EFFECT OF AUDIT COMMITTEE CHARACTERISTICS AND OWNERSHIP STRUCTURE ON FINANCIAL PERFORMANCE OF LISTED OIL AND GAS FIRMS IN NIGERIA

BY

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DECLARATION

I declare that the work in this dissertation entitled "***Effect of Audit Committee Characteristics and Ownership Structure on Financial Performance of Listed Oil and Gas Firms in Nigeria***" has been performed by me in the Department of Accounting. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this project dissertation was previously presented for another degree or diploma at this or any other Institution. I take the sole responsibility of all errors therein.

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CERTIFICATION

This project dissertation entitled "***Effect of Audit Committee Characteristics and Ownership Structure on Financial Performance of Listed Oil and Gas Firms in Nigeria*****"** by Zubairu, SHEHU meets the regulations governing the award of degree of Masters of Science in Accounting and Finance of the Ahmadu Bello University, and is approved for its contribution to knowledge and literary presentation.

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ABSTRACT

Financial performance is a rallying point for all stakeholders, be it management, regulators, investors and potential investors. The continuous survival and growth of any business is dependent on its performance and as such the need to look for factors to enhance the continuous performance of firms. It is to this end that the study examines the impact of audit committee characteristics, ownership structure on financial performance of listed Oil and Gas companies in Nigeria over the period of 2010 -2015. The populations consist of nine listed Oil and Gas companies as at 31st December, 2015 while a sample of seven companies were used after eliminating two through criteria. Secondary source of data was used and were obtained through the annual reports and accounts of the selected companies. Panel multiple regression technique was used and Stata 13 was used as tool for data analysis. The result indicates that audit committee composition, audit committee financial expertise, managerial ownership and institutional ownership have significant positive impact on financial performance of listed oil and gas firms in Nigeria. Audit committee size revealed significant negative influence on financial performance of firms. However, the study did not find any significant impact of audit committee meetings on financial performance. The study recommends amongst others that; the members of the audit committee should highly be composed of members with knowledge of finance in order to make them effective which will affect financial performance positively. At least 45% of audit committee members should be financially literate.

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CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

Financial performance of a firm remains one of the major route of assessing its wellbeing and to know whether it will be able to meet financial obligation of all interested parties it is also an indication for possible payment of dividend. Firms owe commitment to their principal, which is maximization of wealth, and to other stakeholders who are also concerned with the financial health of firms (Farouk, 2014). The continuous survival, growth and expansion of firm would hardly be met without sound financial performance. Firms strive to achieve higher performance in the face of stiff competition, globalization and technological advancement; competition is fuelled by entry of small and young firms into the market which threatens the market share of large existing organizations (Maness & Zietlow, 2005). Despite these challenges, firms are expected to excel in their financial performance. However, to ensure the continuous performance of firms, corporate governance mechanisms such as audit committee characteristics and ownership structure must meet up with expectation.

One of the mechanisms of corporate governance is the audit committee that play vital roles in ensuring smooth and efficient management and administration of companies. The audit committee is equally challenged by the recent failures in corporate governance in Nigeria and should be compelled to ensure that sound corporate governance exist. According to CAMA 1990, the audit committee is a committee of shareholders and non-executive directors charged with the responsibility of liaising between the external auditors and the board of directors on one hand, and between management and the external auditors on the other hand. The inclusion of this committee in the corporate governance mechanism raises the expectations of shareholders and the general public for enhanced corporate governance and by extension increase performance of companies. This raised confidence is predicated on perceived checkmating role of the audit committees in ensuring that the board of directors lives up to

their expectation in fulfilling the globally accepted pillars of corporate governance, accountability, fairness, responsibility and transparency. But the rampant failure of corporate governance in Nigeria as manifested in corporate failures throw strong doubt on the effectiveness of audit committees in carrying out this role.

Audit committee may be composed of members with varied backgrounds and occupations as well as experience in an area important to the business, such as financial reporting, auditing, industry insight, risk management, or technology. To fulfil the committee's primary responsibilities, all members should be financially literate and capable of understanding the financial reporting issues and complexities arising from the company's business activities. It is also a requirement that the audit committee members be composed of outsiders who do not participate in the day-to-day running of the business. All this varieties of experience, responsibilities and mixture is expected to have effect on the performance of the firm. Also, the distinct characteristic of 'divorced management from ownership' of modern corporations, make stewardship accounting inevitable in company administration and management. Professional managers who are considered more competent than the owners of the corporations and are thus hired to run and manage the affairs of the companies are expected to guarantee transparency accountability and fairness in their duties (Howard, 2000). This is a basic tenet of corporate governance. It is guaranteed by ensuring that various mechanisms are put in place to ensure seamlessness in accommodating corporate goal (ownership goal) and management goal in an enterprise. There is an ongoing debate in the literature on the impact and merit of the separation of ownership and control. Early theorists such as Williamson (1964) proposed that non-owner managers prefer their own interests over that of the shareholders. Consequently, non-owner managed firms become less efficient than owner-managed firms. The way and manner at which shares are owned in companies may have influence on the performance of such companies.

Oil and Gas is a vital sector in every nation and economies all over the world, In Nigeria, the Oil and Gas industry is at a developing stage with only 9 companies quoted on the Nigerian Stock Exchange as at 31st December 2015. In most cases of corporate governance, Oil and Gas industries is a sensitive sector where activities are said to be carefully monitored and supervised by professionals and regulatory bodies to ensure strict adherence to ethical codes and conduct which are not usually the case. The study of corporate governance, ownership structure as it affects the Oil and Gas industry cuts across various phases of research. It is to this end that this study tries to establish if corporate governance, which is audit committee characteristics and ownership structure affect the performance of the listed Oil and Gas companies in Nigeria.

1.2 Statement of the Problem

The corporate governance culture in Nigeria has consistently failed to be responsible and accountable to the stakeholders and has no deep-rooted mechanism to maintain a balance among the major players such as board of directors, shareholders and management which have resulted in poor financial reporting quality (Bello, 2010). The challenges of corporate governance in Nigeria stems from the culture of corruption and lack of institutional capacity to implement the codes of conduct governing corporate governance because company executives enjoy an atmosphere of lack of checks and balances in the system to engage in gross misconducts since investors are not included in the governing structure (Shehu, 2012).

Audit committee appears to be bedeviled with a great deal of challenges in Nigeria most especially in the area of implementation; though there has been good structure or laid down rules by the Securities and Exchange Commission for public companies and that of Central Bank of Nigeria for Banks. The non-satisfactory performance remaina paradox despites the adoption of corporate governance by public companies.

Performance of corporate bodies is of paramount value to stakeholders in general and shareholders in particular as, on one hand it is a key source for financing the current economic activities, thus helping to maintain a going concern and increase the value of the business, and on the other hand it is the basis for distributing dividends, which in turn may attract investors (and their funds). Thus, it should appear as straightforward that identifying and analyzing those factors (determinants) that influence performance is of great relevance both to practice and academia. Companies are governed by the boards of directors, both executive and non-executive. It is logical to suppose that the managerial abilities of the board of directors would have a significant impact on the entity's performance. It is however not clear-cut whether certain audit committee characteristics regarding its composition would significantly influence the company's performance.

Past studies have investigated the impact of different corporate governance characteristics on firm performance. (See Wintoki & Yang, 2007; Adams & Mehran, 2008; Guest, 2009, Bhagat & Bolton, 2008). Works have been done to examine the relationship between audit committee, ownership structure and financial performance across the globe but, little has been done in Nigerian Oil and Gas industry despite the prevalent financial scandals which have their roots in corporate governance failures. Also, the results from previous findings are mixed and to the best of our knowledge there is no study in Nigeria that has attempted to resolve it in listed Oil and Gas companies in Nigeria. Therefore, to what extent does Audit committee characteristics and ownership structure influence Performance of listed Oil and Gas companies in Nigeria and in what direction?

Studies in this area in Nigeria such as Modum, Ugwoke, and Onyeanu (2014), Aanu, Odianonsen, and Fayoke (2014), Ojulari (2012), Ehikioya (2009), Kajol & Sunday (2008), Ojeka, Iyoha and Obigbem (2013) have either investigated audit committee characteristics or

ownership structure as standalone variables, there is no study that have combined the two studies in a single research which may produce different result.

Ojulari (2012) suggested that future research study should be conducted on an industry basis to see the trend from one industry to another in order to paint a meaningful comparison about the whole picture of Audit committee characteristics and performance in Nigeria. Hence, the decision to focus on the Oil and Gas companies.

1.3 Research Questions

The following research questions were raised based on the identified problem and gaps in previous researches. These questions is expected to be answered at the end of the research.

i. How does audit committee size impacts on financial performance of listed Oil and Gas firms in Nigeria?

ii. How does Audit committee composition have influence on financial performance of listed Oil and Gas firms in Nigeria?

iii. How does Audit committee meetings play significant role in influencing financial performance of listed Oil and Gas firms in Nigeria?

iv. How does audit committee financial expertise have impact on financial performance of listed Oil and Gas firms in Nigeria?

v. How does managerial ownership have impact on financial performance of listed Oil and Gas firms in Nigeria?

vi. How does institutional ownership impacts on financial performance of listed Oil and Gas firms in Nigeria?

1.4 Objectives of the Study

The main objective of this study is to assess the impact of Audit Committee characteristics and ownership structure on financial Performance of listed Oil and Gas firms in Nigeria. The specific objectives are:

i. to determine the effect of audit committee size on financial performance of listed Oil and Gas firms in Nigeria.

ii. to investigate the impact of audit committee composition on financial performance of listed Oil and Gas firms in Nigeria.

iii. to determine the effect of audit committee meetings on financial performance of listed Oil and Gas firms in Nigeria.

iv. to assess the impact of audit committee financial expertise on financial performance of listed Oil and Gas firms in Nigeria.

v. to determine the impact of managerial ownership on financial performance of listed Oil and Gas firms in Nigeria.

vi. to assess the effect of Institutional ownership on financial performance of listed Oil and Gas firms in Nigeria.

1.5 Research Hypotheses

Based on the highlighted objectives, the following hypotheses are formulated in null form:

Ho_1: Audit committee size has no significant effect on financial performance of listed Oil and Gas firms in Nigeria.

Ho_2: Audit committee composition has no significant influence on financial performance of listed Oil and Gas firms in Nigeria.

Ho_3: Audit committee meeting has no significant effect on financial performance of listed Oil and Gas firms in Nigeria.

Ho_4: Audit committee financial expertise has no significant influence on financial performance of listed Oil and Gas firms in Nigeria.

Ho_5: Managerial ownership has no significant contribution on financial performance of listed Oil and Gas firms in Nigeria.

Ho_6: Institutional ownership has no significant effect on financial performance of listed Oil and Gas firms in Nigeria.

1.6 Scope of the Study

The study assesses the impact of audit committee characteristics and ownership structure on performance of Oil and Gas Companies listed on the Nigerian Stock Exchange as at 31st December 2015. The study covers the period of six (6) years starting from 2010 to 2015. The justification for choosing this period is based on the fact that it is a period in which the oil and gas sector witnessed dwindling financial performance. The variables captured are audit committee size, audit committee composition, audit committee meeting, audit committee financial expertise, managerial ownership, and institutional ownership, while return on asset and return on equity serve as a proxy for financial performance.

1.7 Significance of the Study

The study would have contribution to literature owing to the six Corporate Governance Structure proxy used i.e. Audit committee financial expertise, Audit committee size, Audit Committee Composition, Audit Committee Meeting, Managerial Ownership, and Institutional Ownership. This will make available to greater extent proof on the interconnected nature of Audit committee characteristics, ownership structure and Performance.

Secondly, results from this research will provide an understanding and appreciation of link between Audit committee characteristics, ownership structure and Performance. Gaining such fact will enable listed Oil and Gas companies to reap the benefits of having a well-

structured audit committee in terms of its size, composition and the level of financial literacy of its members.

Thirdly, it is expected that the study would assist management as per information on any of the Audit committee characteristics, ownership structure that contributes in increasing the Performance of Oil and Gas Firms.

Lastly, the study would assist the regulators and others such as the management, Investors and potential investors in assessing the practice of good internal mechanisms such as audit committee in order to ascertain whether much have to be done by putting an effective and efficient mechanisms in place in order to improve the financial performance of these organizations.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter discusses the relevant literature to the study. These comprise of Audit committee, corporate ownership structure and financial performance. It also presents the review of empirical studies on the relationship between audit committee, ownership structure and financial performance. The chapter also discusses the theoretical framework for the study.

2.2 Concept of Audit Committee

According to CAMA 1990, the audit committee is a committee of shareholders and non-executive directors charged with the responsibility of liaising between the external auditors and the Board of directors on one hand, and between management and the external auditors on the other hand. Audit Committees are the most important recent development in the corporate governance structure and are expected to contribute significantly in this respect (Modun, Ogwoke & Onyeanu, 2013). Shamsudden (2003) opines that members of the committee should possess qualities such as integrity, dedication, and a thorough understanding of the business of the company. Moreover, the composition of the Audit Committee (AC) and the manner in which they exercise their governance and oversight responsibilities have a major impact on the overall internal control mechanism of a company.

Audit committee is considered vital to maintaining transparency in a firm. The members of audit committee are also part of the board of directors which is responsible for formulating strategies for improving the financial health of the firm. So if the audit committee presents a true picture of financial statements in front of the members of board of directors and the CEO, they would be in a better position to draw effective strategies towards increasing the performance of the firm (Bhardwaj & Rao,2015).

The concept of audit committees differs according to the goals, functions, and responsibilities assigned to them. Al-Thuneibat (2006) defined it as the committee that is composed of non-executive directors in organization. The major goal behind forming the audit committee is to increase auditing quality and reduce questioning of directors board when the external auditors is performing their function. Arens et al. (2009) defines the committee as group of persons selected from members of the board of directors who are responsible for retaining independence of the auditor.

Nigeria tried to enact a group of legislations to support corporate governance, and one of them is the stock exchange law of 2003 and modified in 2011. That law obliges all Nigerian joint-stock companies to form an audit committee consisting of three non-executive members from the company's board of directors. The duties and responsibilities of such committee are determined by the instructions issued by the board which comply with article (46). It also securesbanking law No. (28) 2000 which obliges all Nigerian banks to form audit committees. Articles No. (32) And (33) of this law determine responsibilities and duties. The instruction No. (1) 1998 issued by Nigerian Stock Exchange and requested all Nigerian joint-stock companies to form audit committees.

Modern disclosure instructions were issued and were put into effect in the beginning of 2003. Article No. (15) Explained how to form the audit committee, determining its duties and responsibilities. The most recent concept of audit committees in Nigerian milieu was the one issued by Nigerian Stock Exchange “directory of governance rules of companies listed in Nigerian Stock Exchange 2011” which stipulates that the audit committee should consist of non-executive members of the board of directors who should not be less than three. Two of them at least should be independent members, and one of them chairs the committee. All members of the committee should be equipped with knowledge of financial and accounting affairs. Decisions of the committee are taken by absolute majority of members. It should also

put down written procedures to regulate its duties and commitments with the approval of the board of directors. It has the right to ask for legal, financial, administrative or technical opinion from any external consultant.

2.3. Concept of Ownership Structure

The relationship of ownership structure and firm performance is an important area of study in the broader field of Corporate Governance from last two decades (Wahla, Alishan & Hussain, 2012). Research revealed that firm's market value is based not on its investment projects only but other factors such as financial structure, dividend policy, its governance / control and ownership structure. The impact of ownership on firm performance is thereby two fold. On the one hand, concentrated ownership can provide for better control of management, as size of ownership stake and the incentive to monitor are positively correlated (Shehu and Jibril, 2012). In turn, this should improve firm performance and equally benefit minority shareholders. On the other hand, it can come with costs for minority shareholders as the controlling owners might try to expropriate from them (Kirchmaier & Grant, 2006)

Firms may be owned by a diverse mix of different types of investors. With few exceptions, these investors become owners in firms to accomplish financial objectives. However, they may differ with respect to their trading styles, clientele, legal and regulatory environments, and their ability to gather and process information (Brian, Certo, Ireland & Reutzel, 2010).

Ownership Structure of a company refers to the distribution of control and ownership in the company (Farouk & Shehu, 2014). Control is seen as the ability to effect decisions and for shareholders it is represented by voting power. While ownership is regarded as the right to cash flows of the company and it is proportionate to the shareholdings (Shehu, 2012). Ownership structure is one of the main dimensions of corporate governance and is widely seen to be determined by country-level corporate governance characteristics such as the

development of the stock market and the nature of state intervention and regulation (La Portaet al., 1998). Ownership structure is defined not just by the distribution of equity with regard to votes and capital but also by the identity of the equity owners. These structures are of major importance in corporate governance because they determine the incentives of managers and thereby the economic efficiency of the corporations they manage. A classic reference is Jensen and Meckling (1976).

(a) Managerial Ownership

According to Christiawan and Tarin (2007) as cited in Muhammad, Indra and Yunika (2013) managerial ownership is a situation where the manager has shares, in other words, someone is a manager as well as the company's shareholder. According to Phani, Reddy, Ramachandran, and Asish (n.d.) Insider ownership reflects the governance problem arising due to variance in the cash flow and control rights such ownership entails. Insider ownership as defined in the governance literature has two dimensions. In the first case insider ownership can be defined as shares owned by managers (manager-owner), while some managers are assigned ownership rights as a post facto incentive mechanism by owners. In the second case, insider ownership is defined by the de facto ownership rights held by an insider who promotes and also manages (owner-manager).

(b) Institutional Ownership

Institutional Investors refers to the ownership stake in a company that is held by large financial organizations, pension funds or endowments. Institutions generally purchase large blocks of a company's outstanding shares and can exert considerable influence upon its management.

Bartov, Radharkrishnan and Krinsky (2000) posited that institutional owners are professional investors who have long-term focus. With respect to the amount of their investments and their know-how, they serve to control the management. Chi-keung, (2013)

described institutional shareholders to includes holders of pension funds, investment trusts, and insurance companies. This kind of shareholders are powerful because they invest large amounts of money into a firm and thus have greater incentive to monitor their interest in the firms. Also, when the firm performs poorly, they can place pressure on the managers of the firm and even withdraw their investment. According Murwaningsari (2009) as cited in Muhammad et al (2013) defined institutional ownership as an institution that has a great importance to the investments made, including equity investments. So, usually the responsibility of the institution is to submit certain divisions to manage the investment company. Since the development of the institutional investment professionals monitor the level of control over the actions of management are very high that the potential for fraud can be reduced. Oehl (2000) considered Institutional ownership as an important channel via which minority shareholders are protected against expropriation of controlling shareholders in emerging markets.

2.4. Concept of Financial Performance

Sonnentag and Micheal (2001) documented that when conceptualizing performance, one has to differentiate between an action (that is behavioral) aspect and an outcome aspect of performance. According to them, the behavioral aspect refers to the consequences or result of the individual behavior. The outcome aspect describes behavior which may results in outcomes such as number of engines assembled, and sales figures, etc. Based on this, financial performance is defined as subjective measures of how well a firm can use asset from its primary mode of business and generate revenues. The term is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. It can also be referred to as the business independent criteria to assess its overall outcomes in relation to its own goals.

Zeitun and Tian (2007) regarded the concept of performance as controversial issues in the financial strategy of most corporate organization due to its multi-dimensional meanings. According to them, performance measures are either financial or organizational. Financial performance such as profit maximization, maximizing profit on assets, and maximizing shareholders benefits are core measure of firms' effectiveness (Chakravarthy, 1986). Operational performance measures such as growth in sales and growth in market share provide a broad definition of performance as they focus on the factors that ultimately lead to financial performance (Zeitun&Tian, 2007).

Similarly, Heng and San (2011) advanced other ways of measuring corporate performance which are productivity, profitability, growth or even customer's satisfaction. Additionally, Barbosa and Louri (2005) opined that financial measurement is one of the tools which indicate the financial strengths, weakness, opportunities and threats. These financial measurements according to them include Return On Investment (ROI), Residual Income (RI), Earnings Per Share (EPS), dividend yield, Price Earnings Ratio (PER), book value per share. Etc. However, the most commonly used performance measure proxies are Return On Asset (ROA), Return On Equity (ROE) or Return On Investment (ROI). These performance measures proxies are termed as accounting measures. There are other measures of corporate performance called market performance measures such as ratio of price per share to the earnings per share (P/E), Market value of equity, Tobin's Q. All these can also be referred to as the financial measures of performance.

Firm performance is critical to the economic well-being of the owners and the overall economy. For instance, Flamholtz, Das and Tsui (1985) analyzed the concept of performance and its measurement from traditional perspective, where they regarded the term as an element of planning and control cycle that captures performance data, enables control feedback, influences work behavior. In the words of Simons (1990) the concepts of performance revolves

round monitoring and strategic implementation. It's mainly underpinned by a financial perspective (Johnson & Kaplan, 1987). Generally, performance measurement plays a key role in the development of strategic plans and evaluating the achievement of organizational objectives and serve as a signaling and learning device (Simons, 1990; and Ittner & Larcker, 1998).

Khan, Shah and Atta (2009), regarding the company's present and future performance opined that performance can be seen from many variables, such as stock price performance, reported earnings, or market share of a firm. According to them, investors are keen in the stock return and upward trend in the stock return, which attracts investors towards investment in stock that will further raise the demand in the stock market and will lead to increasing stock prices and performance of the stock market.

Mubaraq (2005) opined that there are many measures of performance based on non-financial information as not all activities of an enterprise are capable of being expressed in monetary terms, and financial statements only are not adequate to measure all aspect of performance. According to him, the non-financial measures of performance: staff turnover, training time per employee, number of production stoppage through strikes, absenteeism and accidents, number of complaints received, number of customers and suppliers, output per employee, production lead time, adherence to quality and product quality.

As a performance measure, ROA is generally considered as good internal management ratio because it measures profit against all the assets an organization uses to make those earnings. Hence, it is a way to evaluate the organization's profitability, performance and effectiveness. ROA provides good information about a firm's financial performance in terms of using assets to create income. It shows the percentage of profit that a corporation earns in relations to its overall resources. Thus, it is considered as a measure of efficiency too. A firm

with high ROA means that it is good at translating assets into profits. ROA is generally seen as a stable financial performance ratio, an increase in which is a sign of good performance.

Earnings per share(EPS) represent the portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serve as an indicator of a company's profitability. Earnings per share are used for the purpose of evaluating the prices of company's shares and it gives an idea of its growth in earnings over the years.

Net profit margin is a ratio derived from the operating income section of an income statement compared to sales. Net profit margin is obtained by dividing profit before tax by sales and this shows how efficiently the company is able to generate profits from its primary operations. This measurement is especially useful to investors wanting to see how profitable and stable the company operations are.

Tobin's Q-ratio (Q), is hybrid in nature. It is measured by dividing the sum of the market value of equity and the book value of debt by the book value of total assets (Kajola Sunday, 2008)

Return on equity (ROE) measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. It is often viewed as a hybrid measure of firm performance because it incorporates profit which is accounting based and equity which is market based. The measure is determined by dividing profit after tax by equity.

2.5 Review of Empirical Studies

Researches have been conducted on this topic cutting across various sectors both within and outside Nigeria. However, some found positive relations between audit committee, ownership structure and financial performance, while some found negative relationships among the variables. Some of these researches are not without limitations. This section will make an attempt to bring out issues that may warrant the need for this study.

2.5.1 Audit Committee Size and Performance

With regards to the agency theory, the management-shareholders conflict often leads to top management's decision to serve their own interests and not the shareholders, particularly when management is a very opportunistic person. Therefore, audit committees that are efficient and effective must be able to resolve conflicts and to work towards sustainable performance (Ebrahim, Faudzia& Abdullah, 2014).

Zubair (2016) evaluate the impact of Audit Committees (AC) on the performance of listed Deposit Money Banks (DMBs) in Nigeria. The study employs qualitative and quantitative research methods using correlation and survey research designs. Panel regression technique of data analysis were used for the analysis. The population of the study includes all the listed Deposit Money Banks. The secondary data was analyzed using sample size of 16 through census sampling technique. The study reveals a significant positive relationship between components of audit committee (size) and the performance of listed deposit money banks in Nigeria.

Kipkoech (2016) establish the effect of audit committee size and experience on firm performance among listed firms in Nairobi securities exchange, Kenya. The study is informed by agency theory and institutional theory. The study was conducted in firms listed on the Nairobi Securities Exchange for the period ranging from 2006 to 2011. Multiple Regressions was used to test hypothesis. Research findings showed that audit committee experience and audit committee size has a significant effect on firm performance.

Aanu, Odianonsenand Foyeke (2014) explores the influence of audit committee effectiveness on firm's performance using four characteristics: independence, financial expertise, size, and meetings of the audit committee. The performance measures were Return on Equity (ROE), Return on Asset (ROA) and Return on Capital Employed (ROCE). Twenty-five (25) manufacturing firms were selected and from which data were collected for the period

(2004-2011). Empirical analysis was carried out using regression and correlation. The result of the analysis showed that size of audit committee has no significant relationship with all performance.

Hamdan, Sarea and RedaReyad (2013) investigate the relationship between audit committee characteristics (namely: audit committee size, financial experience, and audit committee independence) on performance, which includes financial, operating and stock performance. The study sample contained 106 corporations from the financial sector listed in the Amman Stock Exchange Market with a total of 212 observations during the 2008-2009 sample years. The results showed that the audit committee size has an impact on financial and stock performance. It does not have an effect on operating performance.

Al-Matari, Al-Swidi, BtFadzil, and Al-Matari (2012) examines the relationship between the internal corporate governance mechanism related to the board of directors, the audit committee characteristics and the performance of the Saudi companies listed in the Saudi stock exchange (TADAWL) in 2010, excluding financial companies. Audit Committee size (ACSIZE) was found to have a significant relationship with firm performance (but in the opposite direction to expectation).

The size of the audit committee is one characteristic considered to be relevant to the effective discharge of its duties (Cadbury Committee, 1992). A minimum of three audit committee directors has been proposed by a number of corporate governance reports (BRC, 1999; New York Stock Exchange, 2002; CMA, 2006). It is argued that a larger committee has greater organizational status and authority (Kalbers & Fogarty, 1993; Braiotta, 2000) and a wider knowledge base (Karamanou & Vafeas, 2005). However, an audit committee can suffer from process losses and diffusion of responsibility if it becomes too large (Karamanou & Vafeas, 2005).

It is the requirements of some Stock Exchanges that the audit committee for the listed companies be made up of three members (Al-Sa'eed & Al-Mahamid, 2011). However, CAMA (1990) sec. 359 specifies the maximum number of audit committee members in Nigeria as six but did not specify the minimum. Bedard, Chtourou and Courteau (2004) have argued that when the audit committee is large, the control and oversight functions over the accounting and financial processes increase. In agreement to this Anderson, Mansi and Reeb (2004) found that large size audit committees have the potential to protect and control the process of accounting and finance by bringing in greater transparency. A very large audit committee can bring about dispersion of responsibility and process losses (Karamanou &Vafeas, 2005).

2.5.2 Audit Committee Composition and Performance.

The report of the Blue Ribbon Committee (BRC) considers the composition as an essential quality of the audit committee in order to fulfil its oversight role. Indeed, this report argues that several recent studies have identified a correlation between the independence of the audit committee, the level of supervision and the level of fraud in the financial statements Several previous studies use the percentage of outside directors to measure independence like Marrakchi & al (2001) and Bradbury et al. (2006). In effect, these studies note that audit committees composed mostly or exclusively by outside directors are more independent than other committees.

Hamdan, Sarea, and RedaReyad (2013) investigate the relationship between audit committee characteristics (namely: audit committee size, financial experience, and audit committee independence) on performance, which includes financial, operating and stock performance. The study sample contained 106 corporations from the financial sector listed in the Amman Stock Exchange Market with a total of 212 observations during the 2008-2009 sample years. The results showed that the audit committee size has an impact on financial and stock performance. It does not have an effect on operating performance.

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Glover-Akpeyand Azembila (2016) examined the association between the characteristics of audit committees and performance of firms. Data were collected from a sample size of 36 trading stocks on the Ghana Stock Exchange for the financial year of 2015. The number of meetings and financial experts among other characteristics were the predictors of the performance of the traded stock on the Ghana Stock Exchange (GSE). To test the hypothesis for the study, Logit cross-sectional regression using SPSS 17.0 version was utilized. This study revealed that the number of independent members on the audit committee had no influence on the performance of the firms.

Al-Matari, Al-Swidi, BtFadzil, and Al-Matari (2012) examines the relationship between the internal corporate governance mechanism related to the board of directors, the audit committee characteristics and the performance of the Saudi companies listed in the Saudi stock exchange (TADAWL) in 2010, excluding financial companies. Audit Committee size (ACSIZE) was Audit Committee Independence (ACIND) was found to be as expected directions but insignificantly related to firm performance measure.

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on Equity (ROE), Return on Asset (ROA) and Return on Capital Employed (ROCE). Twenty-five (25) manufacturing firms were selected and from which data were collected for the period (2004-2011). Empirical analysis was carried out using regression and correlation. The result of the analysis showed a positive significant relationship between independence and ROA, ROE and ROCE.

Similarly, Klein (2002) shows that following the publication of the BRC, the NYSE and NASDAQ have changed their requirements concerning the audit committee. Indeed, these amendments concern the obligation to establish at least three independent directors on the audit committee for listed companies. Bryan et al (2004) found that the independence of the audit committee has a positive influence on the quality of earnings. In addition, in a study on the main characteristics of audit committees, Keasey et al (1993) showed that the independence of the members of the audit committee is the most important criterion with effect on the reliability of financial statements.

Chan and Li (2008) found that independence of the audit committee (i.e., to have at least 50 percent of expert-independent directors serve on audit committee) positively impacts the firm performance as measured by (Tobin's Q). Similarly, Ilona, (2008) showed that there is a positive relationship between audit committee independence and firm performance as measured by ROA. Moreover, Erickson et al. (2005) asserted that independent directors can reduce agency problems. Based on the argument provided by Erickson et al. (2005) that directors' independence can reduce the agency problem, it can similarly argue that independent audit committee can also reduce the agency problems.

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measured by ROA. Moreover, Erickson et al. (2005) asserted that independent directors can reduce agency problems. Based on the argument provided by Erickson et al. (2005) that directors' independence can reduce the agency problem, it can similarly be argued that independent audit committee can also reduce the agency problems. In other words, a positive relationship between audit committee independence and firm performance is expected and justified.

2.5.3 Audit Committee Meeting and Performance

Al-Mamun (2014) was of the view that regular meetings of audit committee could help reduce agency problems and information asymmetry of a firm by providing fair and timely information to investors. If the audit committee is independent, and work of the committee fair, then frauds occurring in firms could be curbed (Yunos et al., 2014).

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The numbers of audit committee meeting are considered to be an important attribute for their monitoring effectiveness (Lin, Li, & Yang, 2006). Anderson, Mansi and Reeb(2004) noted that audit committee monitors the internal control and provides reliable information to the shareholders. Therefore, audit committee strengthens the internal auditing function and oversees management's assessment of business risk (Hsu, 2007). The number of audit committee meetings is considered as a proxy for audit committee activity (Xie et al., 2003).

Therefore, the audit committee that meets more frequently with the internal auditors is better informed about auditing and accounting issues. When an important auditing or accounting issue arises, the audit committee can direct the proper level of internal audit function to address the problem promptly. Therefore, an audit committee that meets frequently can reduce the possibility of financial fraud (Abbott et al., 2004; Raghunandan et al., 1998). Inactive audit committees with fewer numbers of meetings are unlikely to supervise management effectively (Menon& Williams, 1994).

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Beasley et al. (2000) found that fraudulent firms with earning misstatements have fewer audit committee meetings than non-fraud firms. An active audit committee with more meetings

has more time to oversee the financial reporting process, identify management risk and monitor internal controls. As a result, firm performance increases with audit committee activity.

2.5.4 Audit Committee Financial Expertise and Performance

The issue of financial expertise for at-least one audit committee member was first recognized under Section 359 (3) and (4) of the CAMA. This was further re-echoed in the SEC code of 2011. Bouaziz (2012) found that "audit committee financial expertise has a significant impact on returns on equity and return on asset". Based on the above evidence, a positive relationship between audit committee financial expertise and firm financial performance is expected.

Glover-Akpeyand Azembila (2016) examined the association between the characteristics of audit committees and performance of firms. Data were collected from a sample size of 36 trading stocks on the Ghana Stock Exchange for the financial year of 2015. The number of meetings and financial experts among other characteristics were the predictors of the performance of the traded stock on the Ghana Stock Exchange (GSE). To test the hypothesis for the study, Log it cross-sectional regression using SPSS 17.0 version was utilized. This study revealed that the number of independent members of the audit committee with finance or accounting degrees impacted negatively on the firm's performance.

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Güneş and Atılgan (2016) did comparison of the effectiveness of audit committees in the UK and Turkish Banks. This study measures the effectiveness of audit committees (ACs) on bank performance via using some of the main bank performance indicators which are return on asset (ROA), return on equity (ROE) and net interest margin (NIM) in the Turkish and the UK banks during 2006-2010. The study found that audit committee financial expertise has significant negative influence on financial performance.

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2.5.5 Managerial Ownership and Performance

The existing literature has examined the relationship between the proportion of shared owned in the firm by insiders and board members (or insider ownership) and firm value. In studies that assume that insider ownership is exogenous. Morck, Shleifer, and Vishny (1988),

McConnell and Servaes (1990), Hermalin and Weisbach (1991), Kole (1995), Bohren and Odegaard (2003) and McConnell, Servaes and Lins (2003) found a non-monotonic relationship between insider ownership and firm value. Smith and Watts (1992), Gaver and Gaver (1993), Himmelberg, Hubbard, and Palia (1999), and Demsetz and Villalonga (2001) find that observable and unobservable firm and industry characteristics can explain the relationship between insider ownership and firm value. Many of these studies use a fixed-effects approach to capture the effect of unobservable characteristics assuming that they are not time varying. But characteristics such as market power, intangibles, monitoring technologies (Himmelberg, Hubbard, &Palia,1999) and managerial skill (Bertrand &Schoar, 2003) can clearly vary over time thereby decreasing the appropriateness of the fixed-effects approach. In addition, Zhou (2001) shows that the fixed-effect approach has low power in examining the relationship between governance and performance.

Gugong, Aruguand Dandago (2015) examines the impact of ownership structure on the financial performance of listed insurance firms in Nigeria. The study uses panel data for seventeen (17) firms for the period 2001 – 2010 (10 years). There are several aspects and dimensions of corporate governance, which may influence a firm's performance but this study focuses on two aspects of ownership structure: namely managerial and institutional shareholding. Firm's performance has been measured through Return on Asset (ROA) and Return on Equity (ROE). Findings indicate that managerial ownership has positive significant impact on firm's performance as measured by ROA and ROE.

Lappalainen and Niskanen (2012) examined financial performance of SMEs: impact of ownership structure and board composition. The data for this study were collected through a private survey. The financial data were collected from the Voitto register and observations were made from 2000 to 2005. The authors employ panel data estimation and 2SLS methods in their analyses. Results suggest that the ownership structure affects both the growth and the

profitability of small private firms. Firms with high managerial ownership levels exhibit higher profitability ratios but have lower growth rates.

Fahlenbrach and Stulz (2007) found some evidence that increases in managerial ownership which are associated with increases in Tobin's Q, but find no relationship between Tobin's Q and decreases in managerial ownership.

Hayes et al. (2005) explore the interactions between the percentage of shares held by the directors and firm performance. Using a sample of S&P 500 firms for the period 1997 and 1998, they report a significant positive relationship between the percentage of shares held by independent directors serving on the finance& investment committee as well as on the strategy committee (but not in the other committees) and firm's performance. A positive relationship is found between the fractions of shares held by CEOs and firm's performance.

2.5.6 Institutional Ownership and Performance

A considerable body of research has focused on the role of institutional investors as corporate monitors. The rationale is that due to the high cost of monitoring; only large shareholders such as institutional investors can achieve sufficient benefits to have an incentive to monitor (Grossman & Hart, 1980). Indeed, Shleiferand Vishny (1986) note that large shareholders may have a greater incentive to monitor managers than members of the board of directors, who may have little or no wealth invested in the firm. Moreover, large institutional investors have the opportunity, resources, and ability to monitor, discipline, and influence managers.

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shareholding. Firm's performance has been measured through Return on Asset (ROA) and Return on Equity (ROE). Findings indicate that institutional ownership has positive significant impact on firm's performance as measured by ROA and ROE.

Lee investigated the impact of Ownership Structure on Financial Performance of South Korea. The focus was on the role of two main dimensions of the ownership structure: Ownership concentration (i.e., the distribution of shares owned by majority shareholders) and identity of owners (especially, foreign investors and institutional investors). The study used panel data for covering 2000-2006, the study found that firm performance measured by the accounting rate of return on assets generally improves as ownership concentration increases, but the effects of foreign ownership and institutional ownership are insignificant.

Gitundu1, Kiprop, Kibet and Kisaka (2016) investigated the influence of ownership structure on financial performance of privatized companies in Kenya for the period of 2007 to 2013. Data was extracted from prospectuses and financial reports of privatized companies, obtained from the Capital Markets Authority (CMA) and the Nairobi Stock Exchange (NSE). A unit root test was used to examine stationarity of data while a Hausman test determined the appropriate regression model. This study used a Fixed Effects (FE) regression model with a robust standard error option to control for heteroskedasticity and contemporaneous correlation which may lead to spurious results. Institutional shareholders have a positive influence on ROA and technical efficiency. Large individual investors have a positive influence on cost efficiency.

Elghouti (2014) examined the effect of Ownership Structure on Firm Stock Returns and Financial Performance. The results show that institutional ownership represented by companies, holdings and individuals have negative effect on financial performance represented by ROA and ROE. Also, institutional ownership has no effect on debt to equity ratio except

banks that have negative and significant effect and employee associations that have positive and significant effect.

McConnell and Servaes (1990), Nesbitt (1994), Smith (1996), and Del Guercio and Hawkins (1999) have found evidence consistent with the hypothesis that corporate monitoring by institutional investors can force managers to focus more on corporate performance and less on opportunistic or self-serving behavior. On the other hand, Maug (1998) notes that whether institutions use their ability to influence corporate decisions is partially a function of the size of their shareholdings. If institutional investor shareholdings are high, shares are less marketable and are thus held for longer periods. In this case, there is greater incentive to monitor a firm's management. However, when institutional investors hold relatively few shares in a firm, they can easily liquidate their investments if the firm performs poorly, and therefore have less incentive to monitor. Studies such as (Coffee, 1991; Bhide, 1994; Denirag, 1998; and Maug, 1998) conclude that institutional investors' goal of maintaining the liquidity of their holdings and their desire for short-term profit outweighs the benefits of monitoring management in the hope of eliciting higher long-term profitability.

On balance, however, it seems clear that large stockholders and institutional investors have become increasingly active in corporate governance, especially in underperforming firms. Bethel et al. (1998) found that block share purchases by institutional investors are most likely in highly diversified firms with poor profitability because of their potentials to rise when they participate in the activities and management of such firms through their shares and voting rights. Further, these activist purchases are followed by increases in asset divestitures, decreases in mergers and acquisitions, and abnormal share price increases. Gillan and Starks (2000) found that corporate governance proposals sponsored by institutional investors receive more favorable votes than those sponsored by independent individuals or religious organizations.

2.6 Theoretical Framework

There are several theories that explain the relationship between audit committee, ownership structure and financial performance in the literature of accounting. This study limits itself to the use of agency theory to anchor the study as it is relevant in resolving conflict of interest between management and owners

It is an acknowledged fact that the principal-agent theory is generally considered the starting point for any debate on the issue of corporate governance emanating from the classical thesis on The Modern Corporation and Private Property by Berle and Means (1932). According to this thesis, the fundamental agency problem in modern firms is primarily due to the separation between finance and management. Modern firms are seen to suffer from separation of ownership and control and therefore are run by professional managers (agents) who cannot be held accountable by dispersed shareholders. In this regard, the fundamental question is how to ensure that managers follow the interests of shareholders in order to reduce cost associated with principal-agent theory? The principals are confronted with two main problems. Apart from facing an adverse selection problem in that they are faced with selecting the most capable managers, they are also confronted with a moral hazard problem: they must give agents (managers) the right incentives to make decisions aligned with shareholder interests.

The Agency theory view directors as the agent of the shareholders and therefore there is a need for them to act in the best interest of the shareholders. In this situation, sometimes the agent may not act in the best interest of the shareholders which result in an agency loss situation. The agency theory stresses the separation of ownership (principal) and managers (agent) in an organization, therefore it is believed that managers may sometimes pursue opportunistic behavior which may conflict with the goal of the owners (principals) and therefore destroy the wealth of the shareholders. Advocates of the agency approach view the

manager (directors) as an economic institution that will mitigate the problems and serves as the guardian to shareholders (Hermalin and Weisbach 2000, Fama and Jessen 1988).

This study adopts agency theory due to its relevance in resolving conflict that may arise between managers (agent) and shareholders (principal) of the companies, its empirical evidence by the study conducted by several scholars on Corporate Governance and firm performance in developed countries, will link the variables concern in the Nigerian situation. Key postulations of agency theory serve as the bases for the adoption.

However, for the purpose of this study agency theory will be preferred. This theory can be used to explain the impact of Corporate Governance on firm performance.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter discuss the methodology adopted in this study. This comprises of the population, source and methods through which the data was collected. The techniques employed in the analysis of this data and the justification for the technique used are also contained in the chapter. Finally, the variable measurement, model specification and justification for use of control variables were presented.

3.2 Research Design

The study adopts the Ex-post facto design for the study. The design for the study is considered appropriate in that it is better in establishing the correlation Audit committee and ownership structure influence on the financial performance of oil and gas firms in Nigeria. Ex-post factor design according to Denga and Ali (1983), is a design which helps to investigate possible cause and effect relationship by first identifying some existing consequence and searching back by collecting and analyzing data to establish possible causal factors.

3.3 Population of the study

The study is limited to listed Oil and Gas Companies in the Nigerian Stock Exchange as at 31st December, 2015. The number of listed Oil and Gas Companies as at 2015 Nigerian Stock Exchange Fact book was nine. These are Oando Plc, Afroil Plc, Beco Petroleum Product Plc, Conoil Plc, Eterna Oil Plc, Forte Oil Plc, Mobil Oil Nigeria Plc, MRS Oil Nigeria Plc and Total Nigeria Plc (NSE Factbook, 2015)

3.4 Sample Size and Sampling Techniques

The criteria used to select the sample size are as follows:

i. Oil and gas companies should have been listed before 2010; and

ii. Oil and Gas companies should have not had changed in their name from 2010 to 2015. The criteria lead to elimination of Beco oil because it was listed after 2010, while Forte oil changed their name from African Petroleum which left the sample size to seven (7) companies out of nine. These companies are part of the major players within the Oil and Gas Companies.

3.5 Source and Method of Data Collection

This study source data through secondary source. This source has been adjudged a better source as it may be less free from bias unlike the primary source. The data was extracted from the published audited annual reports and accounts of those companies from the period of 2010 to 2015. Audit committee data and ownership structure data were extracted from the director's report, while the data for financial performance was extracted from the statement of comprehensive income and statement of financial position.

3.6 Data Analysis Techniques and Justification

Panel Multiple regression was adopted to investigate the model of the study. Descriptive statistics was used in describing the nature of the data, while correlation analysis was conducted to ascertain the level and magnitude of relationships amongst the variables. Regression was run in order to make inferences from the outcome of the result as to their impact, direction and the significance level of their impact to the dependent variable financial performance. Stata13 was used as a tool of data analysis. Robustness tests such as multicolinearity test, normality test, heteroscedasticity test, hausman specification test, langrange multiplier test were conducted. This enable the researcher ascertain the validity of the results for the study. Normality test was conducted using the skewness, kurtosis and Shapiro wilk. Multicolinearity test to check for correlation among the independent variables of the study using tolerance value and the variance inflation factor (VIF). Breusch-Pagan / Cook-Weisberg was used to test for presence or absence of heterogeneity. In order to decide the more effective model between the fixed effect and

Random effect, Hausman specification test was used. Langrange multiplier test was estimated to check for panel effect where the hausman specification test favours the random. Where the langrange result turnout to be significant, the Random effect result was interpreted for the analysis otherwise robust ordinary least square.

3.7 Variable Measurement

The variables for the study are performance, Audit committee size, Audit committee composition, Audit committee meetings, Audit Committee financial expertise, Managerial Ownership and Institutional Ownership

Table 3.1 Variable Measurement

Variable	**Nature of Variable**	**Proxy (ies)**	**Measurement**
Financial Performance	Dependent	Return on Assets (ROA)	Profit after tax divided by total assets
Audit committee characteristics and Ownership structure	Independent Variable	Audit Committee size (ACS)	Total Numbers of Audit committee members
		Audit Committee Composition (ACC)	% of Outside members on the Audit Committee
		Audit Committee Meeting (ACM)	Total number of meetings held by Audit Committee members in a year
		Audit committee financial expertise (ACFE)	Proportion of audit committee members that has financial expertise (accounting and professional knowledge)
		Managerial Ownership (MO)	% of Directors shareholdings
		Institutional Ownership (INST)	% of Institutional shareholdings
		Firm Size (Size)	Natural log of total assets

Source: Compiled by Author

Return on Asset (ROA) was used to proxy financial performance. ROA is adjudged a better measure of financial performance because it measures the rate at which the organization's assets are put to use and the yield from the effective and efficient use of the total assets. Though, ROA is a more weighted measurement of financial performance as it considers

both the debt and equity in its measurement which makes it more enduring and most used by researchers.

3.8 Model Specification

The equation below forms the model of the study using panel multiple regression. This equation is represented as follows:

$ROA_{it} = \beta_{0it}+\beta_1 ACS_{it}+\beta_2 ACC_{it}+\beta_3 ACM_{it}+\beta_4 ACFE_{it}+\beta_5 MO_{it}+\beta_6 INST_{it} + \beta_7 SIZE_{it} +\mu_{it}$

Where:

ROA = Return on Assets

ACS = Audit Committee size

ACC = Audit Committee Composition

ACM = Audit Committee Meeting

ACFE = Audit Committee Financial Expertise

MO = Managerial Ownership

INST = Institutional Ownership

SIZE = Firm size

$\beta_1 - \beta_7$= Coefficient of explanatory variables

β_o= Constant or Intercept

μ = Error Term

CHAPTER FOUR
DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents the data collected through descriptive statistics and correlation analysis. This was followed by the presentation and discussion of regression analysis for the purpose of estimating the model used in this study. Also, findings and policy implications there from were discussed. The chapter ends with a discussion on the various robustness test conducted for the dependent and independent variables of the study.

4.2 Descriptive Statistics

Table 4.1 shows the detailed account of the descriptive statistics for the dependent and independent variables respectively where the minimum, maximum, mean, standard deviation, skewness and kurtosis of the data for the variables used in the study were described.

Table 4.1: Descriptive Statistics of the Variables

Variables	Min	Max	Mean	Std. Dev.	Skewness	Kurtosis	N
ROA	-0.01	0.92	0.33	0.266	0.992	2.739	42
ACS	4	6	5.714	0.554	-1.780	5.200	42
ACC	0.5	0.83	0.637	0.106	-1.189	1.557	42
ACM	2	6	3.619	0.882	0.388	4.034	42
ACFE	0.13	0.79	0.425	0.172	0.348	2.394	42
MO	0.01	0.10	0.045	0.019	0.549	3.053	42
INST	0.11	0.27	0.208	0.047	-0.339	1.864	42
SIZE	0.35	58.17	7.919	12.09	2.754	10.36	42

Source: Descriptive Statistic Results Using STATA 13

Return on assets recorded a negative minimum value of 1% and maximum value of 92% implying that within the oil and gas sector and the study period, there was a firm that recorded about 1% loss, while the highest return on assets recorded was 92%. The mean value for return on assets was 0.33 within the study period implying that on average the firms recorded 33%. The standard deviation for return on assets was lower than its mean implying that the deviation of the mean from actual was not too grievous. The skewness and kurtosis values falling around zero and three implies normality of the data.

The audit committee size has a minimum value of four (4) and a maximum value of six (6), implying that there was a firm that do not comply with the minimum value of six members of the audit committee as stipulated by the Nigerian Security and Exchange commission code of corporate governance. Audit committee size showed a mean value of 5.7, implying that on average, most of the firm comply with the minimum value of six. The standard deviation of audit committee size implying that the mean value recorded was the true average for the firm. The skewness and kurtosis value implies that the data was not normally distributed.

Audit committee composition has minimum value of 0.5 and maximum value of 0.83 implying that the most of the composition of the audit committee were either half of the members or above. Audit committee composition has an average value of about 64% implying than more than half of the members of the audit committee was comprised of outside members. The standard deviation for this variable implies that its mean is a true mean with little deviation. The data for audit committee composition was not normally distributed based on the result from the skewness and kurtosis test which was far away from zero and three respectively.

Audit committee meeting recorded a minimum value of two (2) and maximum value of six (6), implying that the lowest numbers of meeting held by the firms within the study period was two times, while the highest number of times the audit committee meet was six times. However, on the average, the number of meeting of held by the committee was about four (4) times, implying that, most of the committee sat not less than four times in a year. The standard deviation recorded implies that the mean value for audit committee meeting was the true mean for the firms. The skewness and kurtosis value showed that the data for audit committee meeting was normally distributed.

Audit committee financial expertise has a minimum value of 0.13 and 0.79 implying the minimum number of members of audit committee with knowledge of finance was 13% while the maximum number of such committee with financial knowledge was 79%. The

average number of audit committee that is financial literate stood at about 43%. The standard deviation for audit committee financial expertise shows that the average value recorded represent the true mean while the skewness and kurtosis values implies that the data was normally distributed.

The managerial ownership has a minimum value of 0.01, while the maximum value was 0.10, implying that the minimum percentage of ownership held by the management was 1% while the maximum was 10%. On the average, managerial ownership stood at 5% for the firms. The value of standard deviation implies that the mean value represents the true average for the firms. Skewness and kurtosis test conducted for the variable shows that the data was normally distributed.

Institutional ownership recorded a minimum value of 0.11 and a maximum value of 0.27 for the firm implying that the lowest level of institutional ownership among the firms was 11% while the largest stood at 27%. The mean value for institutional ownership was 0.208 which shows that on average the value of institutional ownership among the firms was 21%. The standard deviation proves that the mean value recorded was the true average for the firms. Skewness value was within the acceptable range showcasing normality of the data except for kurtosis which was far from three implying abnormalities in the data.

4.3 Correlation Analysis

Table 4.2 displays the correlation coefficients between dependent and the independent variables and also the relationship between the independent variables themselves. The values were gotten from the Pearson correlation of two-tailed significance. It shows the correlation matrix with the top values displaying the Pearson correlation coefficient between all pairs of variables and the asterisk beside the coefficients showing the two-tail significance of these coefficients.

Table 4.2: Correlation Matrix

	ROA	ACS	ACC	ACM	ACFE	MO	INST	SIZE
ROA	1							
ACS	-.2116	1						
ACC	.3423*	.1414	1					
ACM	-.0052	.2211	-.4080*	1				
ACFE	.4281	-.3124*	.1483	-.1972	1			
MO	-.0637	.1852	-.1407	.4069*	-.2724	1		
INST	.5028	-.1799	.0840	-.0173	.5399*	-.2235	1	
SIZE	.1430	-.2053	.0740	.1451	.1410	-.1176	.4340*	1

Source: Correlation Matrix Results Using STATA 13

*. Correlation is significant at 0.01 level (2-tailed)

**. Correlation is significant at 0.05 level (2-tailed)

From Table 4.2, return on assets is 21% negatively correlated with audit committee size which were insignificant either at 1% or 5%. Audit committee composition have significant and negative relationship with return on assets to the tune of 34%. Return on assets was found to have insignificant and negative relationship with audit committee meetings at the magnitude of 1%. Audit committee financial expertise has significant and positive correlation with return on assets at the magnitude of 0.42. Return on assets was found to have insignificant and weak magnitude of relationship with managerial ownership of the firms. Institutional ownership was found to have significant and positive correlation with both return on assets to the tune of 50%. The relationship between sizes used as control variable was found to be positively but insignificantly related with return on assets.

The relationship between audit committee size and audit committee composition was positive and weak at the level of 0.14 suggesting absence of colinearity. Audit committee size and audit committee meeting was related at the level of 0.22 which was positive suggest weak relationship. The relationship between audit committee size and audit financial expertise was negative at the level of 0.33 suggesting a significant relationship. The relationship between audit committee size and managerial ownership was positive but insignificant suggesting a weak relationship. The correlation between audit committee size and institutional ownership was negative at the level of 0.18 implying a weak relationship. Size was found to be negatively

related with audit committee size at the level of 0.21 which shows a weak correlation between the two variables.

The correlation between audit committee meetings and audit committee composition was negative and strong at the level of 0.41, suggesting the absence of colinearity. Audit committee composition and audit committee financial expertise was related at the level of 0.15 which was positive suggest a weak relationship. The relationship between audit committee composition and managerial ownership was negative at the level of 0.14 suggesting an insignificant relationship. The relationship between audit committee composition and institutional ownership was positive but insignificant suggesting a weak relationship. The correlation between audit committee composition and size was positive at the level of 0.07 implying a weak relationship.

Audit committee financial expertise and audit committee meeting was negatively related at the level of 0.20 which implies a weak relationship. The relationship between audit committee meeting and managerial ownership was positive at the level of 0.41 suggesting a significant relationship. The relationship between audit committee meeting and institutional ownership was negative but insignificant suggesting a weak relationship. The correlation between audit committee meeting and size was positive at the level of 0.14 implying a weak relationship.

The association between audit committee financial expertise and managerial ownership was negative and weak at the level of 0.27 implying absence of colinearity. Audit committee financial expertise and institutional ownership was related at the level of 0.54 which was positive suggesting strong relationship. The relationship between size and audit financial expertise was positive at the level of 0.14 suggesting an insignificant relationship. The relationship between institutional ownership and managerial ownership was negative but insignificant suggesting a weak relationship. The correlation between size and managerial

ownership was negative at the level of 0.12 implying a weak relationship. Institutional ownership was found to be positively related with size at the level of 0.43 which shows a significant correlation between the two variables.

Generally, the relationship between the independent variables themselves were found to be insignificant except few of them that were significantly related, though this may not be enough to conclude that multicolinearity exist among the independent variables of study until the variance inflation factor and tolerance values are far and above the limits expected. The VIF and tolerance were found to be consistently smaller than ten and one respectively, indicating absence of multicolinearity (Neter, Kutner, Nachtsheim, & Wasserman, 1996; Cassey & Anderson, 1999; Tobachnick & Fidell, 1996).

4.4 Presentation and Interpretation of Regression Result

This session presents the regression result of the dependent variable (FP) and the independent variables of the study (Audit committee size, audit committee composition, audit committee meetings, audit committee financial expertise, managerial ownership and institutional ownership in addition to the control variable firm size). The presentation was followed with the interpretation of the cumulative results, then the analysis of the independent variables Impact on financial performance of firms.

Table 4.3: Summary of Regression Result (Fixed Effect Model)

Variables	A-Coeff	A-T Stat	Prob.
Constant	-0.724	-1.43	0.163
ACS	-1.115	-1.78	0.086
ACC	1.123	2.52	0.018
ACM	0.047	1.04	0.308
ACFE	0.561	2.05	0.050
MO	4.145	2.11	0.044
INST	2.054	2.02	0.053
SIZE	-0.004	-1.32	0.198
R^2 Within	0.4665		
R^2 Between	0.3402		
R^2 Overall	0.3924		
Wald Chi^2	3.50		
Wald-Significance	0.0081		

Source: Result output from STATA 13

Table 4.3 shows the cumulative R^2 between 0.3402 which is the multiple coefficient of determination gave the proportion of the total variation in the dependent variable explained by the independent variable jointly. Hence, it signified that 34% of the total variation in financial performance of listed Oil and Gas companies in Nigeria was caused by their audit committee size, audit committee composition, audit committee meeting, audit committee financial expertise, proportion of managerial ownership and proportion of institutional ownership.

The F-statistics of 3.50 which is significant at one percent indicates that the financial performance and Audit committee characteristics, ownership structure model was fit. This indicates that the independent variables are properly selected, combined and used. It implies that for any change in Audit committee characteristics and ownership structure of listed Oil and gas companies in Nigeria, their performance will be directly affected. The value of Wald Chi^2 which is statistically significant at a level of 0.000 means that there is a 99.9 percent probability that the relationship among the variables was not due to mere chance.

i. Audit Committee Size and Financial Performance

The audit committee size shows a t-value of -1.78 and a coefficient value of -1.115 with significant value of 10%. This means that audit committee size (ACS) is negatively, strongly and significantly influencing performance of listed Oil and Gas companies in Nigeria. It connotes that when there is an increase in audit committee size by one, the performance of listed Oil and Gas companies will decrease by 36.95. This may be as a result of the fact that too large audit committee suffer from process losses and diffusion of responsibility. This finding is in line with those of Karamanou and Vafeas (2005) but contrary to the findings of Kalbers and Fogarty, (1993); Braiotta, (2000), Bedard, Chtourou and Courteau (2004), Anderson, Mansi and Reeb (2004).

ii. Audit Committee Composition and Financial Performance

The audit committee composition shows a t-value of 2.52 and a coefficient value of -1.123 with significant value of 5%. This means that audit committee composition (ACC) has positive and significantly influencing financial performance of listed Oil and Gas companies in Nigeria. It implies that when there is an increase in the proportion of outsiders in the audit committee by one percent, the financial performance of listed Oil and Gas companies will increase by the coefficient value. This may be as a result of the fact that enough outsiders well represented on the audit committee is expected to monitor the management and contribute towards enhancement of performance. This finding is in line with those of Marrakchi et al (2001), Bradbury et al. (2006), Bryan et al (2004), Keasey et al (1993) but contrary to that of Chan and Li (2008).

iii. Audit Committee Meetings and Financial Performance

The audit committee meeting shows a t-value of 1.04 and a coefficient value of 0.047 which is neither significant at 1%, 5% and 10%. This means that audit committee meeting (ACM) is positively and insignificantly influencing financial performance of listed Oil and Gas companies in Nigeria. It implies that when there is an increase in the number of times the committee meets in a year, the financial performance of listed Oil and Gas companies will decrease by its coefficient value of 0.047. This may be as a result of the fact that when meetings are held and quality decisions are not taken or implemented, it will not have any positive effect on financial performance irrespective of the number of meetings held. This finding is in line with those of Hsu (2007), Raghunandan, Rama, Scarbrough, (1998); Abbott, Parker, Peters, (2004), Menon & Williams, (1994). Beasley, Carcello, Hermanson, Lapides, (2000).

iv. Audit Committee Financial Expertise and Financial Performance

The audit committee financial expertise shows a t-value of 2.05 and a coefficient value of 0.561 with significant value of 5%. This means that Audit Committee Financial Expertise

(ACFE) is positively and significantly influencing the financial performance of listed Oil and Gas companies in Nigeria. It shows that when there is an increase in the level of knowledge of audit committee on area of financial expertise, the financial performance of listed Oil and Gas companies will increase by the coefficient value. This may be as a result of audit committee members with knowledge of finance who will be able to make meaningful contribution as to the content of financial statement and the requirements in respect of preparation of financial statement which will enable them to monitor the management thereby enhancing the performance of the firms. This finding is in line with those of Bouaziz (2012).

v. Managerial Ownership and Financial Performance

From the Table 4.3, it was observed that the t-value for Managerial Ownership (MO) was 2.11 and a coefficient value of 4.145 with significant value of 5%. This signifies that managerial ownership is positively and significantly influencing financial performance of listed Oil and Gas companies in Nigeria. This also implies that for every one percent increase (1%) in managerial ownership, the financial performance of listed Oil and Gas companies in Nigeria will increase by the coefficient value. This may be as a result of the argument put forward by the advocate of the alignment hypothesis, that, high levels of insider ownership can become effective in aligning insiders to take value maximizing decisions, which may lead to increase in financial performance. This finding is in line with those of Fahlenbrach and Stulz (2007), Hayes et al. (2005) but contrary to those of Bohren and Odegaard (2003), and McConnell, Servaes and Lins (2003).

vi. Institutional Ownership and Financial Performance

The regression results revealed that Institutional ownership as depicted in Table 4.4 have a t-value of 2.054 and a coefficient value of 2.02 which is significant at 5%. This indicates that institutional ownership has positively and significantly impacted on performance of listed Oil and Gas companies in Nigeria. The result shows that, for every one-point increase in the

institutional ownership of the companies, the financial performance of the listed Oil and Gas companies in Nigeria will increase by 25.06. This may be as a result of the fact that institutions are large investors, who are knowledgeable, powerful and more sophisticated than individual investors with relevant expertise and experience to monitor management. Also, their investing decisions tend to carry a great deal of weight than smaller investors, many of whom scrutinize the activities of the managers in a bid to protect their huge amount of investment. In addition, institutions wield tremendous influence in other matters as well, since these major organizations are often company's largest shareholders, they are not shy about offering suggestions or opinions from time to time. For example, institutional owners may sometimes pressurize the management into restructuring the company, divesting certain business segments. Occasionally, they may even express their disapproval by launching a proxy battle. All of this actions put together is in an attempt to enhance good performances. This finding is in line with the study of Grossman and Hart (1980), Shleifer and Vishny (1986), McConnell and Servaes (1990), Nesbitt (1994), Smith (1996), and Del Guercio and Hawkins (1999), Hartzell and Starks (2002), Shleifer and Vishny (1986), Admati, Pfleiderer and Zechner (1994), Huddart (1993), Maug (1998) and Noe (2002).

4.5 Policy Implications of the Findings

The study has numerous theoretical, practical and regulatory implications. These implications represent the contributions to knowledge in the study which are expected to benefit the Oil and Gas firms, existing body of knowledge within the accounting research, accountants in practice, investors, regulators and providers of accounting services as the outcome of our study would serve as a stimulant to them to realize how effective and the extent to which audit committee characteristics and ownership structure are to the firms in area of enhancing and turning around the financial performances of the firms.

The findings have important policy implication since they suggest and will also assist the regulators in areas where there is need to improve on the corporate governance principles with respect to audit committee characteristics and ownership structure, in order to put the listed Oil and Gas firms in Nigeria on the right direction through the provision of effective monitoring and guide on the conduct of management.

The analysis revealed that managerial ownership plays significant role in reducing their performance. The implication of this is that it provides some support for the entrenchment hypothesis which states that, high levels of insider ownership can become ineffective in aligning insiders to take value maximizing decisions, which may lead to decrease in the overall performance of the firms. Since the firms operate in an environment where managers have opportunity of allotting higher numbers of shares to themselves, thereby having dominance and control.

The findings in respect of Institutional ownership implies that they play a vital role in enhancing the upward movement of the organizational performance which provides some support to the proponents of the strategic alliance hypothesis who argue that performance of firms with high institutional shareholdings is high.

Furthermore, the negative effect of audit committee size and audit committee meetings on return on assets have significant policy implications for the number of board members and the quality of decisions taken and the implementation of such decisions after the directors meetings as drivers to increased performance and not just about the numbers. Since Nigerian corporation vary in size, industry and sophistication of operations, it is reasonable to argue that adopting a “flexible and responsive” instead of “one size fits all” approach to board size and board meetings may improve financial performance.

4.6. Robustness Tests

This section presents the result from robustness tests conducted. The robustness tests included normality test, multicolinearity test heteroscedascticity test, and hausman specification test

i. Normality test: The study conducted normality test using the skewness and kurtosis. Among the independent variables, only audit committee size, audit committee composition and size were found to have values far away from zeros and three respectively. However, for return on assets, audit committee meetings, audit committee financial expertise, managerial ownership and institutional ownership have their skewness and kurtosis values around zeros and three implying that the data were normally distributed.

ii. Multicolinearity test: This was conducted to check whether there was a correlation between the independent variables of the study. From Table 4.2, there was no variable with higher correlation above 0.50 except audit committee financial expertise and institutional ownership which recorded 0.54. The low magnitude of the correlations amongst the explanatory variables implies that multicolinearity was not a problem amongst the variables. The variance inflation factor and tolerance estimated were found to be consistently smaller than ten and one respectively (see Appendix II), indicating absence of multicolinearity (Cassey & Anderson, 1999 and Tobachnick & Fidell, 1996).

iii. Heteroscedasticity Test: From the result obtained from the heteroscedasticity test conducted, the chi-square value (2.10) was small and the p-value (0.1475) was large, indicating heteroskedasticity was absent.

iv. The Hausman test: The result obtained from the Hausman specification test recorded a chi square value of 15.46 which was significant at 5% level which implies that, ($p < 0.05$) and as such the fixed effect estimation should be used in favour of the random effect.

4.7 Test of Hypotheses

Table 4.4 shows the summary of regression results, which are used to test the hypotheses formulated earlier in chapter one.

Table 4.4: Variable Coefficients

Variables	T-Values	P. Values	Tolerance/VIF
Audit Committee Size	-1.78	0.086	0.777776 / 1.29
Audit Committee Composition	2.52	0.018	0.749479 / 1.38
Audit Committee Meetings	1.04	0.308	0.614577 / 1.63
Audit Committee Financial Expertise	2.05	0.050	0.599958 / 1.67
Managerial Ownership	2.11	0.044	0.769699 / 1.30
Institutional Ownership	2.02	0.053	0.529913 / 1.89

Source: Result output from STATA 13

From Table, most of the variables have positive coefficients except audit committee size. All the independent variables were significant at 5% and 10% level except audit committee meetings which is statistically insignificant. This revealed that all the Audit committee characteristics, ownership structure variables used in the study explain the attitude of performance of listed Oil and Gas companies in Nigeria to a large extent except for audit committee meetings.

The results for each hypothesis are presented below:

Audit committee size measured as the number of audit committee members was found to be negatively significant at 10% level which means that it is associated with the financial performance of listed Oil and Gas companies in Nigeria. Therefore, audit committee size has significantly affected the financial performance of the companies.

With respect to the result displayed above as regards audit committee size showing that the variable was statistically significant in reducing performance, there is enough evidence to reject the hypothesis one of the study.

Audit committee composition measured as the proportion of outside members on the audit committee was found to be statistically significant which means that it has significantly impacted on financial performance of listed Oil and Gas companies in Nigeria. Therefore,

Audit committee composition has significantly affected the financial performance of the companies.

Owing to the above outcome reported as regards Audit committee composition showing that it is statistically significant in influencing financial performance, this has produce evidence that justifies the rejection of hypothesis two of the study.

Audit committee meeting was found to be positive but insignificant at either 1%, 5% and 10% level, which means that it is not associated with the financial performance of listed Oil and Gas companies in Nigeria. With this, there is therefore, enough evidence of not rejecting the hypothesis three of the study.

Audit committee financial expertise was found to be statistically in significant, an indication, that it is significantly associated with financial performance of listed Oil and Gas companies in Nigeria. Therefore, Audit committee financial expertise has significantly affected financial performance. This provides an evidence to reject hypothesis four of the study.

Managerial ownership has a significant negative relationship with financial performance at 5% level of significance indicating that larger managerial ownership decreases the financial performance of listed Oil and Gas companies in Nigeria. Therefore, there is sufficient evidence of rejecting null hypothesis five of the study.

Institutional ownership was found to have positive significant impact on return on assets at 5% level. Thus, institutional ownership strongly drives financial performance of listed Oil and Gas firms in Nigeria. This provides statistical evidence to reject hypothesis six of the study.

CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Performance is the rallying point for all stakeholders as it serves as reliance for growth, ability to pay debt owned by organization and also an opportunity for shareholders to get dividend from their investment. Because of the importance of this concept, it is pertinent for management, researchers to look for factors that could enhance the continuous improvement in financial performance of organization, hence the need for this study. The study starts by warming up the background by discussing the link between audit committee characteristics, ownership structure and financial performance. The topic is important in the oil and gas sector investigated as the sector serve as one of the drivers of Nigerian economy in terms of revenue. This led to the formulation of six objectives and hypothesis. The study covers the period of six years starting from 2010 to 2015. The findings have important practical, theoretical and methodological policy implications.

The study review various concepts used in this study starting from financial performance, audit committee characteristics and ownership structure. It went further to review empirical literature in relation to audit committee characteristics (audit committee size, audit committee composition, audit committee meetings and audit committee financial expertise), ownership structure (managerial ownership and institutional ownership) on financial performance proxy by return on assets. The study also reviews agency theory which is the theory that best anchored the study as the theory seek to resolve conflict that may arise between management and owners.

The study adopted ex-post facto research design as it is the design that best suit research investigating causal effect and using historical information. The population of the study were the nine listed Oil and Gas firms in Nigeria as at 31st December, 2015 as reported in the Nigerian Stock exchange fact book of 2015. Out of the nine firms, only seven was used as

sample size after eliminating two through a set up criteria. Secondary source of data collection was used through the annual reports and accounts of the selected firms. Panel multiple regression technique was used with the aim of explaining and predicting empirically the performance behavior as a result of changes in audit committee characteristics, ownership structure. The model used for the study examined the association between six explanatory variables (Audit committee size, audit committee composition, audit committee meeting, audit committee financial expertise, managerial ownership and Institutional ownership) and one dependent variable (performance represented with return on assets) through the use of least square technique.

The findings of this study are based on panel data collected for the period of 2010-2015 from a sample of seven (7) listed Oil and Gas companies on the Nigerian Stock Exchange as at 31st December 2015. The result revealed that five of the explanatory variables except audit committee meetings were significant in explaining the financial performance of the firms. Among the five significant explanatory variables, the audit committee composition, audit committee financial expertise, managerial ownership and institutional ownership have significant positive influence on financial performance of firms, while the audit committee size has negative significant influence on financial performance of the firms. Also, firm size was found to have insignificant influence on financial performance of the firms.

5.2 Conclusion

As a result of the foregoing discussion and analysis in the previous chapter, the study concludes as stated below:

The positive influence of audit committee composition, audit committee financial expertise, managerial ownership and institutional ownership indicates that the variables increases the financial performance of the firms significantly. Therefore, it can be concluded those variables have impacted on financial performance of listed Oil and Gas firms in Nigeria.

The insignificant impact of audit committee meetings on financial performance is an indication that firms with a higher numbers of meetings held by audit committee may not necessarily influence their financial performance as this could be attributed to the fact that high number meetings by members on the committee without quality decisions may lead may just be a product of free ride and a lot of disagreement. Therefore, the study concluded that audit committee meetings has not impacted on financial performance of listed Oil and Gas companies within the study period.

On the whole, the study concludes that audit committee characteristics, ownership structure has significantly impacted on the financial performance of listed Oil and Gas firms in Nigeria within the study period.

5.3 Recommendations

In line with the findings and Conclusion of the study, the following recommendations are proffered

i. The inability of audit committee size to enhance financial performance may be as a result of the problem of one size fits all. This ability of board members to take a quality decision and perform proper monitoring is more important than just their numbers, emphasis should be laid by Securities and Exchange Commission on quality of time spent by the board members in deliberation rather than their numbers

ii. The audit committee composition is expected to be three members from the executive and three members from the shareholders. Therefore, the number of outside members of audit committee should be increased to an average of sixty-five percent (65%) for the listed Oil and Gas firms in Nigeria

iii. The audit committee is expected to meet at least four times in a year implying that they could meet beyond four times a year. From the findings of the study, the quality of time and

decisions taken during meetings should be more of emphasis by the management rather than the number of times the committee should meet in a year.

iv. The members of the audit committee should highly be composed of members with knowledge of finance in order to make them effective which will affect financial performance positively. At least 45% of audit committee members should be financially literate.

v. It is observed that the shares controlled by the directors is minimal in listed Oil and Gas firms in Nigeria, therefore, the level shares held by directors should be increased to an average of 15% as it makes them more aligned to the organization and prevent them from embarking on anything that is capable of jeopardizing their investment in the firm.

vi. Additional shares should be allotted to institutional investors since they tend to guard against their investment. At least, the institutional investors should be allowed to control 30% of the shares in listed Oil and Gas firms in Nigeria

5.4 Limitations and Suggestions for Further Research

This work investigates the impact of Audit committee characteristics, ownership structure on performance of listed Oil and Gas companies in Nigeria and is believed to have paved the way for further research in the following areas.

i. The study only made use of six audit committee characteristics, ownership structure (Audit committee size, audit committee composition, audit committee meeting, audit committee financial expertise, managerial ownership and Institutional ownership). Therefore, it is suggested that future researchers who might be interested in this area to include block holder ownership and foreign ownership in their ownership structure.

ii. The study made use of profit after tax divided by total assets to proxy financial performance. Therefore, the study suggests that further studies in this area should make use of other performance proxies such as return on equity, net profit margin, economic profit, etc.

iii. As this research is only limited to Oil and Gas companies, it is recommended that further studies in this area should add more companies from those listed in the Nigerian Stock Exchange to make the findings and recommendations more amenable to generalization.

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Appendix I

Population of the study

S/No.	Company's Name	Year of Listing	Eliminated	Reason for Elimination
1	OandoPlc	27th February 1992	No	-
2	AfroilPlc	1990	No	-
3	Beco Petroleum Product. Plc	2011	Yes	Listed after 2010
4	ConoilPlc	1989	No	-
5	Eterna Oil Plc	3rd August 1992	No	-
6	Forte Oil Plc	1978	Yes	Change name from A.P
7	Mobil Oil Nigeria Plc	4th April 1979	No	-
8	MRS Oil Nigeria Plc	8th December 1978	No	-
9	Total Nigeria Plc	20th April 1979	No	-

Sample of the study

S/No.	Company's Name	Year of Listing	Eliminated	Reason for Elimination
1	OandoPlc	27th February 1992	No	-
2	AfroilPlc	1990	No	-
3	ConoilPlc	1989	No	-
4	Eterna Oil Plc	3rd August 1992	No	-
5	Mobil Oil Nigeria Plc	4th April 1979	No	-
6	MRS Oil Nigeria Plc	8th December 1978	No	-
7	Total Nigeria Plc	20th April 1979	No	-

Appendix II

REGRESSION OUTPUT

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ROA

Percentiles		Smallest		
1%	-.01	-.01		
5%	.05	.03		
10%	.07	.05	Obs	42
25%	.14	.07	Sum of Wgt.	42
50%	.245		Mean	.33
		Largest	Std. Dev.	.2664583
75%	.45	.84		
90%	.78	.86	Variance	.071
95%	.86	.91	Skewness	.992027
99%	.92	.92	Kurtosis	2.739793

ROE

Percentiles		Smallest		
1%	-.62	-.62		
5%	-.24	-.35		
10%	-.04	-.24	Obs	42
25%	.04	-.15	Sum of Wgt.	42
50%	.09		Mean	.1064286
		Largest	Std. Dev.	.1976548
75%	.26	.35		
90%	.35	.37	Variance	.0390674
95%	.37	.38	Skewness	-1.324275
99%	.4	.4	Kurtosis	6.118909

ACS

Percentiles		Smallest		
1%	4	4		
5%	5	4		
10%	5	5	Obs	42
25%	6	5	Sum of Wgt.	42
50%	6		Mean	5.714286
		Largest	Std. Dev.	.553733
75%	6	6		
90%	6	6	Variance	.3066202
95%	6	6	Skewness	-1.78034
99%	6	6	Kurtosis	5.200413

ACC

Percentiles		Smallest		
1%	.5	.5		
5%	.5	.5		
10%	.5	.5	Obs	42
25%	.5	.5	Sum of Wgt.	42
50%	.67		Mean	.6366667
		Largest	Std. Dev.	.1059375
75%	.73	.75		
90%	.75	.75	Variance	.0112228
95%	.75	.75	Skewness	-.1891365
99%	.83	.83	Kurtosis	1.55733

ACM

Percentiles		Smallest		
1%	2	2		
5%	2	2		
10%	3	2	Obs	42
25%	3	2	Sum of Wgt.	42
50%	4		Mean	3.619048
		Largest	Std. Dev.	.8821366
75%	4	4		
90%	4	5	Variance	.7781649
95%	5	6	Skewness	.3878329
99%	6	6	Kurtosis	4.033994

ACFE

Percentiles		Smallest		
1%	.13	.13		
5%	.17	.17		
10%	.23	.17	Obs	42
25%	.29	.19	Sum of Wgt.	42
50%	.435		Mean	.4257143
		Largest	Std. Dev.	.1722186
75%	.55	.72		
90%	.68	.73	Variance	.0296592
95%	.73	.78	Skewness	.3483852
99%	.79	.79	Kurtosis	2.394012

MO

Percentiles		Smallest		
1%	.01	.01		
5%	.025	.02		
10%	.026	.025	Obs	42
25%	.028	.026	Sum of Wgt.	42
50%	.0485		Mean	.0459048
		Largest	Std. Dev.	.0189927
75%	.061	.07		
90%	.069	.08	Variance	.0003607
95%	.08	.08	Skewness	.5488392
99%	.1	.1	Kurtosis	3.053164

INST

Percentiles		Smallest		
1%	.11	.11		
5%	.15	.11		
10%	.15	.15	Obs	42
25%	.16	.15	Sum of Wgt.	42
50%	.23		Mean	.2080952
		Largest	Std. Dev.	.0472274
75%	.24	.27		
90%	.27	.27	Variance	.0022304
95%	.27	.27	Skewness	-.3391409
99%	.27	.27	Kurtosis	1.863999

SIZE

Percentiles		Smallest		
1%	.3499999	.3499999		
5%	.76	.54		
10%	.89	.76	Obs	42
25%	1.52	.87	Sum of Wgt.	42
50%	2.565		Mean	7.919286
		Largest	Std. Dev.	12.08621
75%	9.18	23.12		
90%	13.42	40.86	Variance	146.0765
95%	40.86	41.02	Skewness	2.754372
99%	58.17	58.17	Kurtosis	10.36004

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             |   0.0265   0.3719
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             |   0.9740   0.1593   0.0073
             |
        acfe |   0.4281* -0.3124*  0.1483  -0.1972   1.0000
             |   0.0047   0.0440   0.3487   0.2106
             |
          mo |  -0.0637   0.1852  -0.1407   0.4069* -0.2724   1.0000
             |   0.6887   0.2403   0.3743   0.0075   0.0810
             |
        inst |   0.5028* -0.1799   0.0840   0.0173   0.5399* -0.2235   1.000
> 0
             |   0.0007   0.2544   0.5968   0.9135   0.0002   0.1549
             |
        size |   0.1430  -0.2053   0.0740  -0.1451   0.1410  -0.1176   0.434
> 0*
             |   0.3662   0.1922   0.6415   0.3593   0.3733   0.4584   0.004
> 1
             |

             |     size
-------------+----------
        size |   1.0000
             |
             |
```

```
. reg roa acs acc acm acfe mo inst size
```

Source	SS	df	MS	Number of obs =	42
				F(7, 34) =	3.76
Model	1.27077888	7	.18153984	Prob > F =	0.0040
Residual	1.64022109	34	.048241797	R-squared =	0.4365
				Adj R-squared =	0.3205
Total	2.91099996	41	.070999999	Root MSE =	.21964

roa	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
acs	-.1089984	.0702412	-1.55	0.130	-.2517457	.033749
acc	1.042237	.374016	2.79	0.009	.2821454	1.802329
acm	.0580104	.0496016	1.17	0.250	-.0427922	.1588131
acfe	.2364471	.2571458	0.92	0.364	-.286136	.7590302
mo	1.099431	2.058604	0.53	0.597	-3.084155	5.283017
inst	2.249184	.9977533	2.25	0.031	.2215058	4.276863
size	-.0020199	.0032874	-0.61	0.543	-.0087007	.0046609
_cons	-.5238289	.4721706	-1.11	0.275	-1.483395	.4357372

```
. hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of roa

         chi2(1)      =     2.10
         Prob > chi2  =   0.1475

. vif
```

Variable	VIF	1/VIF
inst	1.89	0.529913
acfe	1.67	0.599958
acm	1.63	0.614577
size	1.34	0.745344
acc	1.33	0.749479
mo	1.30	0.769699
acs	1.29	0.777776
Mean VIF	1.49	

```
. xtreg roa acs acc acm acfe mo inst size, fe

Fixed-effects (within) regression               Number of obs      =        42
Group variable: id                              Number of groups   =         7

R-sq:  within  = 0.4665                         Obs per group: min =         6
       between = 0.3402                                        avg =       6.0
       overall = 0.3924                                        max =         6

                                                F(7,28)            =      3.50
corr(u_i, Xb)  = -0.2891                        Prob > F           =    0.0081

------------------------------------------------------------------------------
         roa |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         acs |  -.1145798   .0643147    -1.78   0.086    -.2463226    .0171629
         acc |   1.123272   .4466114     2.52   0.018       .20843    2.038114
         acm |   .0465466   .0448059     1.04   0.308    -.0452341    .1383272
        acfe |   .5607833   .2731269     2.05   0.050     .0013081    1.120258
          mo |   4.145183    1.96553     2.11   0.044     .1189775    8.171388
        inst |   2.054457   1.016703     2.02   0.053     -.028164    4.137078
        size |  -.0039812   .0030226    -1.32   0.198    -.0101729    .0022104
       _cons |  -.7238734   .5048907    -1.43   0.163    -1.758095    .3103483
-------------+----------------------------------------------------------------
     sigma_u |  .16277815
     sigma_e |  .17873764
         rho |   .4533705   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(6, 28) =     3.89                 Prob > F = 0.0060

. est store fixed
```

```
. xtreg roa acs acc acm acfe mo inst size, re

Random-effects GLS regression                   Number of obs      =        42
Group variable: id                              Number of groups   =         7

R-sq:  within  = 0.3854                         Obs per group: min =         6
       between = 0.5116                                        avg =       6.0
       overall = 0.4365                                        max =         6

                                                Wald chi2(7)       =     26.34
corr(u_i, X)   = 0 (assumed)                    Prob > chi2        =    0.0004
```

roa	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
acs	-.1089984	.0702412	-1.55	0.121	-.2466686	.0286719
acc	1.042237	.374016	2.79	0.005	.3091795	1.775295
acm	.0580104	.0496016	1.17	0.242	-.0392069	.1552278
acfe	.2364471	.2571458	0.92	0.358	-.2675494	.7404436
mo	1.099431	2.058604	0.53	0.593	-2.935358	5.13422
inst	2.249184	.9977533	2.25	0.024	.2936239	4.204745
size	-.0020199	.0032874	-0.61	0.539	-.0084631	.0044233
_cons	-.5238289	.4721706	-1.11	0.267	-1.449266	.4016085
sigma_u	0					
sigma_e	.17873764					
rho	0	(fraction of variance due to u_i)				

```
. est store random

. hausman fixed random
```

	Coefficients (b) fixed	(B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
acs	-.1145798	-.1089984	-.0055814	.
acc	1.123272	1.042237	.0810346	.2440774
acm	.0465466	.0580104	-.0114639	.
acfe	.5607833	.2364471	.3243362	.0920562
mo	4.145183	1.099431	3.045752	.
inst	2.054457	2.249184	-.1947274	.1953785
size	-.0039812	-.0020199	-.0019613	.

```
                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(7) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                      =   -22.15    chi2<0 ==> model fitted on these
                                    data fails to meet the asymptotic
                                    assumptions of the Hausman test;
                                    see suest for a generalized test
```

```
. hausman fixed random, sigmamore

Note: the rank of the differenced variance matrix (6) does not equal the number of
        coefficients being tested (7); 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.
acs	-.1145798	-.1089984	-.0055814	.0362259
acc	1.123272	1.042237	.0810346	.4016333
acm	.0465466	.0580104	-.0114639	.0238999
acfe	.5607833	.2364471	.3243362	.2156925
mo	4.145183	1.099431	3.045752	1.263305
inst	2.054457	2.249184	-.1947274	.7519334
size	-.0039812	-.0020199	-.0019613	.001729

```
                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(6) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =       15.46
                Prob>chi2 =      0.0170

.
```

Second Model

```
. reg roe acs acc acm acfe mo inst size
```

Source	SS	df	MS		
Model	.668122313	7	.095446045	Number of obs	= 42
Residual	.933641976	34	.027460058	F(7, 34)	= 3.48
				Prob > F	= 0.0065
				R-squared	= 0.4171
				Adj R-squared	= 0.2971
Total	1.60176429	41	.039067422	Root MSE	= .16571

roe	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
acs	.0633937	.0529945	1.20	0.240	-.0443041	.1710916
acc	-1.053236	.2821819	-3.73	0.001	-1.626699	-.4797734
acm	-.04343	.0374227	-1.16	0.254	-.1194821	.032622
acfe	.0228121	.1940075	0.12	0.907	-.3714584	.4170827
mo	-.0061053	1.553144	-0.00	0.997	-3.162473	3.150263
inst	1.626567	.7527697	2.16	0.038	.0967547	3.156379
size	.002793	.0024802	1.13	0.268	-.0022474	.0078335
_cons	.2018833	.3562361	0.57	0.575	-.5220756	.9258422

```
. hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of roe

         chi2(1)      =     5.08
         Prob > chi2  =   0.0242


. vif

    Variable |       VIF       1/VIF
-------------+----------------------
        inst |      1.89    0.529913
        acfe |      1.67    0.599958
         acm |      1.63    0.614577
        size |      1.34    0.745344
         acc |      1.33    0.749479
          mo |      1.30    0.769699
         acs |      1.29    0.777776
-------------+----------------------
    Mean VIF |      1.49

. xtreg roe acs acc acm acfe mo inst size, fe

Fixed-effects (within) regression               Number of obs      =        42
Group variable: id                              Number of groups   =         7

R-sq:  within  = 0.3021                         Obs per group: min =         6
       between = 0.2379                                        avg =       6.0
       overall = 0.2695                                        max =         6

                                                F(7,28)            =      1.73
corr(u_i, Xb)  = -0.0959                        Prob > F           =    0.1420

------------------------------------------------------------------------------
         roe |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         acs |   .0991867   .0528817     1.88   0.071    -.0091366    .2075099
         acc |  -.9518638   .3672187    -2.59   0.015    -1.704077   -.1996503
         acm |  -.0229674   .0368409    -0.62   0.538    -.0984325    .0524977
        acfe |  -.2335863    .224574    -1.04   0.307    -.6936053    .2264328
          mo |   .0333034   1.616124     0.02   0.984    -3.277176    3.343783
        inst |   1.427796   .8359667     1.71   0.099    -.2846046    3.140196
        size |   .0004584   .0024853     0.18   0.855    -.0046325    .0055494
       _cons |   .0259521   .4151379     0.06   0.951    -.8244193    .8763236
-------------+----------------------------------------------------------------
     sigma_u |  .12589611
     sigma_e |  .14696403
         rho |  .42324616   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(6, 28) =     2.54                 Prob > F = 0.0434

. est store fixed
```

```
. xtreg roe acs acc acm acfe mo inst size, re

Random-effects GLS regression                   Number of obs      =        42
Group variable: id                              Number of groups   =         7

R-sq:  within  = 0.1977                         Obs per group: min =         6
       between = 0.7163                                        avg =       6.0
       overall = 0.4171                                        max =         6

                                                Wald chi2(7)       =     24.33
corr(u_i, X)   = 0 (assumed)                    Prob > chi2        =    0.0010
```

roe	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
acs	.0633937	.0529945	1.20	0.232	-.0404736	.1672611
acc	-1.053236	.2821819	-3.73	0.000	-1.606302	-.5001697
acm	-.04343	.0374227	-1.16	0.246	-.1167771	.0299171
acfe	.0228121	.1940075	0.12	0.906	-.3574355	.4030598
mo	-.0061053	1.553144	-0.00	0.997	-3.050211	3.038001
inst	1.626567	.7527697	2.16	0.031	.1511653	3.101968
size	.002793	.0024802	1.13	0.260	-.0020681	.0076542
_cons	.2018833	.3562361	0.57	0.571	-.4963267	.9000932
sigma_u	0					
sigma_e	.14696403					
rho	0	(fraction of variance due to u_i)				

```
. est store random


. hausman fixed random
```

	Coefficients (b) fixed	(B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
acs	.0991867	.0633937	.0357929	.
acc	-.9518638	-1.053236	.1013722	.2349957
acm	-.0229674	-.04343	.0204626	.
acfe	-.2335863	.0228121	-.2563984	.1131132
mo	.0333034	-.0061053	.0394087	.4467663
inst	1.427796	1.626567	-.1987712	.3635631
size	.0004584	.002793	-.0023346	.0001592

```
                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(7) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                      =       76.89
            Prob>chi2 =      0.0000
            (V_b-V_B is not positive definite)
```