's personal interest (Van Slyke, 2006). The economic benefit for the shareholders in a principal-steward relationship results from lower transaction costs associated with the lower need for economic incentives and monitoring by the managers.

A steward's utility function is maximized when the shareholders' wealth is maximized. The steward believed that the utility gained from interest alignment and collaborative behavior with the principal is higher than the utility obtained through personal interest and self-serving behavior of managers (Davis, Schoorman & Donaldson 1997). Stewards are motivated by intrinsic rewards, such as good relationship and mission alignment, instead of solely extrinsic rewards. The steward, as opposed to agent, places more emphasis on achieving collective objectives rather than individual goals. The steward understands the success of the company as his own achievement. The stewardship theory is concerned mainly with identifying the situations in which the interests of the principal and the steward are aligned (Donaldson & Davis, 1993). Stewardship theory is of the assumption that becoming a steward or an agent is the result of a rational process. In this rational process, the individual evaluates the advantages and disadvantages of one position and the other. There are contributions in stewardship literature that are of the view that stewards are not unselfish, but that there are some situations where executives perceive that serving shareholders interests also serves their own personal interest

(Lane, Cannella & Lubatkin 1998). In this case, agents would recognize that the company's performance directly impacts positively on their individual performance as well as enable them to manage their own careers effectively (Daily, Dalton & Canella 2003). The theory proposed that stewardship relationships rely heavily on the trust and honesty developed between the principal and the managers through historical transaction. When the principal's relationships with the manager is characterized by honesty and trust, he is helping the manager to learn how to value the consequences of his decision towards firms performance and he may change his preferences and develop a good strategy that will be of great benefit to the company.

However, in a principal-steward relationship, the principal invests significantly in time to manage the relationship in a collectively interested manner. For the purpose of this study, the stewardship theory was adopted to underpin the structural mechanism of governance proxied by managerial shareholding, because in the stewardship relationship, the stewards focused more attention on the intrinsic rewards that are not easily quantified such as growth, goals attainment, recognition as well as the overall performance of company. In a principal-steward relationship, agency costs associated with the relationship is in the early stages of the relationship, firm structural mechanism in stewardship relationship is an appropriate mechanism of controlling opportunism in the long run. The explanation here is that agency problems are not uniform throughout the life of a relationship; they are likely to occur at the early stage of the relationship. However, agency costs may decline rapidly as results of potential trust and increasing honesty among the parties. In the long run, there will be benefits associated with a principal-steward relationship, because there would not be costs associated with the reviewing of contract and strict monitoring controls. Such a cost reduction is not only beneficial to a company, but also to the

steward, who benefits from a higher involvement in contract definition and less exposure to monitoring cost (Van-Slyke, 2006).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the methodology adopted for the study. The chapter analyses the method and sources of data collection, discusses the research design, population of the study, sample size and sampling technique, statistical tool for data analysis, variables measurement, and model specification of the study. The chapter also highlights the robustness tests conducted on the data used for the study.

3.2 Research Design

Correlation research design was adopted because the study attempts to measure the relationship between firm characteristics, governance mechanism and financial performance of listed building materials firms in Nigeria. Correlation design does not only establish relationship between variables but show cause and effect between dependent and independent variables.

3.3 Population and Sample Size

The population of this study consists of all the building materials firms listed on the Nigerian Stock Exchange that have complete financial records on their websites or Nigerian Stock Exchange for the period of 2005 – 2014. As at 31st December 2014, 13 firms were listed, out of the number, only seven firms have their financial statements available either on their website or in the office of Nigerian Stock Exchange. Accordingly, the population of the study consists of the seven (7) firms that satisfy the criterion. In view of the availability of data for all the firms, the study adopted census approach by studying all the firms. The list of the firms is given in Table 3.1

Table 3.1 List of Firms

S/N	NAME
1	Ashaka Cement Plc.
2	Berger Paints Nigeria Plc.
3	Chemical and Allied Products Plc.
4	Cement Company of Northern Nigeria Plc.
5	DN Meyer Plc.
6	First Aluminum Nigeria Plc.
7	Lafarge Cement WAPCO Nigeria Plc.

Source: Generated by the author 2015 from NSE FACT Book

3.4 Sources and Method of Data Collection

This study used secondary sources of data collection. The data were obtained from the annual reports and accounts of the seven (7) listed building materials firms for the period 2005 to 2014. Secondary data were used due to the nature of the variables under study. Panel data were extracted from the annual reports and accounts of the firm for the purpose of assessing the relationship between the variables of the study.

3.5 Technique for Data Analysis

Multiple regression was used for the panel data analysis in order to establish relationship between the variables. Multiple regression was considered appropriate in view of the fact that it helps in not only establishing relationship between variables, but cause and effect. In order to achieve reliability of the result, robustness tests like multicollinearity test, hausman test and heteroscedasticity test were conducted.

3.6 Model Specification and Variables Measurement

The model used to empirically test the hypotheses formulated is as follows:

$$ROA_{it} = \beta_{0it} + \beta_1 LVG_{it} + \beta_2 FSZ_{it} + \beta_3 LQT_{it} + \beta_4 OPE_{it} + \beta_5 MSH_{it} + \varepsilon_{it}$$

The dependent and independent variables used in the model are explained as follows:

Variable Acronym	Variable Name	Variable Measurement and Source
ROA	Return on Assets	Measured as earnings before interest and tax divided by the firm's total assets (Okafor, 2007)
LVG	Leverage	Measured as the ratio of firm's total debt to equity (Salehi, 2009)
FSZ	Firm Size	Measured as natural logarithm of a firm's total assets (Dogan, 2013)
LQT	Liquidity	Measured as the ratio of firm's current assets to current liabilities (Owolabi & Obida, 2012)
OPE	Operating Expenses	Measured as the ratio of a firm's total operating expenses to its total assets (Zaman, 2009)
MSH	Managerial Shareholdings	Measured as the proportion of a firm's total equity owned by the managers to its total equity (Din and Javid, 2012)
β	Intercept	
ε	Error Term	
it	Firm i at time t	

Source: Compiled by the Author from Various Literature

3.7 Robustness Test

The following robustness tests were conducted in order to improve the validity of statistical results:

- (i) Multicollinearity test: The study adopted multiple regression models to ascertain the association between the independent and dependent variables. Where the association is highly correlated, multicollinearity exists. For that the study tested for it, to see the possibility of its existence or otherwise. This was done using variance inflation factor (VIF) and tolerance value.

- (ii) Heteroskedasticity test: The study deals with observations that constitute different sizes, some are in decimal while others in units, and that heteroskedasticity sometimes occurs when there is a large difference among the sizes of observations. For that, the study had to run a heteroskedasticity test in order to see its existence or otherwise. It was done using Breusch-pagan/cook-weisberg test for heteroskedasticity.
- (iii) Hausman test: In view of the fact that both fixed and random effect tests were conducted. Hausman test was used to decide the best out of the two results. The test enabled the researcher to choose the most appropriate between the fixed and random effect models.

CHAPTER FOUR DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter analyses and statistically interprets the data collected for the study. The chapter begins with descriptive statistics and correlation matrix. It then presents the regression results and discusses the findings in the light of previous studies. The chapter concludes with highlight of the policy implications of the findings.

4.2 Descriptive Statistics

The summary of the descriptive statistics of the variables are presented in table 4.1. The full results are contained in appendix (IIA).

Table 4.1 **Descriptive Statistics**

Variables	Min.	Max.	Mean	Std. Dev.
ROA	-0.258	0.792	0.1181286	0.1897649
LVG	0.360	8.471	1.587126	1.476421
FSZ	13.787	23.435	16.92374	2.77602
LQT	0.304	2.668	1.2458	0.521123
OPE	0.108	1.69	0.7899	0.3187097
MSH	0.0001	0.1879	0.0248529	0.0375337

SOURCE: *Extract from Stata output*

From table 4.1, the minimum and maximum values of return on assets are -0.258 and 0.792 respectively. Higher return on assets signifies better financial performance while lower return on assets shows lower financial performance. The average value of return on assets is 0.118 which signifies that the average financial performance of listed building materials firms in Nigeria is N0.12b. The firms' minimum and maximum values of leverage are N0.360b and N8.471b respectively, while the mean value is N1.58b. This signifies that the firms' capital structure is financed by debt more than equity. This is because the mathematical expression of firms' debt to equity ratio has shown values greater than one.

Firm size shows minimum and maximum values of N13.787b and N23.435b respectively. This implies that for the firms to have minimum financial performance, they must have an assets

size valued at N13.787b and for maximum financial performance, the firm should have an assets size valued at N23.435b. The firms also need N16.923b to maintain average financial performance. The firms' liquidity shows minimum and maximum values of N0.304b and N2.668b respectively. This implies that for firms to attain minimum and maximum financial performance they must to have liquidity positions of N0.304b and N2.668b respectively. The average liquidity position of the firms is N1.2458b. This means that for the firms to perform averagely, they must maintain an average liquidity position of N1.2458b.

The operating expenses of the firms show minimum and maximum values of N0.108b and N1.69b respectively. This implies that for the firms to achieve minimum and maximum financial performance, their operating expenses should not exceed N0.108b and N1.69b respectively. The average operating expenses of the firms is N0.7899b. This shows that for the companies to have an average financial performance, their operating expenses should not exceed N0.7899b.

Managerial shareholding variable shows that the firms need 0.01% and 19% of their equity to be own by members of management for minimum and maximum performance. The average managerial shareholding is 0.024. This implies that for the firms to have average financial performance, they need to issue 2% of their total equity holdings to members of the management.

4.3 Correlation Matrix

The correlation matrix explains the degree of relationship between the dependent and independent variables of the study as well as the independent variables among themselves. The summary of the associations among the variables of the study is presented in table 4.2, while the full result is attached as appendix (IIB)

Table 4.2 Correlation Matrix

Variables	ROA	LVG	FSZ	LQT	OPE	MSH
ROA	1					
LVG	-0.2951* (0.0131)	1				
FSZ	0.2889* (0.0153)	0.0952 (0.4332)	1			
LQT	0.3869* (0.0009)	-0.4079* (0.0005)	0.2637* (0.0274)	1		
OPE	0.1141 (0.3470)	0.4109* (0.0004)	0.0999 (0.4104)	0.0308 (0.8000)	1	
MSH	-0.3920* (0.0008)	0.2951* (0.0131)	0.2034 (0.0913)	-0.0743 (0.5408)	0.0261 (0.8301)	1

SOURCE: STATA Output

Table 4.2 reveals that firm size and liquidity of the firms are positively and strongly correlated with return on assets. The values of 0.2889 and 0.386 of the variables indicated p-values of 0.0131 and 0.0009 that are significant at 5% and 1% respectively. The table also shows that leverage and managerial shareholding are negatively correlated with return on assets. The variables exhibited a relationship that is significant at 5% and 1% respectively. In contrast, operating expenses have positive relationship with return on assets that is not statistically significant.

The relationship of the independent variables among themselves indicates that liquidity and leverage, managerial shareholdings and liquidity, are negatively correlated among themselves. On the other hand, the relationship between firm size and leverage, operating expenses and leverage, managerial shareholding and leverage, liquidity and firm size, operating expenses and firm size, managerial shareholdings and firm size, operating expense and liquidity, and managerial shareholdings and operating expenses are positively related among themselves. Although some of the variables exhibited strong association, the overall relationship for the independent variables among themselves is not significant. This shown the absence of

multicollinearity as can be observed from and corroborated by the tolerance value and variance inflation factor which have value less than 1 and 5 respectively. (See appendix IIB).

4.4 Analysis of Regression Results, Discussion and Summary of Major Findings

In view of the nature of the data, both fixed effect and random effect models were tested. Hausman specification test was then used to decide between the two results. The result from the Hausman fixed and random effect test revealed a χ^2 value of 0.00 with p-value of 0.00 that is statistically significant at 1% level of significant. This implies that the test considered the fixed effect as the most appropriate estimator. The full results of the fixed and random effect as well as Hausman test are attached as appendix (IIE and IIF). Therefore, Generalized Least Square fixed effect model was adopted for the study.

Table 4.3 presents the summary of the fixed effect multiple regression results obtained from the model of the study while the full results are shown in appendix (IIE):

Table 4.3 Regression Results

Variables	Coefficient	T-Values	P-Values	Tolerance	VIF
Constant	0.5791902	3.89	0.000		
LVG	-0.0196818	-1.72	0.092	0.576534	1.73
FSZ	-0.0298876	-3.56	0.001	0.853490	1.17
LQT	0.0373251	1.07	0.290	0.701942	1.42
OPE	0.0285952	0.53	0.601	0.771472	1.30
MSH	0.2775579	0.51	0.614	0.867985	1.15
R²	0.2556				
Wald Chi²	3.98				
Prob. Chi²			0.0036		

Source: STATA Output

Table 4.3 proves that the functional relationship between the dependent and independent variables is:

$$\text{ROA} = 0.5791 - 0.0196\text{LVG} - 0.0298\text{FSZ} + 0.0373\text{LQT} + 0.0285\text{OPE} + 0.2775\text{MSH}$$

The table shows that leverage has negative significant impact on the financial performance of listed building materials firms in Nigeria. This can be observed from the

computed value of beta coefficient of -0.0196818 with p-value of 0.092 which is statistically significant at 10% level of significance. On the basis of the result, the study rejected the first hypothesis that presumed that leverage has no significant influence on financial performance of listed building materials firms in Nigeria. This is in line with the findings of Magpayo (2011) and Ojo (2012) who reported negative significant relationship between leverage and firms' financial performance. The result is in contrast with the findings of Yoon and Jang (2005), Pacchori and Tatala (2012) and Damouri, Khanagha and Kaffash (2013) who found that leverage is negatively and insignificantly associated with performance of firms and the findings of Rehman (2013) who found a positive significant relationship between leverage and financial performance.

The table also revealed that firm size is negatively and significantly correlated with the financial performance of listed building material firms in Nigeria. The beta coefficient of the variables is -0.0298876 and the p-value is 0.001 which is significant at 1% level of significance. This indicates that size has negative significant impact on the financial performance of firms. The implication of this finding is that the bigger the size of the firms the lower the quantum of profit to be reported by the firms. The result provided a basis for rejecting the second hypothesis, which states that firm size has no significant effect on performance of listed building materials firms in Nigeria. The finding is consistent with the findings of Benchuenvijit (2012) who found a negative significant relationship between firm size and financial performance, but inconsistent with the findings of Driffield, Mahambare and Pal (2005), Stierwald (2009) and Dogan (2013) who found a positive significant relationship between firm size and financial performance.

Furthermore, the result exhibits evidence of positive insignificant relationship between liquidity and financial performance of listed building materials firms in Nigeria. The result

shows a beta coefficient of 0.0373251 with p-value of 0.290 indicating that the p-value is not statistically significant. This implies that liquidity as one of the proxies of firm characteristics does not significantly affect the financial performance of listed building materials firms in Nigeria. The results serves as a basis for failing to reject the third hypothesis, which states that liquidity has no significant impact on the financial performance of listed building materials firms in Nigeria. The finding is in line with the study of Niresh (2012) who found no evidence of significant relationship between liquidity and financial performance. The result however contradicted the findings of Hendander (2005), Gill and Mathur (2011), Owolabi and Obida (2012), and Dalvi and Baghi (2014) who found positive significant relationship between liquidity and firms' financial performance; and the findings of Cheung, Chung and Fung (2012) who reported negative significant association between liquidity and firms' financial performance.

The table further reveals that operating expenses have positive relationship with the financial performance of listed building materials firms in Nigeria. The relationship which is not statistically significant shows a beta coefficient of 0.0285952 with p-value of 0.601. This implies that operating expenses do not have significant effect on the financial performance of the firms. The result provides a basis for not rejecting the fourth hypothesis which states that operating expenses has no significant influence on the financial performance of listed building materials firms in Nigeria. This supports the findings of Zaman (2009), but contradicts the findings of Krishnan (2006) who found negative significant relationship between operating cost and financial performance and the findings of Shil and Pramanik (2012) who found positive significant relationship between operating cost and firms' financial performance.

Finally, the table reveals a value of beta coefficient of 0.2775579 with p-value of 0.614 for managerial shareholding. This signifies that managerial shareholding has positive insignificant influence on the financial performance of listed building materials firms in Nigeria. The result failed to reject the fifth hypothesis that assumed managerial shareholding has no significant impact on the performance of listed building materials firms in Nigeria. The result is consistent with the finding of Isik and Soykan (2013) who found evidence of positive relationship between managerial shareholding and financial performance. The finding however contradicted the work of Alipour and Amjadi (2011) who documented a negative significant relationship between managerial shareholding and financial performance of firms.

The combined and overall effect of the predictor variables on the explained variable showed the model is adequate and free from misspecification. The Wald χ^2 value of 3.98 with Prob. χ^2 of 0.0036 which is significant at 1% level of significances. The model is well fitted with the variables of the study. Furthermore, the coefficient of determination R^2 which stands at 26% indicates the proportion of the total variation in dependent variable (return on assets) that is explained by the independent variables (leverage, firm size, liquidity, operating expenses and managerial shareholdings). This signifies that 26% of the total variation in financial performance of listed building materials firms in Nigeria is caused by the combined effect of leverage, firm size, liquidity, operating expenses and managerial shareholdings; while the remaining 74% is caused by other factors outside the model of this study.

4.5 Policy Implications of the Research Findings

The findings of this study have important implications for policy in Nigeria. One major implication is that building materials firms are the main source of raw materials needed by individuals to build their personal houses, corporate entities to expand their branch network and

government to provide the needed infrastructural facilities for its citizens. The outcome of this study could be used by building materials firms on sources of capital decision, as well as proper utilization of its capital. Based on the result, listed building materials firms in Nigeria should focus more attention on equity financing than debt financing, since leverage is having negative effect on their financial performance. This would send a message to the potential investors about the capital structure of firm as well as its financial performance. The results of this study could also be used by building materials firms in deciding on the most appropriate ways of decreasing their assets and reducing the scope of their operations in order to decrease their size, since firm size is negatively and significantly contributes to their financial performance. The findings of this study could be used by the regulatory authorities in deciding on the percentage of firms' equity ownership by the management, since managerial shareholdings is positively and insignificantly influencing firms' financial performance. This would enable the management to work hard as a steward to the firm for achieving its objectives.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

This study was conducted to investigate the impact of firm characteristics, governance mechanisms and financial performance of listed building materials firms in Nigeria. The study was divided into five chapters. The first chapter discussed the background issues, which led to developing five objectives and formulating five hypotheses for the research with a scope covering ten (10) years, from 2005 to 2014. The review of conceptual literature and empirical studies on firm characteristics, governance mechanisms and financial performance was carried out. Also, the concept and measurement of firm performance was discussed as well as the review of the relationship between each of the proxies of the independent variables and the dependent variable. The theoretical framework that underpinned the study was also discussed.

Correlational research design was used in measuring the relationship among the variables of the study. Data was collected from secondary source through the annual reports and accounts of the sampled firms. The population of the study consisted of only the listed building materials firms in Nigerian Stock Exchange that have the complete financial records either on their website or in the office of the Nigerian Stock Exchange. Census approach was adopted to enable the study cover the entire population. Multiple regression was used to test the five hypotheses formulated by the study. The result of the descriptive statistics, correlation matrix and regression were presented, analysed and discussed in chapter four. The regression result could not provide evidence of for the rejection of hypotheses three; four and five, hypothesized that liquidity, operating expenses and managerial shareholdings have no strong effect on the financial performance of building materials firms in Nigeria. The result however provided evidence for

rejecting the hypotheses on leverage and firm size. Finally, the chapter discussed the findings of the research in light of previous studies and highlighted the policy implications of the findings.

5.2 Conclusions

In view of the findings of this study, some conclusions are made. Consistent shortage of equity capital by building materials firms in Nigeria has necessitated the uses of leverage to constitute part of their capital structure. Based on the findings of this study, leverage has negative significant influence on their financial performance. Firm size has negative significant impact on the financial performance of listed building materials firms in Nigeria. The larger the sizes of the firms the less the firms enjoy economies of scale, and consequently decrease their financial performance. Liquidity has positive insignificant influence on the financial performance of listed building materials firms in Nigeria. Sound liquidity position will enable the firms to improve their financial performance. Operating expenses has positive, but insignificant effect on the financial performance of listed building materials firms in Nigeria. This means that expenses incurred in an efficient way will not lead to reduction in the quantum of profit of the firms. Managerial shareholding positively and insignificantly influences the financial performance of listed building materials firms in Nigeria. The positive insignificant relationship is due to the more percentage of firms' shares allocated to the management which can influence the firms' financial performance.

5.3 Recommendations

In line with the findings of the study, the following recommendations are made:

- (i) The management of listed building materials firms in Nigeria should reduce the level of leverage in their capital structure and focus more attention on equity financing. This is because leverage has negative significant impact on their financial

- performance. Their capital structure should be majorly financed by equity rather than debt as well as selecting debt financing with cheaper cost attached to it.
- (ii) The management of the firms should decrease their assets and reduce the scope of their activities by building few branches in order to decrease their size. This is in line with the findings of this study that the size of listed building materials firms in Nigeria influences their financial performance negatively.
 - (iii) The listed building materials firms in Nigeria should maintain their current liquidity position in order to enable them have good working capital for them to continue operating in line with the going concern concept of accounting. This is in view of the positive contribution of liquidity and insignificant effects on their financial performance.
 - (iv) The management of listed building materials firms should be concerned about the efficiency of their expenditure not the volume, for better financial performance. This is because the findings of this study revealed a positive insignificant relationship between operating expenses and financial performance.
 - (v) Regulatory authorities such as SEC should determine the minimum and maximum percentages of firm's total equity to be owned by the members of the management. This is in line with the findings of this study that revealed a positive insignificant impact of managerial shareholdings on the financial performance of listed building materials firms in Nigeria.

5.4 Limitations of the Study

As it is the case with all studies, this study is associated with some limitations. The findings of this study are therefore to be considered in the light of the following limitations:

- (i) The study intended to use the entire population of listed building materials firms in Nigeria to constitute the population of the study. But some firms do not have complete financial records either on their website or in the office of Nigerian Stock Exchange during the period of the study. The study considered only those firms that meet up with the criterion to form the adjusted population. Therefore, the findings and recommendations of the study may not apply to the firms that were not covered by the study.
- (ii) The study considered only four proxies of firm characteristics and three proxies of governance mechanisms without considering other proxies of both firm characteristics and governance mechanisms. The result may be different if other variables were to be added.

5.5 Areas for Further Research

The issues involved in this study area cannot altogether be covered by a single research, and hence, the need for further research. The following research areas are hereby recommended:

- (i) The study covered only listed building materials firms as a subsector of Nigerian manufacturing industry for the period of ten years. Therefore, there is the need for further research using other subsectors of Nigerian manufacturing industry.
- (ii) The study used natural logarithms of firm's total assets in measuring firm size, and only one performance measure namely return on assets. Future studies may consider measuring size with natural logarithms of firm's total sales value, book value of equity, or natural logarithms of firm's average sales. On performance measurement, future research could consider other performance measures such as return on equity, return on investment and Tobin's Q.

REFERENCES

- Adediran, S. A., Alade, S. O. & Oshode, A. A. (2013). Reliability of financial reporting and companies attributes: The Nigerian experience. *Research Journal of Finance and Accounting*, 4(16); 52-67.
- Agrawal, A. & Knoeber, C. (1996). Firm performance and mechanisms to control agency problems between managers and shareholders. *Journal of Finance and Quantitative Analysis*, 31(8); 377-403.
- Aguilera, R. V. & Jackson, G. (2003). The cross-national diversity of corporate governance: Dimensions and determinants. *The Academy Management Review*, 447-465.
- Akhtar, S., Javed, B., Maryam, A. & Sadia, H. (2012). Relationship between financial leverage and financial performance: Evidence from fuel and energy sector of Pakistan. *European Journal of Business Management*, 4(11); 28-39
- Akhtaruddin, M. (2005). Corporate mandatory disclosure practices in bangladesh. *International Journal of Accounting*, 40; 399-422.
- Akinsulire, C. O. (2014). Financial management. ET-TODA Venture Ltd: Logos.
- Akpan, E. O. & Amran, N. A. (2014). Board characteristics and company performance: Evidence from Nigeria. *Journal of Finance and Accounting*, 2(3); 81-89.
- AL-Hussain, A. H. (2009). Corporate governance structure efficiency and bank performance in Saudi Arabia. Unpublished PhD Dissertation, *University of Phoenix*.
- Ali, M. Y. (2004). Impact of firm and management related factors on firm export performance. *Journal of Asia Pacific Marketing*, 3(2); 5-20.
- Ali, S., Malo-Alain, A. M. & Haque, M. I. (2015). Impact of activity based costing on firms' performance in Saudi Arabia. *Science International Journal*, 27(1) ; 597-606.
- Ali, Y. A., AL-Swidi, A. K. & Fadzil, F. H. B. (2012). Corporate governance and performance of Saudi Arabia listed companies. *British Journal of Arts and Social Sciences*, 9(1); 46-57.
- Alipour, M. & Amjadi, H. (2011). The effect of ownership structure on corporate performance of listed companies in Tehran stock exchange: An empirical evidence of Iran. *International Journal of Business and Social Science*, 2(13); 54-65.
- AL-Matari, Y.A., AL-Swidi, A.K., Fadzil.F.H. & AL-Matari, E.M. (2012). Board of directors, audit committees characteristics and performance of Saudi Arabian listed companies. *International Review of Management and Marketing*, 2(4); 243-251.
- Amba, S. M. (2012). Corporate governance and firm financial performance. *Journal of Academic and Business Ethics*, 56-70.

- Amelia, M. R. (2012). Effect of firm characteristics, financial performance and environmental performance on corporate social responsibility disclosure intensity on manufacturing firm listed in the Indonesia Stock Exchange. *Faculty of Economy, Gunadarma University*.
- Anderson, K. L., Deli, D. N., & Gillan, S. L. (2003). Boards of directors, audit committee and the information content of earnings. *Johnny Weinberg Centre for Corporate Governance, University of Delaware, Working paper series, WP 2003-04*.
- Anderson, R., Mansis, S. & Reeb, D. (2004). Board characteristics, accounting reporting integrity, and the cost of debt. *Journal of Accounting and Economics*, 37(3); 315-342.
- Appiah, B. A. (2010). The impact of training on employee performance: A case study of HFC Bank (Ghana) Ltd., 15-17.
- Aras, G., Aybars, A. & Kutlu, O. (2010). Managing corporate performance, investigating the relationship between corporate social responsibility and financial performance in emerging markets. *International Journal of Productivity and Performance Management*, 59(3); 229-254.
- Baghat, S. & Bolton, B. (2008). Corporate governance and firm performance. *Journal of Corporate Finance*, 14; 257-273.
- Barbosa, N. & Louri, H. (2005). Corporate performance: Does ownership matter? A comparison of foreign and domestic owned firms in Greece and Portugal. *Review of Industrial Organization*, 27(1); 73-102.
- Beasley, M. (1996). An empirical analysis of the relation between board of directors composition and financial statement fraud. *Accounting Review*, 71(4); 443-465.
- Beleska-Spasova, E. & Glaister, K. W. (2011). The role of firm-specific advantages in UK export initiation. *Multinational Business Review*, 19(2); 168-194.
- Bhagat, S., Carey, D. & Elson, C. M. (1998). Director ownership, corporate performance and management turnover. *Journal of Business Lawyers*, 54(3); 885-919.
- Biety, M. M. (2003). An introduction to liquidity and assets liability management. Operational guidelines for the development and early stages of credit union operation.
- Booth, J. R., Comett, M. M. & Tehranian, H. (2002). Board of directors, ownership and regulation. *Journal of Banking and Finance*, 26; 1973-1996.
- Bouaziz, Z. (2012). The impact of the presence of audit committees on the financial performance of Tunisian companies. *International Journal of Management and Business Studies*, 2(4); 230-519.
- Brammer, S., Brocks, C. & Pavelin, S. (2006). Corporate social performance and stock return: UK evidence from disaggregate measures. *Financial Management*, 35(3); 97-116.
- Brennan, M. J. (1995). Corporate finance over the past 25years. *Financial Management*, 24(2); 9-22.

- Brickley, J., Lease, D., & Smith, R. C. (1988). Ownership structure and voting on anti-takeover amendments. *Journal of Financial Economics*, 20; 267-291.
- Carcello, J. & Neal, T. (2003). Disclosure in audit committee charters and reports. *Accounting Horizons*, 16(4); 291-304.
- Cass, A. O. & Julian, C. (2003). Examining firm and environmental influences on export marketing mix strategy and export performance of Australian Exporters. *European Journal of Marketing*, 37(3); 366-384.
- Cavusgil, S. T. & Zou, S. (1994). Marketing strategy performance relationship: An investigation of the empirical link in export ventures. *Journal of Marketing*, 58; 1-21.
- Cheung, W., Chung, R. & Fung, S. (2012). Stock liquidity, corporate governance and firm performance: Evidence from real estate investment trusts. *4th Annual Conference of the Global Chinese Real Estate Congress*, July.
- Cooke, F. L. (2002). Human resource strategy to improve organizational performance: A route for British firms. *Working paper No. 9 EWERC, Manchester School of Management*.
- Dabor, E. S. & Adeyemi, S. C. (2009). Corporate governance and credibility of financial statement in Nigeria. *Journal of Business System, Governance and Ethics*, 1(1); 17-34
- Daily, C. M., Dalton, D. R. & Canella, A. A. (2003). Corporate governance: Decades of dialogue and data. *Academy Management Review*, 28; 371-382.
- Dalvi, M. R. & Baghi, E. (2014). Evaluate the relationship between company performance and stock market liquidity. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(1); 136-144.
- Damouri, D., Khanagha, J. B. & Kaffash, M. (2013). The relationship between changes in the financial leverage and the value of the Tehran listed firms. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 3(3); 198-210.
- Dandago, K. I. & Zaidi, Z. R. (2014). Impact of overhead apportionment on selling price determination in Malaysian automobile manufacturing industry. *Asian Journal Finance and Accounting*, 6(1); 249-261.
- Davis, J. H., Schoorman, F. D. & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy Management Review*, 22(1); 20-47.
- Davis, K. (1973). The case for and against business assumption of social responsibilities. *The Academy of Management Journal*, 16(2); 312-322.
- Dean, D. L., Bulent, M. & Christopher, P. (2000). Revisiting firm characteristics, strategy and export performance relationship: A survey of the literature and an investigation of New Zealand small manufacturing firms. *Industrial Marketing Management*, 29(14); 461-4177.
- Dechow, P. & Dechev, D. (2002). The quality of accruals and earnings: The role of accrual estimation error. *The Accounting Review*, 77; 35-59.

- Demsetz, H. & Lehn, K. (1985). The structure of corporate ownership: Case and consequences. *Journal of Political Economy*, 93; 1155-1177.
- Denis, D.K. & McConnell, J. J. (2003). International corporate governance. *Journal of Finance and Quantitative Analysis*, 38(1); 1-36.
- Desoky, A. M. & Mousa, G. A. (2012). Do board ownership and characteristics affect on firm performance? Evidence from Egypt. *Global Advance Research Journal of Economics, Accounting and Finance*, 1(2); 015- 032.
- Din, S. & Javid, A. Y. (2012). Impact of managerial ownership on financial policies and the firm's performance: Evidence from Pakistan: Manufacturing firms. *MPRA Paper*, No. 37560.
- Dogan, M. & Topala, Y. (2014). The influence of dividend payments on company performance: the case study of Istanbul stock exchange. *European Journal of Business and Management*, 6(3); 189-197.
- Donaldson, I. (1990). The ethereal hand: Organizational economies and management theory. *Academy of Management Review*, 15; 369-381.
- Donaldson, L. & Davis, J. H. (1991). Returns. *Australian Journal of Management*, 16, 49-64.
- Donaldson, L. & Davis, J. H. (1994). Boards and company performance pesearch challenges the conventional wisdom. *An International Review*. 2(3); 151-160.
- Donaldson, L. (2008). Ethics problems and problem with ethics: Toward a pro-management theory. *Journal of Business Ethics*, 78; 299-311.
- Dowell, G., Hart, S. & Yeung, B. (2000). Do corporate global environmental standards create or destroy market value? *Management Sciences*, 46(8); 1059-1074.
- Driffield, N., Mahambare, V. & Pal, S. B. (2005). How Ownership Structure Affects Capital Structure and Firm Performance? Recent Evidence from East Asia. *Department of Economics and Finance, Brunel University, UK*.
- Duke II, J. & Kankpang, K. (2011). Linking corporate governance with organizational performance: New insights and evidence from Nigeria. *Global Journal of Management and Business Research*, 11(12); 249-273.
- Ebrahim, M. A., AL-Swidi, A. K., Fadzil, F. H. B. & AL-Matari, Y. A. (2012). The impact of board characteristics on firm performance: Evidence from nonfinancial listed companies in Kuwaiti Stock Exchange. *International Journal of Accounting and Financial Reporting*, 2(2); 216-242.
- Fama, E. F. & Jensen. M. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26; 301-325.
- Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*, 88; 715-732.

- Fazlzadeh, A., Hendi, A. T. & Mahboubi, K. (2011). The examination of the effect of ownership structure on firm performance in listed firms of Tehran Stock Exchange, based on the type of the industry. *International Journal of Business and Management*, 6(3); 45-63
- Fiori, G., Di-Donato, F. & Izzo, M. F. (2009). Corporate social responsibility and performance. an analysis on Italian listed companies. *Performance Measurement Association Conference, New Zealand*.
- Fooladi, M. (2012). Concentration of ownership, in Iranian listed firms. *International Journal of Social Sciences and Humanity*, 2(2); 112-116.
- Fosu, S. (2013). Capital structure, product market competition and firm performance: Evidence from South Africa. *Working Paper No. 13/11, Department of Economics, University of Leicester, UK*.
- Francis, B., Hassan, I. & Wu, Q. (2012). Do corporate boards affect firm performance? New evidence from the financial crisis. *Bank of Finland Research Discussion Paper*, 11.
- Ghasghaei, E. K. and Fathollahi, J. (2014). The relationship between cost, quality and financial performance of the company (with case study of Tehran Stock Exchange). *Indian Journal of Fundamental and Applied Life Sciences*, 4(54); 1375-1585.
- Gibson, M. S. (2003). Is corporate governance ineffective in emerging markets? *Journal of Financial and Quantitative Analysis*, 38(1); 231-250.
- Gill, A. & Mathur, N. (2011). The impact of board size, CEO duality, and corporate liquidity on profitability of Canadian service firms. *Journal of Applied Finance and Banking*, 1(3); 83-95.
- Gorton, G. & Rosen, R. (1995). Corporate control, portfolio choice and the decline of banking. *Journal of Finance*, 50; 1377-1420.
- Gugong, B. K., Arugu, L. O. & Dandago, K. I. (2014). The impact of ownership structure on the financial performance of listed insurance firms in Nigeria. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(1); 409-416.
- Gupta, M., Pevzner, M. & Seethamraju, C. (2010). The implications of absorption cost accounting and production decisions for future firm performance and valuation. *Contemporary Accounting Research*, 27(3); 889-922.
- Hansen, S. & SungSuk, K. (2013). Influence of stock liquidity to firm value in Indonesian Stock Market. *International Conference on Business, Economics and Accounting*, 20-23 March, Thailand.
- Hartono, U., Subroto, B., Djumahir, A. & Irianato, G. (2013). Firm characteristics, corporate governance and firm value. *International journal of Business Behavioural Sciences*, 3(8); 16- 37

- Hassan, S. U. (2013). Financial reporting quality, does monitoring characteristics matter? An empirical analysis of Nigerian manufacturing sector. *The Business & Management Review*, 3(2); 147-161.
- Hedander, J. (2005). Focus, liquidity and firm value: An empirical study of listed property trusts in Australia. Building and real estate economics, *Royal Institute of Technology, Stockholm*.
- Hossain, M. (2008). The extent of disclosure in annual reports of banking companies: The case of Indian. *European Journal of Scientific Research*, 23(4); 659-680.
- Hsu, H. (2013). The moderating effects of leverages and ownership structure on firm performance. *South East Asia Journal of Contemporary Business, Economics and Law*, 2(1); 89-105.
- Hu, Y. & Izumida, S. (2008). The relationship between ownership and performance: A review of theory and evidence. *International Business Research*, 1(4); 72-81.
- Hu, Y. & Zhou, X. (2006). Managerial ownership matters for firms performance: Evidence from China. *Hong Kong Institute of Economic and Business Strategy, University of Hong Kong*.
- Hull, C. E. & Rothenberg, S. (2008). Firm performance, the interactions of corporate social performance with innovation and industry differentiation. *Strategic Management Journal*, 29(7); 781-789.
- IASB (2010). The conceptual framework for financial reporting, London.
- Ibrahim, K. (2014). Firm characteristics and voluntary segment disclosure among the largest firms in Nigeria. *International journal of Trade, Economics and Finance*, 5(4); 43-52.
- Ilona, D. (2008). Board quality and firm performance. Unpublished Masters Dissertation, *University of Utara Malaysia*.
- Isik, O. & Soykan, M. E. (2013). Large shareholders and firm performance: Evidence from Turkey. *European Scientific Journal*, 9(25); 185-203.
- Jacobs, B. W., Singhal, V. R & Subramanian, R. (2010). An empirical investigation of environmental performance and the market value of the firm. *Journal of Operations Management*, 28(5); 430-441.
- Jensen, M. & Mecling, W. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4); 305-360.
- Jensen, M. (1986). Agency costs of free cash flow, corporate finance and takeover. *American Economics Review*, 76; 323-329.
- Jensen, M. C. & Murphy, K. (1990). Performance pay and top-management incentives. *Journal of Political Economy*, 98(21); 225-264.
- Kajola, A. & Sunday, M (2008). Corporate governance and firm performance: The case of Nigerian listed firms. *European Journal of Economics, Finance and Administrative Sciences*, 2(3); 1-13.

- Klein, A. (2002). Audit committee, board of director characteristics and earnings management. *Journal of Accounting and Economics*, 33(3); 375-400.
- Krishnan, A. (2006). An application of activity based costing in higher learning institution: A local case study. *Contemporary Management Research*, 2(2); 75-90.
- Kroes, J. R. & Manikas, A. S. (2014). Cash flow management and manufacturing firm financial performance: A longitudinal perspective. *International Journal of Production Economics*.
- Kurfi, A. K. (2003). Principles of financial management. Benchmark publishers ltd.: Kano.
- Kyereboah-Coleman, A. (2007). Corporate governance and firm performance in Africa: A dynamic panel data analysis. *Studies in Economics and Econometrics, Working Paper*.
- Lages, L. & Melewar, T. C. (2000). An exploratory study of Portuguese exporters marketing strategies. *European Marketing Academy*.
- Lane, P. J., Cannella, A. & Lubatkin, M. H. (1998). Agency problems as antecedents to unrelated mergers and diversification: Amicus and lev reconsidered. *Strategic Management Journal*, 19; 555-579.
- Lang, M. H. & Lundholm, R. J. (1993). cross-sectional determinants of analysis rating of corporate disclosures. *Journal of Accounting Research*, 31(2); 246-271.
- Lee, J. (2009). Does Size Matter in Firm Performance? Evidence from US public firms. *International Journal of the Economics of Business*, 16(2); 189-203.
- Leonidou, L. C. (1995). Empirical research on export barriers: Review assessment and synthesis. *Journal of International Marketing*, 3; 29-43.
- Leonidou, L. C., Katsikeas, C. S. & Samiee, S. (2002). Marketing strategy determinants of export performance: A meta-analysis. *Journal of Business Research*, 55(1); 517-567.
- Lin, C. H., Yang, H. L. & Liou, D. Y. (2009). The impact of corporate social responsibility on financial performance: Evidence from business firms in Taiwan. *Technology in Society*, 31(1); 56-63.
- Ling-Yee, L. (2004). An examination of the foreign market knowledge of exporting firms based in the people's republic of China: Its determinants and effect on export intensity. *Industrial Marketing Management*, 33(7); 561-572.
- Loveter, P. J., Onwerkerk, C. & Bakker, B. A. (1991). An inquiry into successful exporting. *European Journal of Marketing*, 25(6); 55-57.
- Machold, S. & Vasudevan, A. K. (2004). Corporate governance model in emerging markets: The case of Indian. *International Journal of Business Governance and Ethics*, 1(1); 56-77.
- Magolish, J. D. & Walsh, J. P. (2001). People and profits: The search for a link between a company's social and financial performance. (Lawarence Erlbaum Associates, Mahwah, NJ).

- Magpayo, C. L. (2011). Effect of working capital management and financial leverage on financial performance of Philippine firms. *College of Business, De La Salle, University, 2401 Taft Avenue 1004 Manila*.
- Mahoney, L. & Roberts, R. W. (2007). Corporate social performance, financial performance and institutional ownership in Canadian firms. *Accounting Forum*, 31(3); 233-253.
- Mardin, G. H., Crawford, L. & Power, D. M. (2012). The impact of IFRS adoption on disclosure practices of Jordanian listed companies. *Journal of Accounting in Emerging Economies*, 2; 67-90.
- Mark, Y.T. & Kusnadi, Y. (2005). Size really matters: Further evidence on the negative relationship between board size and firm value. *Pacific-Basin Finance Journal*, 13(3); 301-318.
- Mcconomy, B., Bujaki, B. & Merridee, L. (2000). Corporate governance: Enhancing shareholders value. *CAM Management*, 47(8); 10-18.
- Mirza, S. A. & Javed, A. (2013). Determinants of financial performance of a firm: Case of Pakistan Stock Market. *Journal of Economics and International Finance*, 5(2); 43-52.
- Moh'd, K. H. (2005). Small and medium-size enterprises in Malaysia-role in issues. *Sintok University of Utara Malaysia Press*.
- Mokhtar, N., Ali, S., Hassan, A. A. & Salmat, A. S.A. (2014). Managerial shareholdings and performance of listed companies in Malaysia. *5th International Conference on Business and Economic Research*.
- Moscu, R. (2013). The relationship between firm performance and board characteristics in Romania. *International Journal of Academic Research in Economics and Management Sciences*, 2(1); 26-37.
- Mueller, E. & Spitz, A. (2002). Managerial ownership and firm performance in German small and medium-size enterprises. *Centre for European Economic Research, London*.
- Murphy, G. B., Traylor, J. W & Hill, R. C. (1996). Measuring performance in entrepreneurship research. *Journal of Business Research*, 36; 15-23.
- Nandi, S. & Ghosh, S. K. (2012). Corporate governance attributes, firm characteristics and the level of corporate disclosure: Evidence from the Indian listed firms. *Decision Science Letter* 2(2012); 45-58.
- Nina, G., Gegenfurtner, B., Kaserer, C. & Achleitner, A. (2009). International financial reporting standards and earnings quality: The myth of voluntary vs. Mandatory adoption. *Centre for Entrepreneurial and Financial Studies, Working Paper, No. 2009-09*.
- Niresh, J. A. (2012). Trade-off between liquidity and profitability: A study of selected manufacturing firms in Sri Lanka. *Journal of Arts, Science and Commerce*, 3(4); 31-46.

- Noor, M. A. M., & Fadzil, F. H. (2013). Board characteristics and performance from perspective of governance code in Malaysia. *World Review of Business Research*, 3(3); 191-206.
- Nor, M. M., Shafee, N. B. & Shamsuddin, N. (2014). Board characteristics and Malaysian firm performance. *International Journal of Contemporary Research in Accounting, Auditing and Business Ethics*, 1(3); 32-45.
- Nugroho, B. & Eko, U. (2011). Board characteristics and earning management. *Journal of Administrative Sciences and Organization*, 18; 1-10.
- Ojo, S. A. (2012). The effect of financial leverage on corporate performance of some selected companies in Nigeria. *Canadian Journal of Social Science*, 8(1); 85-91.
- Okafor, C. (2007). Organizational characteristics and performance in Nigerian quoted companies. *Research Journal of Business Management*, 1; 37-49.
- Oluwagbemiga, O. E., Olugbenga, O. M. & Zaccheaus, S. A. (2014). Cost management practices and firm's performance of manufacturing organizations. *International Journal of Economic and Finance*, 6(6); 234-239.
- Omolehinwa, A. (2006). Working out strategic financial management. Cleo international: Lagos.
- Onimisi, A. N. (2010). The effect of capital structure on the performance of quoted manufacturing firms in Nigeria. Unpublished M.Sc. Thesis, *Ahmadu Bello University, Zaria*.
- Owolabi, S. A. & Obida, S. S. (2012). Liquidity management and corporate profitability: A study of selected manufacturing companies listed in the Nigerian Stock Exchange. *Business Management Dynamics*, 12(2); 10-25.
- Ozgulbas, N. Koyuncugil, A. S & Yilmaz, F. (2006). Identifying the effect of firm size on financial performance of SME. *The Business Review Cambridge*, 6(1); 162-167.
- Pachori, S. & Tatala, K. (2012). Influence of financial leverage on shareholders returns and market capitalization: A study of automotive cluster companies of Pithampur, India. *2th International Conferences on Humanities, Singapore*.
- Pervan, M. & Visic, J. (2012). Influence of firm size on its business success. *Croatian Operational Research Review*, 3; 235-248.
- Pouraghajan, A., Tabari, N. A. Y., Mansourinia, E. & Milad, A. (2013). The effect of free cash flows and agency costs on performance of listed companies in Tehran stock exchange. *World of Science Journal*, 1(6); 1-10.
- Pourali, M. R. & Arasteh, F. (2013). A theoretical study of relationship between liquidity, corporate governance and firm value. *International Research Journal of Applied and Basic Sciences*, 4(4); 943-951.

- Prahalathan, B, & Ranjany, R. P. (2011). The impact of capital structure-choice on firm performance: Empirical investigation of listed companies in Colombo Stock Exchange Sri Lanka. *International Journal of Research in Commerce and Management*, 2(4); 12-16.
- Qi, C. Z. Subramanyam, K. R. & Zhang, J. (2010). Accounting quality, bond liquidity and the cost of debt. *Marshall School of Business, University of Southern California, USA*.
- Quinn, M. (2011). Forget about profit, cash flow is king. *Wall Street Journal*, 15-28.
- Rayan, K. (2008). Financial leverage and firm value. *Gordon Institute of Business Science, University of Pretoria*.
- Reheman, A. & Nasr, M. (2007). Working capital management and profitability-case of Pakistan firms. *International Review Business Research Paper*, 3; 279-300.
- Rehman, S. S. F. U. (2013). Relationship between financial leverage and financial performance: Empirical evidence of listed sugar companies of Pakistan. *Global Journal of Management and Business Research*. 13(8); 439-451.
- Roberto, A. E. (2004). Sources of export success in small-and medium-size enterprises: The Impact of public programs. *International Business Review*, 13; 383-400.
- Safarova, Y. (2010). Factors that determine firm performance of New Zealand listed companies. Unpublished Masters Dissertation, *Auckland University of Technology*.
- Saleem, Q. & Rehman, R. U. (2011). Impact of liquidity ratios on profitability (case of oil and gas companies of Pakistan). *Interdisciplinary Journal of Research in Business*, 1(7); 95-98.
- Salehi, M. (2009). Study of the relationship between capital structure measures and firm performance: Evidence from Iran. *International Journal of Business Management*, 4(1); 34-48.
- Saliha, T. & Abdessatar, A. (2011). The determinants of financial performance: An empirical testing using simultaneous equation model. *Economic and Finance Review*, 10(1); 01-19.
- Sanda, A. U., Mikailu, A.S. & Garba, T. (2005). Corporate governance mechanisms and financial performance in Nigeria. *African Economic Research Consortium Research*, 149; 173-202.
- Schriner, J. A. (1996). “How big is too big?” *Industry Week May6*,
- SEC (2011). Code of corporate governance in Nigeria Abuja
- Shih, T. (2012). Effect of firm size, competences on firms internationalization and performance. *Department of International Business, National Taipei College of Business, Taiwan*.
- Shil, N. C. & Pramanik, A. K. (2012). Application of activity based costing in manufacturing companies in Bangladesh: A survey based study. *The USV Annals of Economics and Public Administration*, 12(1); 170-182.

- Shukeri, S. N., Shin, O. W. & Shaari, M. S. (2012). Does board of directors characteristics affect firm performance? Evidence from Malaysia public listed companies. *International Business Research*, 5(9); 120-127
- Skopljak, V. & Luo, R. H. (2012). Capital structure and firm performance in the financial sector: Evidence from Australia. *Asian Journal of Finance and Accounting*, 4(1); 53-67.
- Soderbom, M. (2004). Size and efficiency in African manufacturing firms: Evidence from firm-level panel data. *Journal of Development Economics*, 71; 369-394.
- Spence, M. (1973). Job marketing signaling. *The Quarterly Journal of Economics*, 87(3); 355-374.
- Spulber, D. F. (2007). Global competitive strategy. New York: *Cambridge University Press*.
- Stainer, L. (2006). Performance management and corporate social responsibility: The strategic connection, *Strategic Changes*, 15(5); 253-264.
- Stierwald, A. (2009). Determinants of firm profitability- The effect of productivity and its persistence. *The Journal of Industrial Economics*, 28(4); 335-352.
- Sudiyatno, B., Elen, P. & Kartika, A. (2012). The company's policy, firm performance, and firm value. An empirical research on Indonesia Stock Exchange. *American International Journal of Contemporary Research*, 2(12); 12-26.
- Sultana, A., Iruna, S., Ahmed, K. & Mehmood., N. (2012). Impact of training on employee performance: A study of telecommunication sector in Pakistan. *International Journal of Contemporary Research in Business*, 4(6); 31-43.
- Sunday, K. (2008). Corporate governance and firm performance: The case of Nigerian listed firms. *European Journal of Economics, Finance and Administrative Sciences*, 1(13); 1450-2275.
- Sustar, B. & Sustar, R. (2005). Size matters: The effect of European Union membership of firms in Slovenia. *Marketing Intelligence and Planning*, 23(5); 505-514.
- Tan, T. K. (2009). Financial distress and firm performance: Evidence from the Asian financial crisis. *Journal of Finance and Accountancy*, 62-75.
- Tatahi, M. & Heshmati, A. (2009). The financial and operating performance of private firms in Sweden. *Discussion Paper No. 3953*.
- Temitope, A. O., Sunday, I. O. & Olusesan, A. K. (2015). Accounting information and profit planning: The case of Nigerian listed manufacturing companies. *European Journal of Accounting, Auditing and Finance Research*, 3(4); 86-97.
- Tudose, M. B. (2012). Capital structure and firm performance. *Economy Transdisciplinary cognition*, 15(2); 76-82.

- Van-Slyke, M. (2006). Agents or stewards: Using theory to understand the government-nonprofit social services contracting relationship. *Journal of Public Administrative Research and Theory*, 17; 157-187.
- Velnampy, T. & Nimalathasan, B. (2010). The effect of firm size on profitability: A comparative study of Bank of Ceylon and commercial Bank of Ceylon ltd. in Sri Lanka. *Global Journal of Management and Business Research*, 10(2); 96-103.
- Wahla, K. U., Shah, S. Z. A. & Hussain, Z. (2012). Impact of ownership structure on firm performance: Evidence from non-financial listed companies at Karachi Stock Exchange. *International Research Journal of Finance and Economics- Issues* 84; 148-156.
- Weir, C., Laing, D. & McKnight, P. J. (2002). Internal and external governance mechanisms: Their impact on the performance of large UK public companies. *Journal of Business, Finance and Accounting*, 29; 579-611.
- Wiklund, J. & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: A configurationally approach. *Journal of Business Venturing*, 20; 71-91.
- Williamson, O. E. (1967). Hierarchical control and optimum firm size. *Journal of Political Economy*, 75; 123-138.
- Yoon, E. & Jang, S. (2005). The effect of financial leverage on profitability and risk of restaurant firms. *Journal of Hospitality Financial Management*, 13(1); 21-38.
- Zakaria, Z., Rani, Y. P. & Noorfaiz, P. (2014). Ownership structure and firm performance: Evidence from Malaysian trading and services sector. *European Journal of Business and Social Sciences*, 3(2); 32-43.
- Zaman, M. (2009). The impact of activity based costing on firm performance: The Australian experience. *International Review of Business Research Papers*, 5(4); 200-208.
- Zeitun, R. & Tian, G. G. (2007). Capital structure and corporate performance: Evidence from Jordan. *Australian Accounting, Business and Finance Journal*, 1(4); 40-61.

APPENDIX (I)

LIST OF QUOTED BUILDING MATERIALS FIRMS IN NIGERIAN STOCK EXCHANGE AS AT 31st December, 2014 EXTRACTED FROM THE NSE FACTBOOK.

AFRICAN PAINTS NIGERIA Plc.

ASHAKA CEMENT Plc.

BERGER PAINTS NIGERIA Plc.

CHEMICAL AND ALLIED PRODUCTS Plc

CEMENT COMPANY OF NORTHERN NIGERIA Plc

DANGOTE CEMENT Plc

DN MEYER Plc

FIRST ALUMINIUM NIGERIA Plc

IPWA Plc

LAFARGE CEMENT WAPCO NIGERIA Plc

PAINTS AND COASTING NIGERIA Plc

PORTLAND PAINTS AND PRODUCTS NIGERIA Plc

PREMIER PAINTS Plc

APPENDIX (II A)

DESCRIPTIVE STATISTIC RESULTS



10.0

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StataCorp
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College Station, Texas 7784
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979-696-4600 stata@s
979-696-4601 (fax)

> 5 USA

> www.stata.com

> tata.com

28-student Stata for Windows (network) perpetual license:

Serial number: 1910569294
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UC Riverside

Notes:

1. (/m# option or -set memory-) 1.00 MB allocated to data
2. New update available; type -update all-

. edit

(8 vars, 70 obs pasted into editor)

- preserve

. su roa lvg fsz lqt ope msh, detail

ROA

Percentiles		Smallest		
1%	-.258	-.258	Obs Sum of Wgt.	70 70
5%	-.119	-.213		
10%	-.08	-.179		
25%	.003	-.119		
50%	.094		Mean	.1181286
		Largest	Std. Dev.	.1897649
75%	.191	.481	Variance	.0360107
90%	.336	.578	Skewness	1.178959
95%	.481	.687	Kurtosis	5.220112
99%	.792	.792		

LVG

Percentiles		Smallest		
1%	.36	.36	Obs Sum of Wgt.	70 70
5%	.446	.395		
10%	.5345	.429		
25%	.697	.446		
50%	1.037		Mean	1.587129
		Largest	Std. Dev.	1.476421
75%	1.896	4.223	Variance	2.17982
90%	3.1785	5.717	Skewness	2.529518
95%	4.223	6.665	Kurtosis	10.36033
99%	8.471	8.471		

FSZ

Percentiles		Smallest		
1%	13.787	13.787	Obs Sum of Wgt.	70 70
5%	14.251	13.908		
10%	14.5125	14.124		
25%	14.773	14.251		
50%	15.987		Mean	16.92374
		Largest	Std. Dev.	2.77602
75%	18.027	23.037	Variance	7.706285
90%	22.854	23.038	Skewness	1.178461
95%	23.037	23.379	Kurtosis	3.343296
99%	23.435	23.435		

LQT

Percentiles		Smallest		
1%	.304	.304	Obs Sum of Wgt.	70 70
5%	.637	.426		
10%	.7145	.479		
25%	.838	.637		
50%	1.0635		Mean	1.2458
		Largest	Std. Dev.	.521123
75%	1.639	2.216	Variance	.2715692
90%	1.989	2.256	Skewness	.6163178
95%	2.216	2.418	Kurtosis	2.612198
99%	2.668	2.668		

OPE				
	Percentiles	Smallest		
1%	.108	.108		
5%	.297	.239		
10%	.425	.265	Obs	70
25%	.556	.297	Sum of wgt.	70
50%	.8215		Mean	.7899
		Largest	Std. Dev.	.3187097
75%	.927	1.506		
90%	1.15	1.517	Variance	.1015759
95%	1.506	1.543	Skewness	.5257411
99%	1.69	1.69	Kurtosis	3.511694
MSH				
	Percentiles	Smallest		
1%	.0001	.0001		
5%	.0002	.0001		
10%	.0004	.0002	Obs	70
25%	.0009	.0002	Sum of wgt.	70
50%	.00975		Mean	.0248529
		Largest	Std. Dev.	.0375337
75%	.0336	.0973		
90%	.09335	.0974	Variance	.0014088
95%	.0973	.107	Skewness	1.995002
99%	.1879	.1879	Kurtosis	7.065374

APPENDIX (II B)

CORRELATION MATRIX RESULT

```
. pwcorr roa lvg fsz lqt ope msh, star (0.05) sig
```

	roa	lvg	fsz	lqt	ope	msh
roa	1.0000					
lvg	-0.2951* 0.0131	1.0000				
fsz	0.2889* 0.0153	0.0952 0.4332	1.0000			
lqt	0.3869* 0.0009	-0.4079* 0.0005	0.2637* 0.0274	1.0000		
ope	0.1141 0.3470	0.4109* 0.0004	0.0999 0.4104	0.0308 0.8000	1.0000	
msh	-0.3920* 0.0008	0.2951* 0.0131	0.2034 0.0913	-0.0743 0.5408	0.0261 0.8301	1.0000

APPENDIX (II C)

POOLED ORDINARY LEAST SQUAR REGRESSION RESULT

. reg roa lvg fsz lqt ope msh

Source	SS	df	MS			
Model	.985182825	5	.197036565	Number of obs =	70	
Residual	1.49955701	64	.023430578	F(5, 64) =	8.41	
Total	2.48473983	69	.036010722	Prob > F =	0.0000	
				R-squared =	0.3965	
				Adj R-squared =	0.3493	
				Root MSE =	.15307	

roa	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lvg	-.0266189	.0164378	-1.62	0.110	-.0594572	.0062194
fsz	.022002	.0071853	3.06	0.003	.0076477	.0363563
lqt	.0668367	.0422062	1.58	0.118	-.0174798	.1511532
ope	.1021069	.0658281	1.55	0.126	-.0294	.2336137
msh	-1.957639	.5269747	-3.71	0.000	-3.010392	-.9048858
_cons	-.3272469	.1203423	-2.72	0.008	-.5676584	-.0868354

APPENDIX (II D)

HETEROSKEDASTICITY AND VARIANCE INFLATION FACTOR RESULTS

```
. hettest
```

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

H0: Constant variance

Variables: fitted values of roa

chi2(1) = **4.17**

Prob > chi2 = **0.0412**

```
. vif
```

variable	VIF	1/VIF
lvq	1.73	0.576534
lqt	1.42	0.701942
ope	1.30	0.771472
fsz	1.17	0.853490
msh	1.15	0.867985
Mean VIF	1.36	

APPENDIX (II E)

FIXED AND RANDOM EFFECT REGRESSION RESULTS

```
. xtset id year, yearly
      panel variable: id (strongly balanced)
      time variable: years, 2005 to 2014
      delta: 1 year
```

```
. xtreg roa lvg fsz lqt ope msh, fe
```

```
Fixed-effects (within) regression      Number of obs   =      70
Group variable: id                   Number of groups =       7

R-sq:  within = 0.2556                Obs per group:  min =      10
      between = 0.1991                  avg   =     10.0
      overall  = 0.0160                  max   =      10

corr(u_i, Xb) = -0.5549                F(5, 58)        =      3.98
                                      Prob > F         =     0.0036
```

roa	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lvg	-.0196818	.0114761	-1.72	0.092	-.0426536	.00329
fsz	-.0298876	.0083979	-3.56	0.001	-.0466977	-.0130774
lqt	.0373251	.0349594	1.07	0.290	-.0326537	.107304
ope	.0285952	.0543742	0.53	0.601	-.0802465	.137437
msh	.2775579	.5468011	0.51	0.614	-.8169833	1.372099
_cons	.5791902	.1487446	3.89	0.000	.2814455	.876935
sigma_u	.2132171					
sigma_e	.09801027					
rho	.82555944					

```
F test that all u_i=0:      F(6, 58) =    16.35          Prob > F = 0.0000
```

```
. xtreg roa lvg fsz lqt ope msh, re
```

```
Random-effects GLS regression      Number of obs   =      70
Group variable: id                   Number of groups =       7

R-sq:  within = 0.0013                Obs per group:  min =      10
      between = 0.7846                  avg   =     10.0
      overall  = 0.3965                  max   =      10

Random effects u_i ~ Gaussian          Wald chi2(5)    =     42.05
corr(u_i, X) = 0 (assumed)             Prob > chi2     =     0.0000
```

roa	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
lvg	-.0266189	.0164378	-1.62	0.105	-.0588364	.0055986
fsz	.022002	.0071853	3.06	0.002	.0079191	.036085
lqt	.0668367	.0422062	1.58	0.113	-.0158859	.1495593
ope	.1021069	.0658281	1.55	0.121	-.0269139	.2311277
msh	-1.957639	.5269747	-3.71	0.000	-2.99049	-.9247873
_cons	-.3272469	.1203423	-2.72	0.007	-.5631136	-.0913803
sigma_u	0					
sigma_e	.09801027					
rho	0					

```
. est store fixed
```

```
. est store random
```

APPENDIX (II F)

HAUSMAN FIXED AND RANDOM TEST, AND LAGRANGIAN MULTIPLIER TEST

```
. hausman fixed random
```

Note: the rank of the differenced variance matrix (0) does not equal the number of coefficients being tested (5); be sure this is what you expect, or there may be problems computing the test. Examine the output of your estimators for anything unexpected and possibly consider scaling your variables so that the coefficients are on a similar scale.

	Coefficients			
	(b) fixed	(B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
lvq	-.0266189	-.0266189	0	0
fsz	.022002	.022002	0	0
lqt	.0668367	.0668367	0	0
ope	.1021069	.1021069	0	0
msh	-1.957639	-1.957639	0	0

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(0) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 0.00
Prob>chi2 = .
(V_b-V_B is not positive definite)

```
. xttest0
```

Breusch and Pagan Lagrangian multiplier test for random effects

roa[id,t] = Xb + u[id] + e[id,t]

Estimated results:

	Var	sd = sqrt(Var)
roa	.0360107	.1897649
e	.009606	.0980103
u	0	0

Test: Var(u) = 0

chi2(1) = 17.70
Prob > chi2 = 0.0000