EFFECT OF FIRM ATTRIBUTES ON FINANCIAL REPORTING QUALITY OF LISTED NIGERIAN AGRICULTURE AND

NATURAL RESOURCES FIRMS

BY

John ECHOBU
P15ADAC8015

DEPARTMENT OF ACCOUNTING,
A.B.U BUSINESS SCHOOL,
AHMADU BELLO UNIVERSITY,
ZARIA, NIGERIA

APRIL, 2019

EFFECT OF FIRM ATTRIBUTES ON FINANCIAL REPORTING QUALITY OF LISTED NIGERIAN AGRICULTURE AND NATURAL

RESOURCES FIRMS

BY

John ECHOBU
P15ADAC8015

A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY ZARIA, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF SCIENCE DEGREE (M.Sc.) IN ACCOUNTING AND FINANCE

DEPARTMENT OF ACCOUNTING,
A.B.U BUSINESS SCHOOL,
AHMADU BELLO UNIVERSITY,
ZARIA, NIGERIA

APRIL, 2019

Declaration

I hereby declare that this dissertation titled: "**Effect of Firm Attributes on Financial Reporting Quality of Listed Nigerian Agriculture and Natural Resources Firms**" has been done by me under the supervision of Dr. Luka Mailafia and Mr. A.M. Audi of the Department of Accounting, Ahmadu Bello University Zaria. The information gathered from literatures has been duly acknowledged in the text and a list of references provided. No part of this dissertation was presented elsewhere for award of any degree.

John ECHOBU …… … ……
(P15ADAC8015) Signature Date

Certification

This is to certify that the dissertation titled "**Effect of Firm Attributes on Financial Reporting Quality of Listed Nigerian Agriculture and Natural Resources Firms**" by John ECHOBU (P15ADAC8015) meets the regulations governing the award of the degree of Masters of Science (M.Sc.) in Accounting and Finance in Ahmadu Bello University Zaria and is approved for its contribution to knowledge and literary presentation.

Dr Luka Mailafia Chairman, Supervisory Committee	---------- Signature	---------- Date
A. M. Audi Member, Supervisory Committee	---------- Signature	---------- Date
Dr M. H. Sabari Head of Department	---------- Signature	---------- Date
Prof S. Z. Abubakar Dean, School of Postgraduate Studies.	---------- Signature	---------- Date

Dedication

This dissertation is dedicated to Professor James O. I. Ayatse, the Pioneer Vice Chancellor of Federal University Dutsin-Ma, for being instrumental to the approval of this programme of study.

Acknowledgments

I am greatly indebted to the following people who have made this research work worth doing; their contributions have made it a success. The profound contributions of my supervisors, Dr Luka Mailafia and A.M. Audi, are noted for their constructive insights and perspectives. This research went through various stages of thorough reviews by Dr Farouk Adeiza, Dr I. Shittu, Dr Samaila Thompson, Jibril Yero and Lawal Mohammed. Their input is acknowledged with thanks.

I am obliged to the management of Federal University Dutsin-Ma for giving me the rare privilege to undertake this programme of study.

I appreciate the moral support of all my course mates, especially Nkiru, Harmony, Joel, Habib, Ahanda, Abdulhameed and the class Chairman, Prince Ade.

Finally, I must thank God for His infinite mercies and favour in the course of my studies. I also sincerely thank my family members, first of all my wife, for her prayers, encouragement and having to bear with my absence anytime I was in Zaria; my parents and siblings, my in-laws and the DLCF FUDMA family for their prayers and well wishes. God bless you all.

Abstract

The rationale of this study is to support the diversification effort in the Agriculture and Natural Resources firms in Nigeria, by providing accounting information on the sector that will help investors and other stakeholders in decision making. The study investigated the effect of firm attributes on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria, from 2008-2016. The population of the study consists of 9 listed Agriculture and Natural Resources firms in Nigeria out of which 8 firms were used as sample of the study due to unavailability of data for the excluded firm. Data on firm attributes used in the study and financial reporting quality which is the dependent variable of the study were collected through secondary sources from audited financial statements of the sampled firms. Multiple regression models were used to conduct analysis of data. The result shows that leverage and board size have positive and significant effect on financial reporting quality. However, firm age, liquidity, size and audit fee have negative and insignificant effect on financial reporting quality. The study recommended among others that shareholders and management of corporations in the Agriculture and Natural Resources sectors should maintain optimum level of leverage that is sufficient enough to provide an incentive to report quality accounting numbers. Financial Reporting Council of Nigeria (FRCN) or any other relevant regulatory agency should set up a means of verifying the independence of external auditors by ensuring that they do not economically depend on client firms in audit fee charges.

Table of Contents

List of Tables

CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

Financial reporting is an essential aspect of accounting which provides a feedback mechanism through which managers of corporations give account of their stewardship, by way of reporting activities of the corporation in periodic financial statements for the benefit of users of the information so provided. It is the duty of managers to provide quality financial reports that will be useful for decision making by stakeholders.

Laws and statutes, usually prescribed by Acts, Accounting Standards and Stock Exchange rules, compel managers to report and publish financial statements, detailing the activities of its operations. Managers could also report information voluntarily for the benefit of users. Reporting of accounting information should be complete; and must contain all relevant details necessary to satisfy all the users of the information. It is ethical to accord equal status to all users of accounting information so that information revealed completely satisfies their needs (Takhtaei & Mousavi, 2012).

Financial reporting quality has four main dimensions: disclosure, relevance, reliability, and timeliness. These dimensions describe various aspects of quality that a financial report is expected to exhibit. The quality of financial report could be judged by how much of information is disclosed therein. Disclosure of financial report and the extent of what is disclosed in the report are determined by both statute (mandatory disclosure) and voluntary disclosure by reporting entities. Voluntary disclosure is bringing to the public domain both quantitative and qualitative information about operations of an entity, without any legal compulsion (Amer, Ravindran & Mahmoud, 2014). This helps to reduce information asymmetry and could be an indicator of management's transparency and accountability of its stewardship (Madi, Ishak & Manaf, 2014).

The relevance feature of quality financial reporting, which is one of the fundamental characteristics, describes and emphasizes the usefulness and materiality of financial reports. When financial report is able to induce and facilitate decision making by users, then it is said to have the relevance quality. The relevance of financial report is affected by its materiality. The information content of financial report must be sufficiently adequate to address users' needs of decision making.

The reliability dimension of financial reporting quality is another fundamental feature which portrays the faithful representation of the information in the report. The representation of the information must be reliably complete, in the sense that all information necessary for decision making by users are depicted. It must also be reliably neutral, ensuring that there is no bias in the selection and presentation of financial information, and it must be reliably free from errors and omissions in its information contents and in the process used in producing the information.

The timeliness quality of financial report guarantees that financial information reaches the users in a timely manner so that decisions taken are not belated. Generally, the older the information is, the less useful it is and vise versa.

This study however focuses on the reliability dimension of financial reporting quality, with a spotlight on the reliability of reported earnings, using the earnings management measure as proxy for financial reporting quality. This dimension is chosen for this study because it is at the core of financial reports and its usefulness. If the content of a financial report is relevant, sufficiently and timely disclosed but does not give a true reflection of what it purportedly represent, then any prediction and decision made there from will be faulty. Earnings is a rallying point of interest for various stakeholders of corporations hence, what is reported as earnings must be true, reflecting the economic realities of transactions and free of any

opportunistic manipulation by management. Shehu and Farouk (2014) observe that accounting earnings reported by corporations may be far from being reliable and effective which may have led to the financial crises of 2008. Regulatory agencies and other stakeholders place a very high importance on the authenticity of financial report. The veracity of the report depends on the reliability of reported earnings. Manipulation of earnings by management impairs on the quality of financial reports and diminishes investors' confidence (Shehu & Abubakar, 2012).

Management of organization takes decision on the appropriate accounting policies that underlie the preparation of financial reports. The provisions of Generally Accepted Accounting Principles (GAAP) allow managers some latitude to use discretion in the preparation of financial statements. Suitable measures and values are therefore allocated to items that make up the financial statements. Sometimes, management could be biased in the way it recognizes measure and allocate values to certain items of expenditure and revenues in the financial report. Investors are more interested in earnings declared in the financial statements above other accounting information; therefore, management becomes prone to influencing accounting earnings in order to meet investors' expectations (Pattaraporn, 2016). Due to income smoothening activities of management, certain items in the financials can be manipulated to achieve a desired result (Shehu, 2013). Earnings management is a fundamental aspect of financial reporting quality. How earnings are recognized and measured is essential to the quality of financial reporting.

Financial reporting quality is therefore tied to the quality of reported earnings. In the context of this study, financial reporting quality is the reliability of earnings which comes from an honest and transparent process of reporting earnings. It is the earning that represents the economic phenomena it purportedly represents, free of any management's undue interference

and manipulations for its benefit. It aims at reporting a true profit that is useful for decision making by various users of financial report; more so that most stakeholders look up to reported earnings for decision making.

However, to ensure continuous reliability of the reported earnings, certain factors need to be considered. These factors which are drawn from corporate governance mechanisms and specific firm attributes are considered to examine their influence on financial reporting quality. Corporate governance mechanisms are established to minimize conflict of interest between managers and stakeholders, and are therefore expected to check management excesses in undue earnings smoothening for selfish gains at the detriment of owners. This by extension enhances the quality of reported earnings. Firm attributes comprise of specific firm characteristics like size, age leverage, liquidity, audit fee among others. These attributes differ across firms because of differences in business nature; and they influence the reporting and information environment and limit the manipulative tendencies of management thereby enhancing the quality of earnings (Karami & Akhgar, 2014; Shehu & Farouk, 2014). Firm attributes considered in this study are age, size leverage liquidity, audit fee, and board size.

The age of a firm has been argued to influence the financial reporting quality of a firm. As firms grow older, they are able to develop a strong management of their internal control system, thereby improving on their financial reporting procedures. On the other hand, managers of older firms through their full knowledge and understanding of business operations in the market could circumvent procedures to unduly control what earnings should be reported.

Leverage may have considerable control over accounting numbers in the financial report. A highly levered firm may be under pressure to engage in income smoothening activities in order to portray a good financial standing to creditors and suppliers of external funding.

Leverage could also provide an incentive to report credible earnings and other accounting figures in order to guarantee future outsourcing of capital.

Liquidity is connected with a strong financial position. Firms with high liquidity are usually willing to report this good performance indicator in the financial report so as to exert a pull on creditors and get external funding for projects. Firms with impressive liquidity have more inducement to provide earnings information with higher quality to impress investors and other stakeholders (Amr, 2016; Shehata, Dadawy & Ismail, 2014). Also, excess liquidity may not be advantageous as it may also be a strong source of engaging in discretionary behavior by management, since too much cash is a strong cause of agency problem.

Furthermore, the size of a firm may influence the reported earnings. Some scholars argue that while small firms engage less in earnings management, large firms may be forced to report an exaggerated profit to match their status in the eye of the public.

Audit fees refers to the remuneration paid to external auditors, who by law are required to audit financial statements prepared by management, and give a qualifying report as to the trueness and fairness of the reported accounting information. External auditors are central in the financial reporting process, and their opinion on the financial report goes to show the quality or otherwise of financial reports. The quality of external audit could be measured by the fees paid to external auditors for their work. This quality could be compromised by payment of high audit fees by firms in order to induce auditors not to give a negative opinion on financial report. This may affect the quality of financial reporting.

The boards of directors come directly from shareholders' vote and are established to protect and defend the interest of shareholders. They do this by supervising the management team and direct them on appropriate procedures for operations where necessary. The board of directors ensures control over financial reporting by checking the tendency of management to

manipulate earnings for their selfish benefit which may be to the detriment of shareholders. By so doing, they enhance the quality of financial reporting and thereby significantly impact on financial reporting quality. A large board size with majority of members who are vast in financial reporting will likely be on top of their supervisory role on management activities, compared to small size of directors who may not exert much influence on management.

Studies on financial reporting quality and/or earnings quality has evolved overtime especially with the method of determining the measurement of the main variable of the study, which is financial reporting/earnings quality. Many studies in the area adopted the modified Jones (1995) model which is widely used for the measurement of financial reporting quality (Onatuyeh & Proso, 2016). There is however controversy on the appropriateness of the measure in effectively separating discretionary accruals from total accrual, which is a fundamental aspect in determining financial reporting quality using the earnings quality proxy.

The agriculture and natural resources sectors are productive sectors in the Nigerian economy (Nworu, 2017). The economy has been dependent on revenues from petroleum resources as its mainstay. There have however been calls to diversify the Nigerian economy to other productive sectors in order to have a more robust economy. The need to broaden the horizon of the Nigerian economy is yielding positive results as the Federal Government in the presentation of the 2017 budget allocated a historic high amount of 92 billion naira ($28.06 trillion) to the agriculture sector. This is in addition to the current boost to agricultural productivity through increased intervention funding at single digit interest rate under the Anchor Borrowers Programme, commercial agricultural credit scheme and The Nigeria Incentive-Based Risk-Sharing System for Agricultural Lending (Agro Nigeria, 2017). It is therefore expected that investors will key into the opportunities in these sectors, which is a

signal for the accounting profession to brace up to this expected entry of investors in to these productive sectors by providing quality financial reports to aid investors in their decisions to invest in the agriculture and natural resources sector. It is therefore necessary to understand the financial reporting quality of these sectors as part of the accounting support to diversification of the Nigerian economy.

1.2 Statement of the Problem

Studies on financial reporting quality in Nigeria have focused on the banking, manufacturing, and oil and gas sectors. The Agriculture and Natural Resources sectors which are currently being developed to provide an alternative to the oil and gas sector is neglected by studies of this nature. Investors who are being wooed and encouraged to invest in the agriculture sector in order to attain diversification of the Nigerian economy need information to make decisions. How else can potential investors understand the financial reporting practices in these sectors?

Many studies of this nature have used the modified Jones model by Dechow, Sloan and Sweeney (1995) to determine earnings management/quality and/or financial reporting quality (Sara, Mohamed & Aiman 2016, Onatuyeh & Proso 2016, Ahmed, Salisu & Teslim, 2016, Uwuigbe, Uwuigbe & Okorie, 2015, Ali, Noor, Khurshid & Mahmood 2015, Bala & Kumai, 2015, Shehu & Farouk, 2014, Hamdam, Musgtaha & Al-Sartawi 2013, Swastika 2013, Nugoro & Eko 2011). The model has misspecification issues which creates doubt on its ability to effectively estimate discretionary accruals; following the unwarranted use of the inverse of firm size in the model, which suppresses the constant term and reduces the goodness of fit of the model. These studies have therefore focused more on the end of estimating discretionary accruals rather than on the appropriateness of the means to this end. This is important in order to attest to the correctness of what is derived as earnings

management/quality and/or financial reporting quality which is the main variable of study for researches of this nature. This study therefore used a different methodology, using the model of Yoon, Kim and Woodruff (2012), which addresses the criticisms of the modified Jones model and applying the model in the Agriculture and Natural Resources firms in Nigeria.

1.3 Research Questions

To address the research problem stated above, the following research questions are raised:

i. To what extent does age have effect on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria?
ii. What effect does leverage have on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria?
iii. To what extent does liquidity exert effect on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria?
iv. What effect does size have on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria?
v. To what extent does audit fee have effect of on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria?
vi. What effect does board size exert on financial reporting quality of listed agriculture and natural resources firms in Nigeria?

1.4 Research Objectives

The major objective of the study is to investigate the effect of firm attributes on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria. The specific objectives are to:

i. determine the effect of firm age on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria;

ii. examine the effect of leverage on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria;

iii. analyze the effect of liquidity on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria;

iv. establish the effect of size on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria;

v. find out the effect of audit fees on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria;

vi. determine the effect of board size on financial reporting quality of listed agriculture and natural resources firms in Nigeria;

1.5 Research Hypotheses

Drawing from the research objectives, the following research hypotheses are stated in null form for subsequent testing:

Ho_1 Age has no significant effect on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria;

Ho_2 Leverage has no significant effect on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria;

Ho_3 Liquidity has no significant effect on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria;

Ho_4 Size has no significant effect on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria;

Ho_5 Audit Fees has no significant effect on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria;

Ho_6 Board size has no significant effect on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria.

1.6 Scope of the Study

This research work is aimed at studying the effect of firm attributes on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria, for the period of nine years from 2008 to 2016. Two of the firms were listed on the NSE in 2008 which naturally restricts the start year of the study to 2008 since the study is interested in only listed Agriculture and Natural Resources firms. More so, the year 2008 witnessed a global financial crisis which also affected corporations in Nigeria despite reporting good performance indices in financial reports. Studying the financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria from 2008 and subsequent years will reveal their financial reporting quality patterns after the financial crisis. The dependent variable of the study is financial reporting quality and the independent variables are age, leverage, liquidity, size, audit fees, and board size.

1.7 Significance of the Study

Examining the effect of firm attributes on financial reporting quality in listed Agriculture and Natural Resources firms in Nigeria will help various stakeholders in the industry in their decision making in the following areas:

i. Understanding the financial reporting practices of Agriculture and Natural Resources firms in Nigeria, in relation to specific firm attributes will help regulators and other policy makers to make well informed decisions, regulations and policies to check unhealthy practices of earnings management;

ii. The study reveals the interplay between firm attributes and financial reporting quality. This will help managers of business and investors and other stakeholders to make knowledgeable investment decisions as they will be able to identify firm attributes that enhance the quality of reported earnings;

iii. This research compliments previous studies done in other sectors and industries in Nigeria and contributes to the body of knowledge in the study area with the use of a not so common methodology. It also provides a premise for further researches.

The motivation of the research is borne from the desire to provide accounting support to the call to diversify the Nigerian economy from its overdependence on oil revenue to other productive sectors. Since the call for diversification of the economy is gathering increased momentum, it is therefore expected that the influx of investors into these productive sectors will increase, hence the need to study their financial reporting quality, as investors depend on financial reports to make decisions.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter reviews relevant literatures on financial reporting quality and its determinants. The concepts and dimensions of financial reporting quality, earnings management and determinants of financial reporting quality are highlighted. Empirical works of scholars on the subject are reviewed and the chapter concludes with theoretical framework underpinning the study.

2.2 Concept of Financial Reporting Quality

Financial reporting quality is a general term used to describe financial statements and reports that meets certain standards outlined for its completeness in details, usefulness in decision making, credibility in intent, and timely in presentation.

The concept is viewed differently in the financial reporting literature. According to Cohen, Ganash and Wright (2004) there is no consistent, generally accepted definition of financial reporting quality in literature. The Conceptual Framework for Financial Reporting (FASB, 2010) highlights the key features of financial reporting to include provision of information about an entity's economic resources and the claims against it; make available information about the consequence of transactions and other events that alter an entity's economic resources and claims and provide useful financial information about the reporting entity to existing and prospective investors, lenders, and other creditors in making decisions about providing resources to the entity. The Framework emphasize that useful information of financial report must be relevant, reliable, verifiable and timely reported. Relevant financial information should have predictive or confirmatory value to be useful and to draw out appropriate decisions by users. Predictive value makes the information itself to serve as an

input for users to make their own predictions about future outcomes. The confirmatory value ensures that financial information provides feedback about previous appraisal.

The concept of financial reporting as given by the Framework has provided a premise for the definition of financial reporting quality by various scholars. Gaynor, Kelton, Mercer and Yohn (2016) view financial reporting quality as financial reports that are more complete, unbiased, and without error and provide information of a valuable predictive or confirmatory nature, revealing the firms original economic situation and performance. Financial reporting quality is defined as the faithfulness of the information expressed by the financial reporting procedure (Martinez-Ferrero, 2014). It is the accuracy with which financial reports communicate information about the firm's operations, in particular its cash flows, in order to enlighten the equity investors the true and fair form of financial position (Biddle, Hilary & Verdi, 2009).

According to Amr (2016) financial reporting quality is the provision of more information about the characteristics of firm`s financial performance that are suitable for specific decisions taken by specific users for specific needs. Financial reporting quality is to report the activities of an entity in line with relevant principles, rules, policies and other disclosure requirements, to users of the information disclosed therein, so that better informed decisions can be made by them. The rules, policies and other disclosure requirements are geared towards helping management to produce quality reports that are relevant and faithfully represent the true activities of the entity for a particular period.

The body of literature on the concept broadly describes it in terms of its disclosure, relevance, timeliness and reliability. These are considered in the following subsections.

2.2.1 Disclosure Quality of Financial Reporting

Financial reports are for the benefit of end users who must have access to them. Therefore, the report must be disclosed in sufficient details with complete information required for decision making by users. The quantum of financial information that should be disclosed is largely dependent on the requirements of disclosure as stipulated in laws, standards and rules governing the operations of business organizations. Corporations are therefore under statute to disclose financial information in the form prescribed by relevant corporate/business laws. These laws and standards are carefully crafted to ensure disclosure that satisfies the information needs of investors and other stakeholders as well as to protect their interests. Aljiri, Alzarouni and Chew (2014) noted that standards and reporting practices should be of high quality and not deficient in order to avoid inconsistency, incomparability, reduced transparency and a lack of trust in the information provided

Apart from the mandatory disclosure, firms also reveal other information that they are not compelled by law to disclose, but are relevant for users' decision making. This voluntary disclosure as observed by Akhtaruddin, Hossain, Hossain and Yao (2009) is necessary to enable investors and potential inventors assess their performance; to reduce information asymmetry between managers and owners of business (Madi, et al, 2014); and help to clarify issues in the mandatory disclosures and to determine when fraud has been committed (Unuagbon & Ozeigbe, 2016).

The willingness to disclose more information in the financial reports is influenced by various factors such as level of competitive advantage, strength of employee trade unions, and cost of disclosure. A firm might not be willing to publish information that it considers will affect its competitive position. Also, influential employee unions could compel managers to disclose relevant employee contracts for the protection of their interests. The cost of voluntary

disclosure is often compared to its benefit to determine if it's worth disclosing (Unuagbon & Ozeigbe, 2016).

Financial reporting quality in this dimension is assessed based on how much information is revealed voluntarily beyond the compulsory disclosure by firms. The more information is revealed, the more the level of transparency and quality in the financial reports. The disclosure quality is usually measured using disclosure index based upon lists of selected items of accounting information covering financial, non-financial and other strategic information, which may be disclosed in corporate annual reports and seek to measure the extent of disclosure by using numerical weights on items of accounting information (Madi, et al,2014; Ahmed, 2012; Akhtaruddin, et al, 2009). .

2.2.2 Relevance Quality of Financial Reporting

The conceptual framework of the Financial Accounting Standard Board (2010) describes relevance of financial information as a fundamental feature of financial report which underscores the usefulness of financial information for decision making, and the capability of making a difference in that decision. When users of financial statement read it, they should be able to get information that influence their decision even if they choose not to act on the information or may have gotten it from other sources. The Framework further states that relevant information must have predictive and confirmatory value. Information has predictive value if users can use it as an input to make predictions about future outcomes. Confirmatory value on the other hand is information which provides feedback on past predictions or evaluations made by users. The Framework also added that relevant information must be material, ensuring that both the nature and magnitude of specific information is not omitted or misstated.

Relevance of accounting information is also viewed with respect to the relationship between stock returns and earnings figures in the financial statement. Financial reporting quality under the relevance dimension is measured by focusing on the association between accounting numbers and stock returns market reactions. In this relationship, stock price is used to represent the value of the firm, with accounting earnings representing firm value based on accounting performance. When these two items are tested for correlation and changes in accounting value corresponds with changes in market value of firm, it then suggest that earnings information provides relevant information (Mbobo & Ekpo, 2016; Jonas & Blanchet, 2000). It is in the same vein that Halonen, Pavlovic and Persson (as cited in Jeroh, 2016) submits that the relevance value of financial statement is the ability of accounting numbers to summarize information underlying stock price.

Schipper and Vincent (2003) put forward that the relevance dimension of quality of financial report evaluates earnings quality by persistence, variability and predictive ability of earnings. This is because as Boubakri (2012) posits, when accounting earnings consist primarily of transitory elements, its information content regarding future earnings and stock prices is low. However, when earnings consist mainly of permanent elements, its information content is more important. Accordingly, earnings' predictive power follows from its persistent component.

2.2.3 Timeliness Quality of Financial Reporting

The timeliness of financial report covers the period between the end of accounting year and when the audited reports are released for stakeholders' use. The conceptual Framework of FASB (2010) states that timeliness is an enhancing qualitative feature of financial statement which ensures that financial information are released in time in order to influence users'

decision. The earlier information is released the more valuable it is for profitable decision making.

According to Emeh and Appah (2013), when financial reports are made public late, it jeopardizes the quality of financial reporting, increases information asymmetry and raises the level of uncertainty in investment decisions. Fujianti (2016) noted that poor timeliness reduces the benefit of financial statements, which in turn lessen transparency in corporate governance objectives. Kamran (2003) argues that timely financial report strengthens the health of financial market, through timely distribution of resources, thereby leading to reduction in spreading of asymmetric information, improvement in pricing of securities, and mitigating insider trading, leaks and rumors in the market.

Several factors account for delay in timely release of financial reports. Fujianti (2016) reported that large percentage of institution ownership structure is capable of pressing management to produce timely reports; adding that the audit committee also influence auditors to release audited statement in good time. Arowoshegbe, Uniamikogbo and Adeusi (2017) found that internal attributes of firms are the main factors that affect timeliness of financial reports in Nigeria, noting that size and firm age helps to aid timely release of reports. The study also found that there seems to be delay in disclosing financial reports to the public when big four auditing firms are employed for external audit.

2.2.4 Reliability Quality of Financial Reporting

As noted in the introductory chapter, this study focuses on the reliability dimension of financial reporting quality, using the reliability of earnings which is measured using earnings management as proxy for financial reporting quality. Financial report must also have the quality of reliability. It is reliable if it faithfully represents the economic phenomena which it purportedly represents either in words or numbers. The representation must be complete

showing a full depiction of all information necessary for users to understand the phenomena being represented, including all necessary explanations and descriptions of significant facts about the quality and nature of the items, factors and circumstances that might affect their quality and nature, and the process used to determine the numerical depiction. Financial report must also be neutral for it to be reliable. A neutral depiction is without bias in the selection and presentation of financial information. Bias information is slanted, weighted, emphasized, deemphasized, or otherwise manipulated to increase the probability that financial information will be received favorably or unfavorably by users (FASB, 2010). A reliable report is also free from errors such that the description of the phenomenon, and the process used to produce the reported information has been selected and applied with no errors and omissions in the process.

The practice of earnings management hampers reliability of earnings reported in the financial statement. Ronen and Yaari (2008) define earnings management as a strategy of generating accounting earnings which is achieved by the discretion of management over accounting choices and operating cash flows. Uwuigbe, et al. (2015) describe it as the deliberate manipulation of financial information to either mislead investors on the fundamental economic status of a business or to achieve some contractual gains that rely mainly on accounting numbers. According to Onatuyeh and Proso (2016) earnings management is the practice of taking premeditated steps within the limitation of generally accepted accounting principles in order to bring about a level of reported earnings. Ghazali, Shafie and Sanusi (2015) view earnings management as the use of discretion in the preparation and reporting of accounting information by management for their own benefit.

Earnings management is a fundamental aspect of financial reporting quality (Kayaa, 2015). It provides a basis for assessment of the reliability of financial reports and especially the quality

of reported earnings. This is why Moshtagh, Abbaszadeh, Nowghabi, and Nowghabi (2014) noted that financial reporting quality stems from the observation by analysts in the financial sector as well as agents of Stock Exchanges, that accounting profits as declared by firms, are far from what they actually portray. The non portrayal of the true profit figure is majorly attributed to the practice of earnings management; hence the quality of reported earnings is compromised.

According to Ahmadpoor and Ahmadi, (as cited in Dangana, 2014), two important characteristics of quality stand out in the concept of financial reporting quality. The first is that the reported earning is profitable and useful for decision making. Users of the financial report should be able to make decisions that they will not regret in the future based on what is reported as earnings. Secondly, the profit so reported is an economic profit which can create cash flow and results from the performance of the legitimate objects of the business. These features of quality therefore provide a premise for financial analysts and standard setters to consider earnings quality as the indirect measure for appraising the quality of financial reports Dangana (2014).

The quality of the earnings reported by firms is a reflection the quality of financial reporting process. It is therefore important to trace and identify the discretionary decisions of management in arriving at the final figure of earnings as reported. This view is also stressed by Lin, Jiang, Tan and He (2015) putting forward that the quality of financial report should be appraised not as the final output but also about the quality of the process employed in disclosing the company's transactions, information about the choice and application of accounting policies and knowledge of the judgments made. This research adopts the concept of financial reporting quality as presented by Lin, et al.

Discretionary behavior of managers who prepare financial reports should therefore be subjected to scrutiny. One of the ways this is done is by analyzing the accrual position of business organizations. The accrual concept of accounting allows for the recognition of revenues/income and expenditure/liability from transactions irrespective of whether cash flow occurs or not. Although accruals occur in the natural course of business and may be legitimate, management may exploit this concept to influence income and expenditure thereby manipulating reported earnings. In assessing financial reporting quality, it is therefore imperative to separate the discretionary accruals from non-discretionary accruals in the total accrual position. The degree of discretionary accruals (or earnings management) gives an insight into the opportunistic nature of managers, and thus showcases the level of quality in the financial report. The earnings management measure of financial reporting quality uses models to compute the discretionary portion of accruals in order to determine earnings quality. This is discussed in the following section.

2.3 Models for Financial Reporting Quality

As stated above, accruals are divided into two - discretionary and nondiscretionary accruals. The discretionary portion of accruals is the one that is susceptible to management manipulation and is one of the high points of interest for researchers who use this approach to investigate financial reporting quality.

Among the many ways to detecting earnings management, the accrual based approach of distinguishing and separating the discretionary component of reported income is the popular (Chen, 2010). The development of models for this purpose over the years, seek to effectively separate the discretionary portion of accruals from the total accruals. Models used in this approach include among others: Healy model, DeAngelo model, Jones model, Modified

Jones model, Extended Jones Cash Flow model, Performance-matching model, Dechow and, Dechev model and more recently, Yoon, Kim and Woodruff model.

The Healy model developed in 1985, tests for earnings management by comparing the mean total accrual which is the nondiscretionary accrual with the total accruals. The difference between the total accrual for the current year and the nondiscretionary accruals is designated the discretionary accruals (Dechow, et al. 1995).

In 1986, DeAngelo developed a model which detects earnings management by first assuming that the mean of total accrual is zero and do not change. Therefore the total accruals scaled by lagged total assets represent the nondiscretionary portion of accruals, which when subtracted from total accruals gives the discretionary accruals. The assumption of unchanging nondiscretionary accruals over period is a major flaw of this model. This is because there is bound to be changes in economic circumstances which will impact variables of nondiscretionary accruals (Dechow, et al. 1995).

Jones model came on board in 1991. The model does not assume a constant change in the nondiscretionary accrual in different periods. This is due to the fact that changes do occur in variables of nondiscretionary accruals because of changing economic environment. This is evident in the model which uses plant, property and equipment variable (PPE) to control for any changes in non-discretionary accruals arising from the depreciation charge and consequently account for changes in business activities of the firm. In the same vein, a sales revenue variable is used to control for changes in non-discretionary accruals linked current accounts arising from changes in the economic environment of the firm (Roodposhti, Banimahd, Rezaei & Salehi, 2012). The Jones model is therefore a linear equation with the total accruals regressed against change in revenue and gross property plant and equipment as independent variables representing which control for nondiscretionary accrual. The model

however assumes that sales revenue is completely nondiscretionary, not putting into consideration that credit sales are within the purview of management manipulation.

The modified Jones model given by Dechow, et al. (1995) is a step towards improving the limitation of the Jones model. The only adjustment relative to the original Jones Model is the change in revenues which is attuned for the change in receivables in the event period. They suppose that all changes in credit sales in the event period are discretionary, and conclude that it is simple and easy to manipulate credit sales component of the total revenue than revenues accruing from cash sales (Roodposhti, et al. 2012). This model is also not without limitation. According to Dechow, Hutton, Kim and Sloan (2012), this adjusted model is weak in detecting earnings management, especially in cases of high performance, as it most likely has a lesser capacity to separate discretionary accruals.

The Extended Jones Cash Flow Model emanates from the work of Kasznik (1999). He adds to Modified Jones model changes in operating cash flow as an explanatory variable to explain the negative correlation between cash flow from operations and total accruals. He brings in this element of cash flow because of the high tendency of management to exercise discretion over forecast of future in cash flows when they have overestimated earnings. On the other hand, he finds no proof that managers use income-decreasing discretionary accruals to manage reported earnings downward when they have undervalued earnings in their prediction (Roodposhti, et al. 2012).

The Performance Matched Model by Kothari, Leone, and Wasley (2005) tries to establish a link between performance represented as return on assets and total accruals in the detection of discretionary accruals. The Kothari method capitalizes on the inability of the Jones and the Modified Jones models to effectively spot earnings management for firms with extreme performance. The model believes that accruals of firms experiencing high performance is

expected to be non-zero, hence the need to include firm performance in the model for the estimation of discretionary accruals (Roodposhti, et al. 2012). Furthermore, Kothari, et al. (2005) found that the problem of heteroscedasticity was still present even with the lagged total assets in both the Jones and Modified Jones models. To further mitigate this problem of heteroscedasticity, they also included a constant in the model (Kashmiri, 2014).

Dechow and Dechev model is propounded on the basis that earnings management does not flow only from management discretion to manipulate earnings, and that accrual quality can be related to the firm and industry (Kashmiri, 2014). It therefore considers short term variables of working capital accrual and cash flow for preceding, current and subsequent periods because accruals predicts future cash collections/payments and cancels out when cash formerly acknowledged in accruals is collected/paid. They focus on interim working capital accruals and do not try to model durable accruals and their connection to cash flows (Dangana, 2014). The past, present and future cash flows are nondiscretionary, and should be negatively correlated with present cash flow and positively correlated with future cash flow (Man, 2013). The standard deviation of the residuals from the model is the proxy for earnings quality.

Yoon, et al. (2012) developed two models. The aim of their models is to correct the misspecification problems with the Modified Jones Model especially with the identification of the inverse of firm size (or total assets) as an independent variable by wrongly changing the orders of the standardization and the transformation into a statistical model. Modified Jones Model fails to meet some critical regression features evident in regression residuals not having zero means; fitted values of non-discretionary accruals and regression residuals of discretionary accruals not independent.

Yoon, et al noted that the misspecification problem with the Modified Jones Model is due to inappropriate use of surrogate variables for both current and noncurrent accruals. They therefore added new variables in their models which have sound logical validity and show much higher explanatory powers than the modified Jones model. Another deviation from the Modified Jones Model is in the area of estimating discretionary accruals. The Modified Jones Model applies the estimation models to individual industries on the premise that those firms in the same industry will have similar firm characteristics. The new model however applies estimation models to group of firms with similar financial structure, arguing that that while firms in the same industry may have different firm characteristics based on the point at which a firm is in the entity life cycle, firms that have similar financial structures will have similar firm characteristics. Hence, the models estimates discretionary accruals based on firms with similar financial structures, by ranking the firms and formed ten portfolios of equal observations using inventory as financial structure variable. This according to Yoon, et al (2012) achieves far greater estimation performance in terms of coefficient constancy and the robustness of discretionary accruals.

The first model does not include the inverse of firm size and uses a free constant term. It has two proxy variables for current accruals (ΔREV and ΔNREC). However, it uses the same proxy for noncurrent accruals (PPE) as in the modified Jones model does. The second model added lagged intangible assets (INTG) as an additional proxy for noncurrent accruals, and should be used when the ratio between intangible assets to total asset is material.

2.4 Determinants of Financial Reporting Quality

Several factors determine financial reporting quality. Empirical literature broadly categorized these factors into corporate governance mechanism factors and firm attributes.

The concept of corporate governance explains the machinery, procedure and practice by which corporations are administered and controlled. The agency framework provides the foundation for the governance and administration of companies by emphasizing the minimization of conflict of interest between owners and managers of corporations. In line with the agency theory, measures have been developed to improve the relationship between corporations and all its stakeholders. The measures bother on safeguarding the interest of the parties involved in the running of corporations. Examples of these measures include the avoidance of duality, that is, clear separation between the Chairman and Chief Executive, the establishment of board of directors, which in turn set up various committees like the audit committee, for the protection of shareholders interests among others.

According to Man (2013), corporate governance mechanisms can be generally categorized into two types- internal and external. Regulators focus on internal mechanisms which are determined by internal factors, such as insider shareholding as well as board structures and characteristics, including the proportion of independent directors, audit committees, remuneration committees, and ownership structures and so on. External mechanisms are determined by outside factors, aim to oversee corporations for the benefit of stakeholders, and consist of issues such as legal protection and takeover policy.

Because managers have the tendency to project their interest over and above the interest of shareholders, corporate governance mechanisms becomes necessary to mitigate managers' self interests. This is why Akhtaruddin, et al. (2009) argue that corporate governance provides a support for internal control that lessens agency troubles; and checks managers' opportunistic behaviors, information imbalance; leading to an improvement in corporate reporting and disclosure.

Furthermore, corporate governance mechanisms are involved in examining and determining a firm's general information reporting policy. The role of governance mechanisms in determining reporting policy may be either complementary or substitutive. It is complementary when it makes stronger the internal control system of the firm, weakens managers' desire to hold back information for their own profit, giving rise to enhancement in the reporting of quality of financial statements. It is substitutive on the other hand, when governance mechanisms decrease information asymmetry and opportunistic behaviors in the firm, leading to a decrease in the need for more monitoring and reporting quality (Kelton & Yang, 2008). It follows then that a sound and workable corporate governance mechanisms serve to improve financial reporting quality. This is why Fodio, Ibikunle, and Oba (2013) posit that there is a natural connection between corporate governance and financial reporting quality; with Cohen (2004) adding that one of the most important functions of corporate governance is to ensure quality of financial reporting process.

Corporate governance attribute used in this study is board size. The size of the board was chosen because it is strategic to the accomplishment of corporate governance objectives because of its key role of monitoring and supervising corporate activities for the protection of shareholders' interests. Shareholders of corporations usually appoint directors to oversee business operations and to protect their interests. The board of directors is usually headed by a Chairman. According to the Nigerian Code of Corporate Governance, the size of the board of directors should be between five and fifteen. A good board size is expected to have mixture knowledgeable and experienced directors that can put to check the opportunistic behavior of earnings management by managers, thus ensuring the quality of accounting numbers.

The concept of firm attributes is astutely captured by Karami and Akhgar (2014). They state that corporations have a set of characteristic features which more often than not relate to its category and the nature of business substance. Business transactions are not the same for all firms due to differences in business nature, leading to different difficulties, operational cycle, volatility, revenues, sources of financing, monetary resources, and objectives. These differences in the nature of businesses and their prevailing characteristics influence the reporting and information environment; therefore financial reporting may be influence by company attributes Karami and Akhgar (2014).

It is in this light that Amr (2016) put forward that financial reporting quality differs across firms in the same country because of the different characteristic nature of firms. Also, Shehu and Farouk (2014) posit that firm characteristics are variables which affect the firm's decision both internally and externally, and they help to limit the manipulative tendencies of management, thus improving the quality of accounting earnings. Specific firm characteristics used in previous studies include age leverage, liquidity, size, profitability, growth among others. Firm specific attributes used for this study are firm age, leverage, liquidity, size and audit fees.

The age of a firm is the period of its existence as a registered business entity. Researchers use different measure for age to compute the age of firm. While some use the date of incorporation to the year of reporting (Olowokure et al. 2016) others use of listing years, which is the number of years the firm has been on the stock exchange (Haniffa & Cook, 2002; Ojeka, Mukoro & Kanu, 2015). Scholars have the liberty to choose which measure is more appropriate, depending on the objectives of their study. The age firm from date of listing on the NSE, to the various reporting years is used for this study. This is because

investors have more confidence in firms listed on the stock exchange in addition to the increased monitoring and scrutiny demanded by the stock exchange rules.

Age of a firm is considered as one of the essential determinants of financial reporting quality. Even though this firm attribute is important, there is scarcity of studies in Nigeria that investigated the relationship between firm age and final reporting quality (Olowokure, et al. 2016). The internal control system of a firm gets stronger with age, and a strong and well structured internal control system guarantees quality financial reporting process, (Huang, Rose-Green and Lee, 2012). As firms advance in age, they also improve in their governance mechanisms, and as a result, become more closely monitored by government regulatory agencies. This is expected to produce a corresponding improved financial reporting practice (Chalaki, Didar & Riahnezhad, 2012).

Leverage refers to the proportion of debt financing in the total capital structure of a firm. It is believed that a proper mix of debt and equity capital increases the value of a firm. Leverage is also connected to financial reporting choices. Agency theory clarifies this link. According to this theory, highly leveraged firms have an inducement to voluntary increase the level of corporate reporting to stakeholders through conventional financial statements (Jensen & Meckling, 1976). Reporting financial information lessens agency costs and also makes it easy for creditors to evaluate the volatility of a company, and likely ask more information to safeguard their resources (Botosan & Plumlee, 2002; Fathi, 2013a). Shehu (2013) stated that examining the effect of leverage on quality of reported earnings is important because it is a means of evaluating the information content of the statement of financial position and it can be used as a surrogate for financial risk of a firm which impacts upon its share price.

Liquidity is the ability of a firm to turn assets into liquid form. This is essential for its existence as a going concern and for meeting current obligations as they fall due. Common

ratios used for computing liquidity include the quick acid test ratio and the current ratio. In each case, a firm's total current assets should be more than its current liabilities for it to meet current obligations. Liquidity is also a measure of performance, which is a motivation to provide earnings information with higher quality.

The firm attribute of size is relative. It could be measured in terms of the size of its assets, revenue, capital base, customer base, market coverage and so on. Large firms are expected to present better quality financial report because by their size, they are open to public inspection and are more complex compared to small firms.

Audit fees are charges paid to external auditors for audit of financial statements prepared by management. The fees paid to external auditors could be a function of the quality of services provided by the audit firm, the client size, audit risk, audit complexities and so on. However higher fees has been linked with dishonest practices by corporations and inflated earnings. High audit fees could be used as a cover to force external auditors to disregard shady practices of management, especially the disclosure of an inflated profit, which undermines the quality of reported earnings.

2.5 Empirical Review of Literature

This section discusses empirical works of previous studies in relation to the study under consideration.

2.5.1 Age and Financial Reporting Quality

Iyoha (2011) examined the impact of company attributes on the reliability of financial reports in Nigeria, using a sample of 61 quoted companies' annual reports for the years 1999-2007. Data collected on the study were analyzed and results estimated using Ordinary Least Square (OLS) Regression which was complimented with the panel data estimation technique. Reliability of financial report was the dependent variable of the study and was proxied by

scaled total accruals to determine the extent of earnings management. The study concluded that age has no significant relationship with reliability of financial reports. The use of total accrual without separating between discretionary and non-discretionary accruals in this study is not a correct measure of earnings management as not all accruals are discretionary.

Sara, et al. (2016) studied the impact of firm characteristics on earnings management of fifty (50) active firms from a population of quoted firms on the Egyptian Stock Exchange, from 2007-2011. The technique of data analysis used was regression tools and the random effect Generalized Least Square regression results were interpreted. The study concluded that there is no significant relationship between age and earnings management. The study used discretionary accruals measured by the Modified Jones Model to represent earnings management. However, owing to misspecification issues, the ability of the model to effectively separate between discretionary and nondiscretionary accruals is questionable.

In their study of listed firms in the Tehran Stock Exchange (TSE), out of which one hundred and thirty six (136) sampled firms were studied, Chalaki, et al. (2012) investigated the effect of corporate governance attributes on financial reporting quality and used age of firms as a control variable. The study period was from 2003 to 2011 and multiple regression tools were used to analyze data. The study used both the McNichols (2002) and Collins and Kothari (1989) models to measure financial reporting quality. It was found that there is no significant relationship between age and financial reporting quality for both models used in the study. The study measured age as the date of establishment of the firm to the reporting date, with the firm's average age being 34 years. Firms in operations for this number of years could have developed sound internal control systems over the years that will support the provision of quality financial reports. These firms arguably have weak internal control procedures which have not helped to improve financial reporting quality.

Huang, et al (2012) in their study sought to know the relationship between the age of the CEO and financial reporting quality of firms. The study used two surrogates for financial reporting quality - financial restatement and surprise (meeting or beating analyst earnings forecasts). The second measure is used in the sense that external auditors could be pressured to allow clients to influence earning in order to meet or beat analyst prediction of earnings. The study included company age as a control variable in the models of the study and used a sample of 3,413 Compustat firms from 2005-2008. The results of regression analysis revealed that company age was not significantly related to financial reporting quality for both models used. The study seems to project analysts forecast of earnings as the determinant of what firms report as earnings. This is rarely the case because forecasts are mere predictions which are not directly involved in the activities that generate income for firms.

A Nigerian study by Olowokure, et al. (2016) investigated firm characteristics and financial reporting quality of listed deposit money banks in Nigeria, from 2005-2014. A sample of thirteen (13) banks was drawn from the fifteen (15) listed deposit money banks as at 31st December, 2014. The regression results in relation to age and financial reporting quality show that the relationship is negatively significant at 10% level of significance. The measure of financial reporting quality of abnormal loan loss provision in the study is appropriate since it is a study of financial institutions, especially banks.

Kibiya, et al. (2016) investigated audit characteristics and its effect on financial reporting quality of listed nonfinancial firms in the NSE for the period 2010-2014. The sample of the study was 101 firm years longitudinal panels of 505 observations of the listed nonfinancial firms. Firm age was used as control variable and data and regressed against financial reporting quality measured using the McNichols (2002) model. The result of the study found a significant relationship between age and financial reporting quality. The improvement of

financial reporting quality with age could be the result of corresponding improvement in the internal control systems of the firms which may have also supported the financial reporting process.

2.5.2 Leverage and Financial Reporting Quality

Existing literature reports varying interaction between leverage and financial reporting quality. The work of Shehu (2013) examined monitoring characteristics and financial reporting quality of listed manufacturing firms in Nigeria, from 2007-2011. From a population of 59 firms, 32 were sampled and used in the study. Multiple regression was used to examined the model of the study with the results showing a positive significant relationship between leverage and earnings quality used as a proxy for financial reporting quality, measured using modified Dechow and Dichev (2002) model. The result that leverage positively influence earnings quality could be an indicator that providers of debt financing in the manufacturing sector are effective in monitoring activities of managers, and ensure that they report quality earnings as a guarantee for continued provision of debt financing.

Kim and Yang (2014) studied director tenure and financial reporting quality of listed Korean firms. The study used firm characteristics including leverage as control variables. The sample size is 5,502 firm-year observations over the period 2002-2011. Three different measures were used for financial reporting quality, being performance matched modified Jones Model, earnings persistence model and earnings response model. The study found that for the three models, positive significant relationship exists between firm leverage and financial reporting quality. Being positive and significantly related to financial reporting quality using all the three measures of FRQ in the study, leverage could be a major determinant of financial reporting quality in Korean firms.

Similarly, Shehu and Farouk (2014) investigated the relationship between firm attributes and earnings quality of listed oil and gas companies in Nigeria for the period 2007-2011. A sample of 7 out of the nine listed oil and gas firms were used in the study, which also used regression tools as technique for data analysis. The study documented a positive and statistically significant correlation between leverage and earnings quality. Residuals from the modified Jones model by Dechow et al (1995) were used to proxy earnings quality in the study. Residuals generated using the modified Jones model is based on the argument that firms in the same industry have the same characteristics. This may not be true because firms, though in the same industry, are in different stages in the life cycle and may not share similar features. It is therefore more appropriate to group firms having similar financial structures for the purpose of generating residuals (Yoon, Kim & Woodruff, 2012).

A study of the effect of firm size and leverage on quality financial reporting of listed companies in the Tehran Stock Exchange by Karami and Akhgar (2014) produced a result that showed a positively significant relationship when leverage was regressed against quality of financial reporting, measured using Kaznick (1999) model. The study period was from 2003-2012, with a sample of 120 active firms.

Amr (2016) used leverage as a control variable in a study which focused on analyzing the effect of liquidity on the quality of financial reporting of listed Egyptian firms. The study period which covered from 2014 to 2015 consisted of 32 listed firms. Hypothesis of the study were tested using regression analysis which documented a significant positive relationship between leverage and financial reporting quality represented as accounting conservatism, measured as market to book value of equity. The study implied accounting conservatism to mean the timely recognition and incorporation of economic losses into earnings than of economic gains. But it can be argued that because of the matching concept of accounting, all

economic losses must be matched against revenues to determine profit for the period. Therefore, it is not a question of whether the losses are timely recognized and incorporated, but whether they are actually charged against incomes. When this is not the case, the action could be seen as an earnings management practice.

On the contrary, a negative significant relationship between earnings management and leverage (used as control variable) was reported in the work of Ahmed, et al. (2016) in their study of IFRS adoption and earnings management in Nigerian non-financial quoted companies. The empirical research of this study was based on the sample of 68 non-financial quoted companies in Nigeria that consistently published their audited annual financial report between 2010 and 2014. Panel data multiple regression model was used for data analysis and interpretation. Earnings management was measured by discretionary accruals based on the modified Jones Model. The negative significant relationship is an indication that financial reporting quality improves as earnings management decreases with an increase in leverage. However, leverage should not be allowed to soar high to point of putting the firm in a very risky position of debt.

Fathi (2013a) in his study of determinants of quality financial information of listed French firms for the period 2004-2008, found an insignificant relationship between leverage and financial information quality. The study used a sample of 101 firms from a population of 250 listed firms, and used both discretionary accruals and disclosure index as measures of financial information quality which was the dependent variable of the study.

Uwuigbe et al. (2015) studied the effect of firm characteristics on earnings management of 20 listed firms in Nigeria covering the period from 2006-2010, and hypothesized a no significant relationship between leverage and earnings management. Discretionary accrual was used as a

surrogate for earnings management, using the modified Jones model; they failed to reject the hypothesis.

Similarly, Pattaraporn (2016) investigated the relationship between ownership structure and financial reporting quality from the perspective of financial restatement in listed Thai firms. The study was carried out on all listed non financial firms in the 2011. Regression results of the study indicated that leverage which was used as a control variable has no significant relationship with financial reporting quality. This study is however limited in scope as only a year was considered which may put a question on the validity of inferences drawn from the results.

2.5.3 Liquidity and Financial Reporting Quality

The ability of a firm to meet its current obligations as they fall due is an indication to investors and creditors of its continued existence in the future. Thus, it will be willing to report its liquidity position to the public (Shehu & Farouk, 2014). Liquidity is also an indication of a healthy financial performance of a firm. A firm with good financial performance indices such as liquidity has more inducement to provide earnings information of higher quality, Amr (2016). According to Alsaeed (2006) firms with very impressive liquidity are more likely to disclose information on their performance to investors and other stakeholders. On the other hand, firms with low liquidity may also reveal more information to show that management is aware of the company's position and to avoid claims by shareholders.

Empirical researchers have found differing association between liquidity and financial reporting quality. The findings of Amr (2016) revealed a positive significant relationship between liquidity and financial reporting quality. The study was conducted on a sample of 32 firms listed on the Egyptian Stock Exchange for the period 2014 and 2015. Correlation

research design was used and regression tools for analysis of data. This study could however be faulted on the ground of validity of the regression results since only two years were considered, which may not be sufficient to prove the strength of the results.

Moghaddam and Abbaspour (2017) studied the effect of leverage and liquidity ratios on earnings management and capital of banks listed on the Tehran Stock Exchange. In the study, financial information of 14 banks listed on the Tehran Stock Exchange during the period 2010-2015 were investigated and multivariate linear regression analysis using panel data was used. The study found a positive and significant relationship between bank liquidity and earnings management. The study however used descriptive research design instead of correlation design which is more appropriate for investigating relationship between two or more variables.

Shehu and Farouk (2014) in an empirical investigation of firm attributes and earnings quality of listed oil and gas companies in Nigeria for the period of 2007-2011, sought to study the bearing of liquidity on earnings quality and hypothesized that liquidity has no significant bearing on earnings quality of listed oil and gas firms in Nigeria. The listed oil and gas firms are Nine (9) in numbers out of which a sample of Seven (7) were used for the study. The study adopted the correlation and ex-post research design and data was analyzed using regression technique. The regression result revealed a positive and significant relationship between liquidity and earnings quality. Excess liquidity could be a source of agency problems because the higher the liquidity level, the higher the tendency of management's discretionary behavior. But it appears the managers of these firms have been able to manage increase in liquidity to meet current obligations as the fall due, while also using it as a motivation for reporting earnings of higher quality.

Shehu and Ahmad (2013) focused on the manufacturing firms in Nigeria and investigated firm characteristics from perspective of structure, monitoring and performance elements and the quality of financial reporting measured by modified model of Dechew and Dechev (2002). The study adopted correlation research design with pooled balanced panel data of 24 firms which served as sample of the study, using multiple regression as a tool of analysis. Liquidity was treated as one of the performance variables and regressed against financial reporting quality. The result showed a negative but significant relationship between liquidity and financial reporting quality. This result further substantiates the position of the agency theory that liquidity is a major source of the agency problem, because high liquidity could lead to increased discretionary behavior by management.

2.5.4 Size and Financial Reporting Quality

Empirical literature has established a link between firm size and financial reporting quality. The size of a firm could be reflected in its total assets or total sales. The direction and extent of the relationship between this variable and quality of financial report varies. According to Alsaeed (2006), negative relationships exist for a large firm. This is due to its political exposure, and as a result, would be frugal in its reporting practices in order to avoid being politically monitored. On the contrary, Nassreddin (2015) argues that large firms will usually report more information because the cost of reporting and disclosure is less compared to small firms; the firm can enjoy improved marketability and ease of raising capital through disclosure; the scrutiny of the public is more on large firm, hence the need to disclose more information.

Obigbemi, Iyoha and Ojeka (2015) posit that the size of a business determines its shareholders as well as its capital base. This gives a clue to the level of stewardship expected from managers and directors of the business. A large firm with large shareholders would

therefore require managers to render an account of their stewardship through necessary and adequate reporting of the business activities. Uwuigbe, et al. (2015) opined that big firms are prone to contrive their current accruals in order to exaggerate earnings. However, not all current accruals are vulnerable to management distortions. The portion of accruals that is susceptible to manipulation is the one under management's discretion.

In his work, Llukani (2013) identified various elements which can prevent large firms from engaging in earnings management to include: the reputation of the firms, as they would want to protect their status by not being caught in the shady act of distorting earnings and audit by large and experienced external auditors. This is because the rigorous audit process will likely reveal any window dressing done in the accounts. Llukani (2013) also considered the other side of the possibility of large firms engaging in managing earnings. They do this by negotiating with auditors because of the relationship they have with them, decreasing earnings to avoid political risk, and increasing profits in order to increase external funding. Nelson, Elliott and Tarpley (2002) argue that since audit fees increase with client size, auditors tend to be reluctant in making adjustments in the financial report and overlook earnings management in large firms.

Katundu and Samaila (2015) used firm size as a control variable in their study of the impact of board characteristics, independent audit committee on financial reporting quality of oil marketing firms in Nigeria from 2000-2011. Financial reporting quality was represented with the qualitative characteristics of relevance, faithful presentation, understandability, comparability and timeliness of financial statement. Data for the study were obtained from an audited annual report and accounts of the sampled oil marketing companies, and multiple regressions was used to analyze the data. The regression results revealed that size has positive significant relationship with financial reporting quality. The methodology of determining

financial reporting quality may be faulted due to the judgmental nature of determining several items that make up these qualitative features without scientific basis.

Karami and Akghar (2014) investigated the effects of company's size and leverage features on the quality of financial reporting of companies listed in Tehran stock exchange. Using systematic elimination sampling method, 120 active companies in Tehran stock exchange during the period of 2003 – 2012 were selected as the sample of the study. Data for the study was analyzed using regression tool, which showed a significant negative relationship between company size and financial reporting quality. According to Karami and Akghar, the study used the Kaznick (1999) model because it ranked higher than other models in determining discretionary accrual, based on industry classification of firms. However, as argued by Yoon, et al. (2012), firms with similar features should rather be classified based on their financial structure, and discretionary accruals generated through this classification better reflects how these features influence with FRQ.

Unwuigbe, Peter and Oyeniyi (2014) in their study of the effects of corporate governance mechanisms on earnings management of listed firms in Nigeria used firm size as a control variable. To achieve the objectives of the study, a total of 40 listed firms in the Nigerian stock exchange market were selected and analyzed for the period from 2007-2011. Regression analysis method was employed as a statistical technique for analyzing the data collected from the annual report of the selected firms. Findings of the study revealed that size has significantly negative effect on earnings management, proxied by discretionary accruals. This means that the higher the size of firm, the lower the earnings management practices, and by extension, the higher the quality of earnings.

On the contrary, the empirical results of the studies of Uwuigbe et al. (2015) for 20 listed firms in the Nigerian stock exchange market for the period 2006-2010 and Ali, Noor,

Khurshid and Mahmood (2015) for the textile sector of Pakistan from 2004 to 2013, show a positive and significant effect of the size of firm on earnings management represented as discretionary accruals. This implies a lower quality of reported earnings due to higher levels of earnings management as firms increase in size.

Kingsley, Osaro, Precious and Collins (2016) and Saftiana, Mukhtaruddin, Putri and Ferina (2017) concluded in their separate studies that size is positively related to earnings management though not statistically significant. This shows that earnings management increases as the firms grow in size. The firms may be sparing with earnings information in order to avoid political risks and intervention that most large firms are susceptible to.

An empirical study on the impact of firm characteristics on earnings management in listed firms in Egypt was done by of Sara, et al., (2016). The study selected the 50 most active firms in the Egyptian stock exchange and the analysis is done using the financial statements from the disclosure book for the period 2007-2011. Data generated were statistically tested using regression techniques. The result revealed that firm size does not statistically impact on earnings management, with a negative relationship. This inverse relationship between size and earnings management is a pointer that the sampled firms practice less of earnings management as they grow in size. These firms may also be audited by big audit firms with vast expertise in the detection of earnings management behavior leading to a reduction in creative accounting.

2.5.5 Audit Fees and Financial Reporting Quality

Payment of remuneration of external auditors for audit services rendered is indicative of the evidence that audit of financial statements prepared by corporate managers have been carried out by the auditors. Bala, Amran and Shaari (2018) posit that the fees paid can be used to judge the quality of the audit service provided, which could lead to a positive improvement in

the quality of financial report. However, high audit fees do not translate to strict scrutiny by auditors of the financial statements; can erode auditor independence and is associated with greater discretionary accruals by client firms (Martinez & Moraes, 2017). According to Muzatko and Teclezion (2016) auditors who charge higher fees might be economically reliant on those fees and allow clients more latitude in reporting earnings.

The independent studies of Okolie, Izedonmi and Enofe (2013) and Nawaiseh (2016) examined the influence of audit quality on earnings management. Audit fees was used as one of the proxies of audit quality and regressed against earnings management. The result shows that a negative significant relationship exists between audit fees and earnings management. This means that the higher the audit fees paid, the lesser the earnings management, which translates to reliable earnings quality.

Martinez and Moraes (2017) studied the influence of auditors' fees on earnings management in the Brazilian market using a sample of 300 listed firms in the year 2009 and 2010. The study aimed at supporting or refuting the hypothesis that audit firms that charge less for their service tend to be more relaxed regarding earnings management by their client companies. Regression was used as tool of analysis of data, with the results supporting the hypothesis. A period of only two years as used in this study may not be sufficient to conclude that firms that pay less audit fee engage in more aggressive earnings management.

The objective of the study of Eriabie and Dabor (2017) was to find out the impact of audit quality on earnings management in quoted Nigerian banks for the period 2005-2010. All eighteen banks quoted on the NSE as at December, 2010 were used in the study. Audit quality was measured as audit fees and auditor change, and cross-sectional year by year analysis was performed on data using regression tools. Based on the frequency of the results, audit fee was positively related to earnings management, suggesting that high audit fee

aggravates earnings management. This result aligns with the position of Muzatko and Teclezion (2016) that firms manage earnings because of lack of auditor's independence as a result of financial benefit derived from high audit fees paid by the firms.

Another study in the Nigerian banking industry was done by Aliyu, Musa and Zachariah (2015). The study examined the impact of audit quality on earnings management of listed deposit money banks in Nigeria from 2006-2013. Correlation research design was employed in a sample of ten (10) listed deposit money banks using secondary data. The study used the Ordinary Least Squares (OLS) regression technique of data analysis. Audit fee was used to represent auditor financial independence, and the regression found a positive significant relationship with earnings management. This result seems to support the opinion of Martinez and Moraes (2017) that increased audit fee payment may be used as concession to cover larger discretionary accruals by firms.

2.5.6 Board Size and Financial Reporting Quality

The board of directors has been found to impact on quality financial reporting. According to Obigbemi, et al. (2016) the Nigerian Code of Corporate Governance specifies that the composition of the board of directors must ensure diversity, so that integrity, compatibility, independence and availability will not be compromised. Furthermore, the board should be made up of both executive and non-executive directors to be headed by a Chairman, and the membership should be from 5 to 15 persons. Abu-Siam, Laili, and Bin-Khairi (2014) argue that board of directors play a supervisory role of controlling the reliability and quality of financial reports, because managers are prone to manage earnings to the detriment of shareholders.

Empirical results of the relationship between board size and earnings quality have been documented. A recent study by Paulinus, Oluchulwu and Somtochukwu (2017) carried out an

empirical investigation of corporate governance and financial reporting quality of quoted companies in Nigeria. The study was conducted on 15 consumer goods firms in Nigeria from 2012-2016. Data for corporate governance proxied by board size and audit committee independence were extracted from the notes from annual reports and financial reporting quality was represented by audit delay. Audit delay was measured as number of days from the fiscal year end to the date of audit report. Regression results of the study showed that board size has a negatively significant relationship with financial reporting quality. Mere timeliness of the release of audited financial report as used in this study cannot be used as a fair criterion for assessing reporting quality. The information content of financial statement should rather be subjected to scrutiny in order to confirm their veracity or otherwise. A false reporting of earnings for example, will remain false whether it takes only a day from the fiscal year end to the date of audit report.

Swastika (2013) evaluated the impact of the corporate governance and firm size on the earning management for food and beverages companies in Indonesian Stock Exchange. Multiple regressions were utilized to test this relationship at 95% confidence. Corporate governance was proxied by board of director (number of board members), audit quality, and board independence. Earning management was measured by Jones model with discretionary accruals. Using data from the year 2005 to 2007 annual reports of 51 food and beverages listed companies, including the composite index, the results showed that board of director was statistically (positively) significant in explaining earning management measured by discretionary accruals. The board members, though increasing in numbers, could not influence the financial reporting process in order to produce reliable reports. They may have been negligent in the performance of this all important function or probably lacked the proficiency to perform it.

Akeju and Babantunde (2017) investigated the impact of corporate governance on financial reporting quality in Nigeria, and examined this relationship for 40 listed firms in Nigeria, for the period 2006-2015. The relationship between corporate governance mechanisms (board characteristics, audit committees, board independence, board size and growth) and financial reporting quality was observed. The results of the multiple regression analysis for all explanatory variables studied were positive and statistically significant at 0.05 level. The McNichols (2002) model was used to determine financial reporting quality. The board size therefore appears to be a good match to management's strength, and is able to check its earnings management tendencies.

Kankanamage (2015) examined the impact of board characteristics on earnings management in Sri Lanka during the period from 2012-2015. The study used ordinary least squares regression (OLS) to examine the effect of board on earnings management for a sample of 160 listed firms in Sri Lanka. Kothari, Lenon and Wesley (2005) performance adjusted discretionary accrual model used to measure the earnings management by using discretionary accruals. Findings of the study revealed that there is a significant positive relationship between board size and earnings management. The study concluded that effective boards constrains earnings management and improves financial reporting quality and transparency. The board will have to combine its size with relevant experience to be effective in its monitoring functions of management's activities.

The study of Obigbemi, et al. (2016) evaluated the role board structure plays in curtailing earnings management practices in Nigerian companies. This study sampled the data of 137 quoted companies in Nigeria for a period of 8 years (2003-2010). Earnings management was measured using the magnitude of the discretionary accruals as estimated by the performance matched modified Jones model. Ordinary least squares (OLS) regression technique was used

to measure the research model as well as the Pearson moment correlation coefficient. The study shows that there is a significant relationship between board structure and earnings management practices in Nigeria. Specifically, a negative significant relationship between board size and earnings management was reported, implying that earnings management reduces (leading to an increase in financial reporting quality) when the size of the board increases. The use of the performance matched model in the study is commendable because it was a step toward detection of earnings management in cases of high performance which the modified Jones model in its original form fails to achieve. However, the model still retains the misspecification of the inverse of total assets. This as discussed earlier suppresses the constant term thereby reducing the model fitness.

Conversely, another Indonesian study by Nugroho and Eko (2011) reported an insignificant positive relationship between board size and earnings management. The study was conducted on companies listed in the Indonesian Stock Exchange from 2004-2008. Earnings management was determined by the Jones model (1991) as modified by Dechow and Sloan (1995) and regression models were employed to analyze data of the study.

2.6 Theoretical Framework

To provide the theoretical support for this research, the study considers the Positive Accounting Theory and the Agency Theory.

2.6.1 Positive Accounting Theory

The positive accounting theory (PAT) was developed by Watts and Zimmerman in 1986. PAT tries to clarify and envisage accounting practices that forms the basis of business transactions. Accounting research uses it to explain firm's choices on accounting procedures and practices. The theory hypothesizes that, in imperfect markets, accounting choice may be

determined by managers with the intention of manipulating reported incomes and capital structure (Watts & Zimmerman, 1986, as cited in Omoro, Aduda & Okiro, 2015).

The premise of the theory is hinged on the thought that, management, due to the fact that they are the direct handlers of business have first hand information over other stakeholders. This makes them to be selfish by using this information advantage for their selfish interest. This in most cases produces conflict of interest between them and shareholders. The PAT theory emphasize that this self-centered nature of management largely influences and shapes their choice of accounting policies and practices. Positive Accounting Theory is used in this study to explain management‘s motive for making accounting choices.

In an attempt to explain managers’ choices of accounting methods in terms of self-interests and the relationship between stakeholders, Positive Accounting Theory, lay down three hypotheses: the bonus hypothesis, the contractual motivation hypothesis and the political motivation hypothesis. Available bonus plans and compensational benefits for managers are common motivations for the adoption of certain accounting procedures and practices. Since bonuses and other compensational benefits are a function of generated earnings, managers would vote in favor of policies that increase income. The contractual motivation hypothesis, also known as debt covenant hypothesis states that firms with high leverage, and are on the verge of failing to meet their obligation, may go for accounting policies that supports the shift of future earnings to current period so as to meet the contractual obligation. Political motivation hypothesis provides support for firms who are under strict political or public scrutiny to manage earnings in a decreasing direction. The PAT theory is considered relevant to this study as it explains the incentives of financial statements by management.

2.6.2 Agency Theory

Meckling and Jensen developed the agency theory in 1976. The theory defines the principal-agent relationship. The principal here are shareholders while agents refer to the managers. These parties have divergent interests, thus giving rise to agency costs Shehata (2014). It is accepted that both parties pursue the maximization of their interests, and having differing viewpoints which could lead to conflicting and skewed interest between them. Shareholders would want to maximize the value of firm while the managers would want to maximize utility, of which income is paramount. In most cases, the agent will not always act in the best interests of the principal and could also hide information for selfish purpose.

Managers have a level of independence and they also have authority to make decisions on behalf of the shareholders. And as direct handlers of a business, they have firsthand information, and could be in possession of more knowledge of a business than its owners. Thus, the problem of information asymmetry between managers and shareholders occurs. Financial reporting and regulation help to mitigate the agency problem as it requires that management of corporations report both mandatory and voluntary information for the benefit of shareholders and other interest parties.

The agency theory explains the link between board size and financial reporting quality. Since the interest of the shareholders is a major responsibility of the board of directors, their oversight functions mitigate the conflict of interest between managers and shareholders. Thus, a large board size with experienced members is able to check against earnings management by managers for their interest.

According to Jensen and Meckling (1976) a component of the agency costs is represented by the monitoring costs supported by shareholders for the monitoring of the managers actions. The audit fees are an important component of these costs, as long as external auditors have to

make sure that managers act according to the shareholders' interests, while also inspect the accounts of the company. Therefore, audits can restrict the ability of managers to manage earnings. The demand for auditing is grounded in agency theory and asserts that an independent audit is a means to reduce costs due to the conflict of interest between investors and managers (Muzatko & Teclezion, 2016; Urhoghide & Emeni, 2014).

The agency theory states that highly levered firms will want to lessen agency cost relating to borrowing, by reporting reliable earnings figure which sufficiently addresses the information need of providers of debt financing in assessing the risk of firms and to protect their funds. Also, based on the agency theory, large sized firms witness greater agency costs and this means more opportunistic practices which can affect the reliability of earnings (Jensen & Meckling, 1976; Sara, et al, 2016). Firm age as used in the study represents the length of time a firm exists as listed firm on the NSE. This therefore relates more to how the monitoring role of NSE helps listed firms to develop strong internal control and best reporting practices. This scrutiny by NSE ensures reliability of reports which therefore reduces agency conflicts between managers and business owners. Also, excess liquidity is a source of agency problems as found by Jensen (1976) and management opportunistic activities or discretion could be triggered by excess liquidity, it is therefore expected that excess liquidity will negatively affect earnings quality from the agency perspective.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology adopted for this research work. It discusses the research design, population and sample of the study, data sources, collection method and analysis. It also presents the measurement of the variables under study and the econometric model for regression analysis.

3.2 Research Design

The study adopted the correlation research design. Correlation research design is adopted because it is usually employed to investigate the relationship between two variables or more.

3.3 Population and Sample of the Study

The population of the study is nine (9) listed Agriculture and Natural Resources firms in Nigeria as at 31st December, 2016, comprising of five (5) Agriculture Firms and four (4) Natural Resources Firms. One filter is applied to the population to arrive at sample for the study, being availability of complete financial statements for the firms in the study period. Consequently by applying this filter, one firm was eliminated, leaving a sample of eight (8) firms for the study. The eliminated firm is Ellah Lakes Plc .See table below for the population of the study.

Table 3.1 Listed Agriculture and Natural Resources firms in Nigeria

S/N	Name of Firm	Sector	Year of Listing on NSE
1	Ellah Lakes Plc	Agriculture	1993
2	FTN Cocoa Processors Plc	Agriculture	2008
3	Livestock Feeds Plc	Agriculture	1978
4	Okomu Oil Palm Plc	Agriculture	1991
5	Presco Plc	Agriculture	2002
6	Aluminum Extrusions Industry Plc	Natural Resources	1986
7	B.O.C. Gases Plc	Natural Resources	1979
8	Multiverse Mining and Exploration Plc	Natural Resources	2008
9	Thomas Wyatt Nigeria Plc	Natural Resources	1978

Source: Nigerian Stock Exchange Fact Books

3.4 Sources and Method of Data Collection

Secondary sources of data collection were used for this study. Data was extracted from audited annual financial reports of the listed Agriculture and Natural Resources firms in Nigeria covering from year 2008-2016. Secondary data is suited for this study because it is a quantitative study with positivism paradigm and quantitative data can be easily extracted from audited financial statements of the firms.

3.5 Techniques for Data Analysis

Multiple regression techniques using Ordinary Least Square (OLS), fixed effects and random effects regressions were adopted to examine the model of the study. In addition, panel regression analysis was used based on the fact that the data collected has both time and cross-sectional features. The OLS technique is effective as an unbiased estimator and is suitable in determining the effect of one variable on another, thus consistent with the correlation research design and objectives of the study.

3.6 Robustness Tests

Robustness tests were carried out to improve the statistical inferences drawn from the study. The tests include normality test, multicollinearity test, heteroscedasticity test and the hausman specification test and langrage multiplier tools.

Multicollinearity test is to determine whether there is a high correlation among the independent variables which will give the wrong impression about the result of the study. To confirm the presence or lack of multicollinearity between the independent variables, colinearity diagnostics were observed using the Variance Inflation Factor (VIF). As a rule of thumb, a VIF value of less than 10 is an indicator of the absence of harmful multicollinearity among the explanatory variables Gujarati (2014).

Heteroscedasticity test was done to examine whether the variability of error terms is constant or not. The presence of heteroscedasticity signifies that the disparity of the residuals or error term is not constant which could affect the inferences in respect of beta coefficient, coefficient of determination (R^2) and F-statistic of the study. A significant p-value in the result of the heteroscedasticity test indicates that the error terms are not constant.

Langrage multiplier tools were also used to further test for heteroscedasticity in fixed effect model or deciding between random effects and simple OLS, depending on the results of the

hausman specification tests. It helps in the final analysis, in the choice of the model that best explains and interprets the relationship among variables of the study.

3.7 Variables Measurement and Models Specification

The dependent variable of the research is Financial Reporting Quality (FRQ). Its measurement is quantitative, using absolute values of discretionary accruals from the residuals of the Yoon, Kim and Woodruff (2012) model. Absolute values are used to capture the combined effects of both income-increasing and income-decreasing accruals (Klein, 2006). This model is adopted for the research work because it uses financial structure of firms which is a better proxy for firm characteristics compared to the industry approach used by the Modified Jones model in estimating discretionary accrual. Therefore, since this study is considering the effect of firm characteristics on financial reporting quality, it is better to use a model that will better capture the firm characteristics to be used in the study. In addition, the model improves on the misspecification issues with the modified Jones model by the inclusion of additional variables for current and non-current accruals in the model thereby giving a sound and reasonable validity and showing much higher explanatory powers of variables.

The study adopts the first Yoon et al. (2012) model for computing discretionary accruals. Yoon et al. stated that the second model is warranted if the ratio of intangible assets and total assets is considered material. Only 15 observations out of the 72 observations for intangible assets, covering the firm-years of the study was available as many of the firms do not have data for intangible assets. The study therefore considered it not material to use data on intangible asset, hence the reason for the adoption of the first model, which is given as:

$$TA/A_{t-1} = \beta_0 + \beta_1 \Delta REV/A_{t-1} + \beta_2 \Delta NREC/A_{t-1} + \beta_3 PPE_{t-1}/A_{t-1} + \varepsilon \ldots\ldots (1)$$

Where:

TA = Total Accruals, given as net earnings less cash flow from operations;

A_{t-1} = Total Assets at the beginning of the year;

Δ REV = Change in Revenue from year t-1 to t;

Δ NREC = Net change in receivables from year t-1 to t;

PPE_{t-1} = Lagged Plant, property and Equipment;

B_0 = Constant

β_1, β_2, β_3 = Represents firms specific parameters.

ϵ = Residual here represents the firm specific discretionary portion of accruals.

Since ϵ represents the firm specific discretionary portion of accruals, the equation of the model is further adjusted to clearly define Discretionary Accruals (DA), which is the final derive of FRQ as: $$DA = TA/A_{t-1} - (\beta_0 + \beta_1 \Delta REV/A_{t-1} + \beta_2 \Delta NREC/A_{t-1} + \beta_3 PPE_{t-1}/A_{t-1}) \ldots (2)$$

Two steps regression was employed. First, the regression of the first Yoon, et al. (2012) model to generate residuals was used to derive values for financial reporting quality. The residuals were generated using account payable as the financial structure variable. The choice of using account payable as the financial structure variable for the study was occasioned after conducting pilot test for goodness of fit using other financial structure variable such as leverage, property plant and equipment, inventory, account receivables, current liabilities and non-current liabilities. Account payable had the highest goodness of fit. Based on the ranking of the chosen financial structure variable, four (4) portfolios of eighteen (18) observations each were formed, with each portfolio representing observations with similar firm characteristics. Regression was then carried out on each of the portfolio to generate residuals which represents FRQ in the model of the study.

Second, the regression model of the study was used to test hypothesis of the study. The values so derived for financial reporting quality (the dependent variable) are substituted as values for FRQ in the model of the study. The independent variables in the model are firm age, leverage, liquidity, size, audit fee, and board size. The model of the study is thus developed as follows:

FRQ= f (FAGE, LEVE, LIQU, SIZE, AFEE, BSIZ)

This is econometrically written as:

$$FRQ_{it} = \beta_{0it} + \beta_1 FAGE_{it} + \beta_2 LEVE_{it} + \beta_3 LIQU_{it} + \beta_4 SIZE_{it} + \beta_5 AFEE_{it} + \beta_6 BSIZ_{it} + \epsilon_{it} \quad \text{.....} (3)$$

Where β_0 is Intercept; $\beta_{1\text{-}6}$ are Coefficients of the independent variables; ϵ is the error term; i is firm and t is year. Other variables are defined in table 3.2 below.

Table 3.2 Variables Definition and Measurement

S/N	Variable Name	Variable Acronym	Variable Measurement	A priori Expectation	Source
1	Financial Reporting Quality	FRQ	Absolute values of discretionary accruals using residuals from the Yoon, et al (2012) model.		Yoon, Kim and Woodruff (2012)
2	Age	FAGE	Number of years from the year of of listing on the NSE (inclusive) to the reporting year.	Positive Significant impact on FRQ	Li, Mangena and Pike (2012), Haniffa and Cook (2002)
3	Leverage	LEVE	Ratio of total liabilities to total assets	Positive Significant influence on FRQ.	Kim and Yang (2014), Fathi (2013b)
4	Liquidity	LIQU	Ratio of current assets to current liabilities	Negative Significant effect on FRQ	Shehata, et al. (2014), Takhtaei and Mousavi(2012).
5	Size	SIZE	Log of total assets	Positive Significant impact on FRQ	Onatuyeh and Proso (2016), Uwuigbe et al. (2014)
6	Audit Fee	AFEE	Log of Total Fees	Negative Significant impact on FRQ	Martinez and Moraes (2017), Nawaiseh (2016)
7	Board Size	BSIZ	Number of board of directors	Positive Significant effect on FRQ	Onuorah and Imene (2016), Amer, et al. (2014)

Source: Author's compilation from various literatures

CHAPTER FOUR
DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter presents and analyzes the data of the study. It covers the descriptive analysis of the data as portrayed by descriptive statistics features of each variable of the study, a correlation analysis to show the level of relationships among variables and the regression analysis which will enable the test of hypothesis and reveal findings and policy implication of the study.

4.2 Descriptive Statistics

Table 4.1 Descriptive Statistics

Variables	No. of Observations	Mean	Standard Deviation	Minimum	Maximum
FRQ	72	0.0550	0.0635	0.0017	0.4074
FAGE	72	21.7500	12.6321	1.00	39.00
LEVE	72	0.5379	0.2468	0.0620	1.2792
SIZE	72	8,552.04	13,912.05	516.00	83,162.00
LIQU	72	1.2970	1.3073	0.0195	7.7884
BSIZ	72	8.00	2.0624	4.000	12.00
AFEE	72	7.3771	7.6364	0.7500	31.00

Source: Study Results from STATA Software

Table 4.1 presents the descriptive statistics for all the variables of the study. The minimum and maximum value of Financial Reporting Quality (FRQ) is 0.0017 and 0.4074 respectively, with standard deviation of 0.0635 and mean of 0.0550. The dispersion from the mean is not wide which suggests that the financial reporting quality patterns of the firms are similar. The absolute values rather than negative values for FRQ are used for the descriptive to take care of the effect of both upward and downward earnings management. The minimum and maximum years of listing on the NSE for the sampled firms and for the period of study are 1 and 39 respectively, with average years of listing of about 22 years. It is also observed that the mean leverage (LEVE) of the firms is 0.537, which suggests that debt financing in the

Agriculture and Natural Resources sectors in the period of study accounts for about 54% of the total financing. The remaining 46% can be attributable to equity financing. Data for SIZE (total asset) is presented in million naira (₦'000,000), with minimum and maximum asset size of 516 million naira and 83 billion naira respectively. Also, the figures show a mean asset value of 8,552.04 and standard deviation of 13,912.05. This deviation from the mean size for sampled firms may be due to variations in total asset base. The level of dispersion from the mean of liquidity (LIQU) is small. This is evident in the mean and standard deviation values of 1.2970 and 1.3073 respectively. This shows that the firms under investigation for the period have similar liquidity position on the average. Also, the mean value of 1.2970 is an indication that the firms' current assets barely covered its current liabilities and may be struggling to meet their current obligations as and when due. Furthermore, the Corporate Governance Code stipulates that members of the board should be between 5 and 15 respectively. With the minimum value of 4 for BSIZ, the sectors have not also fully complied with this provision in the Code. The amount paid as audit fee (AFEE) in the companies under review for the period is also stated in million naira (₦'000,000). The minimum and maximum fees paid are 750 thousand and 31 million naira respectively. Overall, the fees paid by the firms in the period, do not vary significantly which can be seen in the close dispersion between the mean of 7.3771 million and standard deviation of 7.6364 million naira.

Table 4.2 Normality Test

Variables	No. of Observations	W	V	Z	Probability
FRQ	72	0.6853	19.820	6.505	0.00000
FAGE	72	0.9053	5.964	3.890	0.00005
LEVE	72	0.9608	2.466	1.966	0.02463
SIZE	72	0.9504	3.126	2.483	0.00652
LIQU	72	0.7066	18.480	6.353	0.00000
BSIZ	72	0.9847	0.967	-0.074	0.52951
AFEE	72	0.9366	3.991	3.015	0.00129

Source: Study Results from STATA Software

In assessing the normality of the data collected for the variables of the study, Shapiro-Wilk test was applied and the result is presented in table 4.2. Under this technique, null hypothesis principle is used to check a variable that came from a normally distributed population. The null hypothesis of the test is that the data is normally distributed if P-value is greater than 0.05. The table indicates that data for Financial Reporting Quality (FRQ), age (FAGE), leverage (LEVE), size (SIZE), liquidity (LIQU) and audit fee (AFEE) are not normally distributed because the P-values are less than 0.05 Thus, the null hypothesis that the data is normally distributed is rejected. On the other hand, board size (BSIZ) is normally distributed as evidenced by the p-value of 0.52951.

4.3 Correlation Analysis

Table 4.3 Correlation Matrix

Variables	FRQ	FAGE	LEVE	SIZE	LIQU	BSIZ	AFEE
FRQ	**1**						
FAGE	0.0056	**1**					
LEVE	0.3249*	0.3339*	**1**				
SIZE	-0.1169	-0.4631*	-0.5267*	**1**			
LIQU	-0.1355	-0.1970	-0.4513*	0.1235	**1**		
BSIZ	0.3752*	-0.0714	-0.1751	0.4355*	0.0233	**1**	
AFEE	-0.1834	0.1319	-0.3987*	0.7153*	-0.0173	0.3341*	**1**

Significant at 1%
Source: Study Results from STATA Software

The correlation matrix in table 4.3 shows the association between the dependent variable and independent variables among themselves. The matrix reveals the strength of the relationships as well as the direction of association between variables. The associations between SIZE, LIQU, AFEE and FRQ are weak and negatively correlated with coefficient of -0.1169, -0.1355 and -0.1834 respectively. This indicates that size, liquidity and audit fees are inversely associated with financial reporting quality. The correlation matrix also reveals that FAGE, LEVE, and BSIZ move in the same direction as FRQ because they are positively related to FRQ; with coefficients of 0.0056, 0.3249 and 0.3752 respectively. The correlation

table also shows that no explanatory variable is perfectly correlated with another which is an indication that multicolinearity is not present in the model.

4.4 Robustness Tests

Table 4.4 Multicolinearity and Heteroscedasticity Tests

Variables	VIF	1/VIF(TV)
FAGE	3.16	0.316354
LEVE	1.86	0.536298
SIZE	6.60	0.151598
LIQU	1.34	0.748740
BSIZ	1.29	0.774462
AFEE	5.02	0.199361
Mean VIF	**3.21**	**-**
Breusch-Pagan Test for Heteroscedasticity: Chi2=63.44; Prob>chi2=0.0000		

Source: Study Results from STATA Software

The statistical inferences of the study needed to be validated, hence the robustness tests of multicolinearity and heteroscedasticity was carried out. The result of these tests as shown in table 4.4 is also to ensure that the assumptions of the OLS regression is complied with in respect of not having a perfectly correlated explanatory variables (absence of multicolinearity) and having a constant variance in the error term (Homoskedastic). However, the results from the table proved the absence of perfect multicollinearity among the independent variables, because the smallest Tolerance Value (TV) is 0.151598, while the highest Variance Inflation Factor (VIF) is 6.60. The rule of thumb for the TV is that any value of 0.1 and below implies the presence of multicollinearity in the estimates, while for the VIF, a value of 10 and above is an indication of perfect multicollinearity (Gujarati, 2004).

The Breusch-Pagan test for heteroscedasticity carried out revealed that the probability of chi-square (0.0000) which is significant at 1% level of significance. This is an indication of heteroscedasticity of the data within the study period and therefore further robustness diagnosis (fixed and random effects technique) was carried out.

4.5 Regression Analysis

In line with the panel nature of the data used in this study, the model of the study is subjected to other robust regression models in addition to OLS, due to the uncertainty as to the conformity with the classical assumptions of the OLS regression model, as indicated by the normality test in Table 4.2 and heteroscedasticity test in table 4.4 which turned out to be significant. Further robust regression for fixed and random effect models were carried out, and the hausman specification test was run to help to decide with model of the two is best for the study. The result of the hausman specification test showed probability of chi2 of 0.1303, suggested that the random effect model should be interpreted for the study. Refer to appendix B (VIII) and (IX) for results of the random effects model and hausman specification test respectively.

However, the Lagrangian Multiplier Test for Random Effects showed a p-value of 0.2201 (see appendix B(X)) which indicates that there is no statistical significant difference between the effects of the random effects model and OLS; therefore, OLS model can also be used for the study. The result of the OLS model is presented in table 4.5.

Table 4.5 OLS Regression Results

Variables	**Coefficient**	**t- test**	**Probability**
INTERCEPT	-0.0264	-0.25	0.801
FAGE	-0.0007	-0.79	0.431
LEVE	0.0870	2.47	0.016
SIZE	-0.0204	-0.68	0.496
LIQU	-0.0001	-0.02	0.983
BSIZ	0.0162	4.62	0.000
AFEE	-0.0105	-0.35	0.725
R^2=0.3429	**Adj. R^2=0.2823**	**F-Stat.=5.65**	**Prob>F=0.0001**

Source: Study Results from STATA Software

It can be observed that the R-squared which is the multiple coefficient of determination was 0.3429. This means that firm age, leverage, liquidity, size, audit fee and board size jointly explain the systematic variations in financial reporting quality patterns among the sampled

companies in Nigeria to the tune of 34%, while the remaining 66% relate to factors not captured in the model. The F-statistics of 5.65 and p-value of 0.0001 show that the model is statistical significant at 1%, which shows that the model is fit and the explanatory variables were carefully selected.

4.6 Hypothesis Testing

The hypotheses of the study formulated in chapter one is tested using a decision rule based on the significances of the t-statistics which are represented by the probability values of the OLS model in table 4.5.

Ho_1: Age has no significant effect on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria.

From table 4.5, the t-statistic value and the coefficient for FAGE are -0.79 and -0.0007 respectively; and probability value of 0.431 which is insignificant. This shows that firm age has no significant effect on financial reporting quality of Agriculture and Natural Resources firms in Nigeria. This assertion meets the first objective/question of the study and provides evidence not to reject the first hypothesis of the study.

Ho_2: Leverage has no significant effect on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria.

Leverage has a positive relationship with financial reporting quality (t-statistics of 2.47 and coefficient of 0.0870) and this relationship is significant also at 5% as shown in the probability value of 0.016. This means that leverage therefore exert positive effect on financial reporting quality. The second objective/question of the study is therefore achieved and the hypothesis that leverage has no significant effect on financial reporting quality is therefore rejected.

Ho_3: Liquidity has no significant effect on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria.

The regression result for the relationship between liquidity and financial reporting quality indicates that the relationship is negative with t-statistics and coefficient values of -0.02 and -0.0001 respectively which is not significant. The probability value is 0.983. With this result, the study fails to reject the third hypothesis of the study, and the third objective/question of the study is also met.

Ho_4: Size has no significant effect on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria.

The results from the OLS model reveal that size and financial reporting quality are negatively related with t-statistics value of -0.68 and coefficient value of -0.0204. The relationship is not significant with probability of 0.496. This result provides a premise for not rejecting the hypothesis, and settles the fourth objective/question of the study.

Ho_5: Audit Fees has no significant effect on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria.

Looking at the OLS regression result, audit fee is negatively related to financial reporting quality with t-statistic and coefficient scores of -0.35 and -0.0105 respectively. The relationship is however not significant as reflected in the probability value of 0.725. Based on this, the study fails to reject the hypothesis that audit fees has no significant effect on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria. The fifth objective/question of the study is attained with the description above of the relationship between audit fee and financial reporting quality.

Ho_6: Board size has no a significant effect on financial reporting quality of listed Agriculture and Natural Resources firms in Nigeria.

The relationship between board size and financial reporting quality as shown in the regression result indicate that board size is positively related with financial reporting quality with t-statistics and coefficient values of 4.62 and 0.0162 respectively; and probability value of 0.000 which is significant at 1%. By this result, board size has a positive significant effect on financial reporting quality, which meets the sixth objective/question of the study; and the hypothesis is therefore rejected.

4.7 Discussion of Findings

The findings of the study are drawn from the tests of hypothesis carried out. The study found that firm age has an insignificant negative effect on financial reporting quality. This means that as these firms get older in doing business as listed corporations on the NSE, their financial reporting quality decreases, but this decrease is not significant. This is worrisome considering that these firms have been listed in the NSE for an average of about 22 years, which should give an expectation of improved financial reporting quality. This may be because the firms in this study may have weak internal control system which does not support the improvement of financial reporting process. It could also be attributable to weakness in enforcing the monitoring and scrutinizing role of the Stock Exchange rules and regulations in checking shady practices of management. This finding concurs with the outcome of the studies of Iyoha (2011), Sara et al (2016), Chalaki et al (2012) and Huang et al (2012), but disagrees with the results of Kibiya et al (2016) and Olowokure et al (2016).

Furthermore, the study found that leverage positively and significantly impacts financial reporting quality. As leverage levels increases, there is a corresponding increase in financial reporting quality. From this positive effect of leverage on financial reporting quality, it can

also be deduced that the level of leverage is not high to the point of putting the firms in a risky position. The studies of Shehu (2013), Kim and Yang (2014), Shehu and Farouk (2014), Karami and Akghar (2014) and Amr (2016) also reported significant positive relationship between leverage and financial reporting quality. The providers of debt financing in the Agriculture and Natural Resources sectors may be effective in keeping an eye on the activities of firms in the sector, in order to protect their funds; more so that debt accounts for more than half the financing in these sectors (54%). The result of this check by debt providers may have put a compelling demand on managers to report activities appropriately to ensure safety of funds and continued debt financing operations. This could explain why this study outcome differs from the empirical researches of Pataraporn (2016), Uwuigbe et al (2015) and Fathi (2013a).

Besides, this research in agreement with the empirical study of Sara et al. (2016) which found that the size of firms, which is measured as log of total assets, has a negative non-significant effect on the quality of financial reporting. This means that large firms in the Agriculture and Natural Resources sectors may not have the incentive for reporting quality accounting numbers. This may be due to the concessions presently being enjoyed by these sectors which are being developed as substitute to the oil sector, and as a result, the firms may be under less of political pressure for strict monitoring of activities. However, the results of Katundu and Samaila (2015), Uwuigbe et al (2015), Ali et al (2015) reported significant relationship. This could be informed by the need for firms in the studies to protect their reputation in the eye of the public so as not to be seen as engaging in unethical business practices. Also, large firms by nature of their size usually have low cost of reporting compared to small firms which may serve as motivation for voluntary reporting. The firms may also be under political exposure that may warrant being generous with financial information.

In addition, the study also reveals that liquidity exerts a negative but not significant effect on financial reporting quality. This is an indication that a high liquidity position in Agriculture and Natural Resources firms reduces financial reporting quality. This result agrees with the findings of Shehu and Ahmad (2013), Moghddam and Abaspour (2017), but differ from the empirical results of Takhtaei and Mousavi (2012), Shehu and Farouk (2014) and Amr (2016). This finding of the study does not concur with the position that firms with impressive performance indicators such as liquidity have added inducement to provide earnings information of higher quality. It rather aligns with the position that high liquidity level may be counterproductive as it has been identified as one of the causes of agency problems, making management to be prone to unethical practices.

Board size was found in the study to have a significant positive effect on financial reporting quality. It is a suggestion that an increase in board size will also cause financial reporting quality to improve. The result concurs with the study of Akeju and Babatunde (2017) and Bala and Kumai (2015) but differ from the study outcome of Obigbemi et al (2016), Kankanamage (2016) and Swastika (2013). This may be because the size of the boards in the Agriculture and Natural Resources firms is adequate to protect the interests of shareholders who voted them for that purpose. It is also a reflection that membership of the board meets the requirement of diversity and that integrity, compatibility, independence and availability is not compromised in the appointment of board members.

The study also found that audit fee paid to external auditors have a negative but not significant effect on financial reporting quality. It reveals that a percentage change in audit charges should lead to decrease in financial reporting quality. The relationship is not significant. This may be a pointer that external auditors who audit financial reports of the Agriculture and Natural Resources sectors may have economic bond with their clients which

affects their level of independence in the performance of their duties; thereby reducing the quality of financial reports. In line with this study, Okolie et al (2013), Nwaiseh (2016) and Martinez and Moraes (2017) documented negative relationship; while Aliyu et al (2015) and Eriabe and Dabor (2017) also documented positive relationship between audit fee and financial reporting quality

4.8 Policy Implications of the Findings

Arising from the findings of the study, the following policy implications are elicited. The NSE as a matter of policy may review its implementation strategy on the enforcement of its monitoring rules and supervision of listed firms to ensure that unhealthy practice of earnings management is drastically reduced. The enforcement of these rules should also aim at helping firms to establish strong internal control systems that will support credible reporting of accounting figures.

By way of internal business policy, firms in the sectors may decide to maintain leverage position at a level that is sufficiently adequate to compel reporting of non manipulated financial activities. The level of leverage decided should not be high to so as not to increase the volatility of business.

Policy makers could allow for the continuity of the current provisions on board size in the Code of Corporate Governance while ensuring that there is diversity among board members to guarantee integrity compatibility, independence and availability among members.

The finding in relation to audit fee and financial reporting quality is pertinent to the increasing focus of standard setters on audit quality especially when audit quality is viewed in terms of amount paid as audit fee. The policy implication that elicit from this is the need for in-depth reassessment of auditors' independence by subjecting the independent auditors'

verification to further checks to ensure that high audit fee do not translate to economic dependence of auditors on client firms.

CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

This empirical study investigated the effect of firm attributes on financial reporting quality with a bias for listed Agriculture and Natural Resources firms in Nigeria. The sectors were chosen for the research because of the growing attention it has gathered towards the effort of diversifying the Nigerian economy; and the accounting support towards this effort to provide information about the financial reporting practices and patterns in these sectors. The study was carried out on a sample of 8 firms which comprised of 4 Agriculture firms (out of 5) and 4 Natural Resources firms (out of 4) covering a period of 9 years from 2008-2016.

The dependent variable of the study is financial reporting quality represented by absolute values of residuals from the Yoon, Kim and Woodruff (2012) model, while the explanatory variables are firm attributes of age, leverage, liquidity, size audit fee, and board size.

Regression tools were employed to analyzed data collected through secondary sources from financial reports of the sampled firms. After conducting a number of robustness tests, the OLS model was identified as most appropriate to interpret results and make inferences. Hence the study found that leverage and board size have positive and significant effect on financial reporting quality of listed Agriculture and Natural Resources firms in the period of the study; Age, liquidity, size and audit fees exert negative but not significant effect on financial reporting quality. The findings of the study will benefit investors, shareholders and management of firms, regulatory agencies and researchers.

5.2 Conclusion

The study examined the effect of firm attributes on financial reporting quality of listed Nigerian Agriculture and Natural Resources firms, covering the period from 2008-2016. The

firm attributes as considered in the study were regresses against financial reporting quality, and based on the results and findings of the study, the following conclusion are derived: first, it was the expectation of the study that firm age should have a positive relationship with financial reporting quality because as firms grow in age, their internal control systems becomes stronger which supports quality reporting process. However, the study results revealed that age has a negative and insignificant effect on financial reporting quality. It is therefore concluded that age does not improve financial reporting quality of the firms in the study period.

Second, leverage exerts a positive and significant effect on financial reporting quality as expected in the study. For this relationship, it is concluded that leverage has a significant positive effect on financial reporting quality and should be considered as determinant of financial reporting quality. Third, the study concluded that liquidity does not enhance financial reporting quality of the firms in the period of the study because of its negative and insignificant relationship with FRQ.

Fourth, an examination of the relationship between size and FRQ indicate that size is inversely related with FRQ. Thus, as firms increase in size, a corresponding decrease in FRQ is reported. Sequel to this result, it is concluded that size does not have a significant positive effect on FRQ. Fifth, considering whether audit fee positively influence FRQ, the regression results shows a negative and not significant relationship between the variables. This led to the conclusion that audit fee does not determine the improvement of financial reporting quality. Finally, the study concluded that board size is one of the attributes that enhances FRQ, as the results shows that it has a positive and significant effect on FRQ.

5.3 Recommendation

On the basis of the findings of the study, the study recommends as follows:

i. The study found that there is no significant increase in financial reporting quality as firms increase in number of years of doing business as listed corporations on the Nigerian Stock Exchange (NSE). It is therefore recommended that the NSE reviews its approach and tactics in the execution of specific rules on financial reporting quality, focusing on earnings management practices by firms, while also ensuring that the internal control systems of listed firms meet minimum requirements to support reliable financial reporting process.

ii. The study recommends that shareholders (through the board of directors) and managers should agree as a matter of policy, to maintain a level of leverage that is sufficient enough to motivate and induce the reporting of quality accounting numbers. The current leverage level of 54% could be maintained as it serves this purpose as shown in the descriptive statistics.

iii. Stakeholders in the sectors especially shareholders are called to note the inverse relationship between liquidity and financial reporting quality. Too much liquidity could be source of agency problems leading to mismanagement of excess liquidity and an easy source of undue discretionary behavior by mangers. It is recommended that liquidity should always be at a level that is sufficient to meet current obligations as they fall due.

iv. The study recommends that the Financial Reporting Council of Nigeria (FRCN) or any other relevant regulatory agency should set up a means of scrutinizing auditors' verification in order to authenticate their independence and ensure that external auditors do not economically depend on client firms with respect to what they earn as audit fee. This recommendation stems from the inverse relationship between audit fee

and financial reporting quality in the study, which could be an indication that auditors may give a pass mark to poor quality financial reports because of an increase in payment of audit fee.

v. On the corporate governance regulation with respect to board size, it is recommended that the current status quo of between 5-15 board members should be maintained.

5.4 Limitation of the Study

The study is limited to only two sectors of firms listed in the NSE, with a population of 9 firms, out of which only 8 were investigated in the study, owing to unavailability of complete financial statements.

5.5 Areas for Further Research

The following areas of further research are recommended:

i. Further researches could be conducted to test the Yoon, Kim and Woodruff (2012) model of separating discretionary accruals for the determination of earnings quality/financial reporting quality in other sectors.

ii. Explanatory variables not investigated in this study should be empirically studied especially in the Agriculture and Natural Resources sectors to provide a wider perspective on the subject.

References

Abu-Siam, Y.I., Laili, N.H., & Bin-Khairi, K.F. (2014). Board of directors and earnings management among Jordanian listed companies: Proposing conceptual framework. *International Journal of Technical Research and Applications, 2*(3), 1-7. Retrieved from https://www.academia.edu/14598103/BOARD_OF_DIRECTORS_AND_EARNINGS_MANAGEMENT_AMONG_JORDANIAN_LISTED_COMPANIES_PROPOSING_CONCEPTUAL_FRAMEWORK

Agro Nigeria. (2017). 2017 Budget: Presidency allocates N92bn to agric, set to revive fertilizer blending plant in Nigeria. Retrieved from https://agronigeria.com.ng/2017-budget-presidency-allocates-n92bn-agric-set-revive-fertilizer-blending-plant-nigeria/

Ahmed, A. (2012). Disclosure of financial reporting and firm structure as a determinant: A study on the listed companies of DSE. *ASA University Review*, *6*(1), 43-60. Retrieved from http://www.asaub.edu.bd/data/asaubreview/v6n1sl5.pdf

Ahmed, B., Salisu, A. & Teslim, O.(2016). IFRS adoption and earnings management in Nigeria non-financial quoted companies. *Universiti Utara Malaysia*. Conference proceedings of the 3rd International Conference on Accounting Studies (ICAS) 2016, Langkawi, Kedah, Malaysia, 309-313. Retrieved from http://icas.my/download/icas_2016/309-314-169.pdf

Akeju, J.B., & Babatunde, A.A. (2017). Corporate governance and financial reporting quality in Nigeria. *International Journal of Information Research and Review, 4*(2), 3749-3753. Retrieved from https://www.academia.edu/34182991/CORPORATE_GOVERNANCE_AND_FINANCIAL_REPORTING_QUALITY_IN_NIGERIA

Akhtaruddin M., Hossain M. A., Hossain M & Yao L. (2009). Corporate governance and voluntary disclosure in corporate annual reports of Malaysian listed firms. *JAMAR, 7*(1), 1-15. Retrieved from https://pdfs.semanticscholar.org/0c34/5ca324e334c3186eca4333fccb00a39c7490.pdf

Ali, U., Noor, M.A., Khurshid, M.K. & Mahmood, A. (2015). Impact of firm size on earnings management: A study of textile sector of Pakistan. *European Journal of Business and Management, 7*(28), 47-56. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.735.2242&rep=rep1&type=pdf

Aliyu, M.D., Musa, A.U., & Zachariah, P. (2015). Impact of audit quality on earnings management of listed deposit money banks in Nigeria. *Journal of Accounting and Financial Management, 1*(8), 31-46. Retrieved from https://iiardpub.org/get/JAFM/VOL%201/IMPACT%20OF%20AUDIT%20QUALITY.pdf

Aljiri, K., Alzarouni, A., & Chew, N. (2014). The association between firm characteristics and corporate financial disclosures: Evidence from UAE companies. *The International Journal of Business and Finance Research*, *8*(2), 101-123. Retrieved from ftp://ftp.repec.org/opt/ReDIF/RePEc/ibf/ijbfre/ijbfr-v8n2-2014/IJBFR-V8N2-2014-8.pdf

Alsaeed, K. (2006). The Association between firm–specific characteristics and disclosure: The case of Saudi Arabia. *Managerial Auditing Journal*, *21*(5), 476-496. DOI: https://doi.org/10.1108/02686900610667256

Amer, A., Ravindran, P., & Mahmoud, A. (2014). Impact of corporate governance and ownership structure on voluntary disclosure in annual reports among listed Jordanian companies. *Procedia - Social and Behavioral Sciences.* Proceedings of International Conference on Innovation, Management and Technology Research, 129, 341 – 348. Retrieved from https://core.ac.uk/download/pdf/82248322.pdf

Amr, A.M. (2016). Analyzing the effect of firm liquidity on the quality of financial reporting: An empirical study on firms listed in the Egyptian stock exchange. *International Journal of Social Science and Economic Research, 1*(10), 1604-1623. Retrieved from http://ijsser.org/uploads/ijsser_01__98.pdf

Arowoshegbe, A.O., Uniamikogbo, E. & Adeusi, A.S. (2017). Factors affecting timeliness of an audit report in Nigeria. *FUNAI Journal of Accounting, Business and Finance, 1* (1), 26-38. Retrieved from https://www.fujabf.org/wp-content/uploads/2018/01/Factors-Affecting-Timeliness-of-an-Audit-Report-in-Nigeria.pdf

Bala, H., Amran, N.F., & Shaari, H. (2018). Audit fees and financial reporting quality: A study of listed companies in Nigeria. *International Review of Management and Business Research, 7*(2), 482-489. Retrieved from https://www.researchgate.net/profile/Noor_Amran/publication/325957245_Audit_Fees_and_Financial_Reporting_Quality_A_Study_of_Listed_Companies_in_Nigeria/links/5b2f2d414585150d23caadbb/Audit-Fees-and-Financial-Reporting-Quality-A-Study-of-Listed-Companies-in-Nigeria.pdf

Bala, H. & Kumai, G.B. (2015). Board characteristics and earnings management of listed food and beverages firms in Nigeria. *European Journal of Accounting, Auditing and Finance Research, 3*(8), 25-41. Retrieved from http://www.eajournals.org/wp-content/uploads/Board-Characteristics-and-Earnings-Management-of-Listed-Food-and-Bevearges-Firms-in-Nigria.pdf

Biddle, G.C., Hilary, G., & Verdi, R.S. (2009). How does financial reporting quality relate to investment efficiency? *Journal of Accounting and Economics, 48*, 112–131. Retrieved from https://dspace.mit.edu/openaccess-disseminate/1721.1/65333

Boubakri F. (2012). The relationship between accruals quality, earnings Persistence and accruals anomaly in the Canadian context. *International Journal of Economics and Finance, 4*(6), 51-62. Retrieved from http://www.ccsenet.org/journal/index.php/ijef/article/download/17406/11557

Botosan, C. A., & Plumlee, M. A. (2002). A re-examination of disclosure level and the expected cost of equity capital. *Journal of Accounting Research*. *40*(1), 21–40. Retrieved from https://www.jstor.org/stable/3542428

Chalaki, P., Dider, H., & Riahinezhad (2012). Corporate governance attributes and financial reporting quality: Empirical evidence from Iran. *International Journal of Business and Social Science, 3*(15), 223-229. Retrieved from http://ijbssnet.com/journals/Vol_3_No_15_August_2012/25.pdf

Chen, T. T. (2010). Analysis on accrual-based models in detecting earnings management. *Lingnan Journal of Banking, Finance and Economics, 2*(1), 57-69. Retrieved from https://commons.ln.edu.hk/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1010&context=ljbfe

Cohen, D.A. (2004). Quality of financial reporting choice: Determinants and economic consequences. A paper presented at the 2003 London Business School Accounting Symposium, July 3 2003. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.551.8406&rep=rep1&type=pdf

Cohen J., Ganash K., & Wright A. (2004). The corporate governance mosaic and financial reporting quality. *Journal of Accounting Literature*, 87-152. Retrieved from http://ssrn.com/abstract=1086743

Dangana U. (2014). Audit attributes and financial reporting quality of listed building material firms in Nigeria. Unpublished Msc. Dissertation, Department of Accounting, Ahmadu Bello University, Zaria. Retrieved from http://kubanni.abu.edu.ng/jspui/handle/123456789/6242

Dechow, P.M., Sloan, R.G & Sweeney, A.P (1995). Detecting earnings management. *The Accounting Review, 70*(2), 193-225. Retrieve from http://www.jstor.org/stable/248303

Dechow, P.M., Hutton, A.P., Kim, J.H. & Sloan, R.G. (2012). Detecting earnings management: A new approach. *Journal of Accounting Research, 50*(2), 275-334. DOI: 10.1111/j.1475-679X.2012.00449.x

Emeh, Y. & Appah, E. (2013). Audit committee and timeliness of financial reports: Empirical evidence from Nigeria. *Journal of Economics and Sustainable Development, 4*(20), 14-25. Retrieved from https://www.iiste.org/Journals/index.php/JEDS/article/view/9803

Eriabie, S & Dabor, E.L. (2017). Audit quality and earnings management in quoted Nigerian banks. *Journal of Accounting, Finance and Auditing Studies 3*(1), 1-16. Retrieved from http://oer.mciu.edu.ng/wp-content/uploads/2015/04/84DABOR.pdf

Fathi, J. (2013a). The determinants of the quality of financial information disclosed by French listed companies. *Mediterranean Journal of Social Sciences, 4*(2), 319-331 DOI:10.5901/mjss.2013.v4n2p319

Fathi, J. (2013b). Corporate governance and the level of financial disclosure by Tunisian Firm. *Journal of Business Studies, 4*(3), 95-111. Retrieved from http://www.mcser.org/journal/index.php/mjss/article/download/199/184

Financial Accounting Standards Board. (2010). Statement of financial accounting concepts No.8. conceptual framework for financial reporting. chapter 1, *The Objective of General Purpose Financial Reporting,* and Chapter 3, *Qualitative Characteristics of Useful Financial Information.* Retrieved from https://www.fasb.org/resources/ccurl/515/412/Concepts%20Statement%20No%208.pdf

Fodio, M.I., Ibikunle, J., & Oba, V.C. (2013). Corporate governance mechanisms and reported earnings quality in listed Nigerian insurance firms. *International Journal of Finance and Accounting, 2*(5), 279-286. DOI: 10.5923/j.ijfa.20130205.01

Fujianti, L. (2016). Analysis Market Reaction on Timeliness Reporting: Study on Indonesia Stock Exchange. *International Journal of Business and Management Invention, 5*(3), 1-10. Retrieved from http://dosen.univpancasila.ac.id/dosenfile/149911100514610538 5519April2016.pdf

Gaynor, L.M., Kelton, A.S., Mercer, M. & Yohn, T.L. (2016). Understanding the relation between financial reporting quality and audit quality. *Auditing: A Journal of Practice & Theory*, *35*(4), 1–22. Retrieved from http://ssrn.com/abstract=2748054

Ghazali, A.W., Shafie, N.A., & Sanusi, Z.M. (2015). Earnings management: An analysis of opportunistic behaviour, monitoring mechanism and financial distress. *Procedia Economics and Finance.* Conference Proceedings of the 7th International Conference on Financial Criminology, *28,* 190 – 201. DOI: http://dx.doi.org/10.1016%2FS2212-5671(15)01100-4

Gujarati, D.N. (2004). *Basic Econometrics*, (4th ed.). USA: McGraw-Hill. Retrieved from http://www.afriheritage.org/TTT/2%20Basic%20Econometrics%20%20Gujarati%5B1%5D.pdf

Haniffa, R.M. & Cooke, T.E. (2002). Culture, corporate governance and disclosure in Malaysian corporations. *Journal of Accounting and Public Policy, 12*, 31 – 44. Retrieved from https://www.researchgate.net/publication/4737353_Culture_ Corporate_Governance_and_ Disclosure_in_Malaysian_Corporations

Huang, H, Ena, R., & Lee, C. (2012). CEO age and financial reporting quality. *Accounting Horizons*, *26*(4), 725-740. DOI: 10.2308/acch-50268

Iyoha, F.O. (2011). Quoted companies' attributes and the reliability of financial reporting in Nigeria. *ICAN Journal of Accounting and Finance*, *1*(3), 12-23. Retrieved from http://eprints.covenantuniversity.edu.ng/3978/1/Dr.%20Iyoha%20F.%202.pdf

Jeroh, E. (2016). Does book values and earnings affect equity values of corporate entities in Nigeria? *Trends Economics and Management, 27*(3), 30–38 DOI: http://dx.doi.org/10.13164/trends.2016.27.30

Jensen, M.C. & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency cost and ownership structure. *Journal of Financial Economics, 3*, 305 – 360. Retrieved from https://www2.bc.edu/thomas-chemmanur/phdfincorp/MF891%20papers/Jensen%20and%20Meckling%201976.pdf

Jonas, G. & Blanchet, J. (2000). Assessing quality of financial reporting. *Accounting Horizons*, *14*(3), 353-363. Retrieved from https://aaapubs.org/doi/abs/10.2308/acch .2000.14.3.353

Kamran, A. (2003). The timeliness of corporate reporting: A comparative study of South Asia. *Advances in International Accounting, 16,* 17–43. DOI: http://dx.doi.org/10. 1016/S0897-3660(03)16002-3

Kankanamage C. A. (2015). The relationship between board characteristics and earning management: Evidence from Sri Lankan listed companies. *Kelaniya Journal of Management, 4*(2), 36-42. Retrieved from https://kjm.sljol.info/articles/10.4038/kjm. v4i2.7499 /galley/5789/download/

Karami, A. & Akhgar, M. (2014). Effect of company's size and leverage features on the quality of financial reporting of companies listed in Tehran Stock Exchange. *Interdisciplinary Journal of Contemporary Research in Business, 6*(5), 71-79. Retrieved from http://euabr.com/ijcrbsep14/71-81sep14.pdf

Kashmiri H. (2014). Testing accrual based earnings management models in an international context. Unpublished Master's Thesis, Massey University, Albany, New Zealand. Retrieved from https://mro.massey.ac.nz/bitstream/handle/10179/5602/02_whole.pdf ?sequence=2&isAllowed=y

Kasznik, R. (1999). On the association between voluntary disclosure and earnings management, *Journal of Accounting Research, 37,* 57-81. Retrieved from https://www.jstor.org/stable/pdf/2491396.pdf?seq=1#page_scan_tab_contents

Katundu, A.S., & Samaila, I.A. (2015). Board characteristics, independent audit committee and financial reporting quality of oil marketing firms: Evidence from Nigeria. *Journal of Finance, Accounting and Management*, *6*(2), 34-50. Retrieved from https://www.questia.com/library/journal/1P3-3690967901/board-characteristics-independent-audit-committee

Kayaa I.D. (2015). The impact of international financial reporting standards (IFRS) on earnings management: A review of empirical evidence. *Journal of Finance and Accounting, 3*(3), 57-65. DOI:10.12691/jfa-3-3-3

Kelton, A.S., & Yang, Y. (2008). The impact of corporate governance on internet financial reporting. *Journal of Accounting and Public Policy, 27,* 62–87. DOI:10.1016/j.jaccpubpol.2007.11.001

Kibiya, M.U., Ahmad A.C., & Amran N.A. (2016). Audit committee characteristics and financial reporting quality: Nigerian non-financial listed firms. *The European Proceedings of Social & Behavioral Sciences*. Conference Proceedings of the International Soft Science Conference, 753-759. Retrieved from http://dx.doi.org/10.15405/epsbs.2016.08.106

Kim, K. & Yang, J. S. (2014). Director tenure and financial reporting quality: Evidence from Korea. *Review of Integrated Business & Economics Research, 3*(1), 237-255. Retrieved from http://buscompress.com/uploads/3/4/9/8/34980536/riber_k14-129__ 237-256_.pdf

Kingsley, A., Osaro, A., Precious, E., & Collins, A. (2016). Determinants of earnings management in Nigerian quoted companies. *Igbinedion University Journal of Accounting*, *1*, 118-133. Retrieved from http://www.iuokada.edu.ng/publication/wp-content/uploads/2019/02/ATU-Omimi-Ejoor-Osaretin-Kingsley-ATU-Favour-Osaro-ENEGBE-.O.-Precious-ATU-Efosa-Collins-DETERMINANTS-OF-EARNINGS-MANAGEMENT-IN-NIGERIAN-QUOTED-COMPANIES.pdf

Klein, A. (2006). Audit committee, board of director characteristics, and earnings management. New York University School of Law, NYU Center for Law and Economics. Law & Economics Research Paper Series Working Paper No. 06-42. Retrieved from https://pdfs.semanticscholar.org/d341/22a97cbca64e305724e82aac97ae089b9b39.pdf

Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, *39*(1), 163-197. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.453.5168&rep=rep1&type=pdf

Li, J., Mangena, M., & Pike, R. (2012). The effect of audit committee characteristics on intellectual capital disclosure. *The British Accounting Review*, *44*(2), 98-110. DOI:10.1016/j.bar.2012.03.003

Lin, Z., Jiang, Y., Tang, Q., & He, X. (2015). Does high-quality financial reporting mitigate the negative impact of global financial crises on firm performance? Evidence from the United Kingdom. *Australasian Accounting, Business and Finance Journal*, *8*(5), 19-46. Retrieved from https://ro.uow.edu.au/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1516&context=aabfj

Llukani T. (2013). Earnings management and firm size: An empirical analysis in Albanian market. *European Scientific Journal, 9*(16), 135-143. Retrieved from https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=2ahUKEwj41P-PxIfhAhWpQhUIHbD6DiMQFjABegQICRAC&url=https%3A%2F%2Feujournal.org%2Findex.php%2Fesj%2Farticle%2Fdownload%2F1140%2F1156&usg=AOvVaw2EVEglxT_W371P6m9Wkjun

Madi, H.K., Ishak, Z., & Manaf, N.A. (2014). The impact of audit committee characteristics on corporate voluntary disclosure. *Procedia - Social and Behavioral Sciences.* Conference Proceedings of the International Conference on Accounting Studies *164*, 486 – 492. DOI: 10.1016/j.sbspro.2014.11.106

Man C. (2013). Corporate governance and earnings management: A survey of literature. *The Journal of Applied Business Research. 29*(2), 391-410. Retrieved from https://clutejournals.com/index.php/JABR/article/download/7646/7711/

Martinez-Ferrero, J. (2014). Consequences of financial reporting quality on corporate performance; Evidence at international level. *Estudios de Economia*, *41*(1), 49-88. Retrieved from http://econ.uchile.cl/uploads/publicacion/9467ef3c29a154b92488a091ff5a59c74d7da5f5.pdf

Martinez, A.L., & Moraes, A.D. (2017). Relationship between audit fees and earnings management. *Revista de Administracao de Empresas*, *57*(2), 148-157. DOI: http://dx.doi.org/ 10.1590/S0034-759020170204

Mbobo, M.E. & Ekpo, N.E. (2016). Operationalizing the qualitative characteristics of financial reporting. *International Journal of Finance and Accounting, 5*(4): 184-192. DOI: 10.5923/j.ijfa.20160504.03

Moghaddam, A., & Abbaspour, N. (2017). The effect of leverage and liquidity ratios on earnings management and capital of banks listed on the Tehran Stock Exchange. *International Review of Management and Marketing, 7*(4), 99-107. Retrieved from http://www.econjournals.com/index.php/irmm/article/viewFile/5595/pdf

Moshtagh, F., Abbaszadeh, M.R., Nowghabi, M.H & Nowghabi, M.J (2014). An investigation of the effect of firm's life cycle stages on earning quality: Evidence from Iran. *Asian Journal of Research in Research in Banking and Finance, 4*(8) .109-122. Retrieved from https://profdoc.um.ac.ir/articles/a/1041551.pdf

Muzatko, S., & Teclezion, M. (2016). The relationship between uudit fees and earnings quality of financial institutions. *Journal of Accounting and Finance, 16*(5), 20-31. Retrieved from http://www.na-businesspress.com/JAF/MuzatkoS_Web16_5_.pdf

Nassreddin, G. (2015). Financial information disclosure. *Cogent Economics & Finance, 3*, 1038208, 10896-10905. Retrieved from http://dx.doi.org/10.1080/23322039.2015.1038208

Nawaiseh, M.E. (2016). Can earnings management be influenced by audit quality? *International Journal of Finance and Accounting*, 5(4), 209-219. DOI: 10.5923/j.ijfa.20160504.06

Nelson,M.W., Elliott, J.A & Tarpley, R.L. (2002). Evidence from auditors about managers' and auditors' earnings management decisions. *The Accounting Review, 77*, 175–202. Retrieved from http://lib.cufe.edu.cn/upload_files/other/4_20140522024341_19.pdf

Nugroho, B.Y., & Eko U. (2011). Board characteristics and earnings management. *Journal of Administrative Science & Organization, 18*(1), 1-10. Retrieved from http://journal.ui.ac.id/index.php/jbb/article/viewFile/969/892

Nworu, O.S. (2017). Export: Improving Nigerian government revenue base and economic diversification. *Human Resource Management Research*, *7*(1), 65-73. DOI: 10.5923/j.hrmr.20170701.08

Obigbemi I. F, Iyoha F. O., & Ojeka S. A. (2015). Firm size and financial performance: A determinant of corporate governance disclosure practices of Nigerian companies. *Journal of Accounting and Auditing Research & Practice*, 1-9. DOI: 10.5171/2015.467294

Obigbemi, I.F., Omolehinwa, E.O., Mukoro, D.O., Ben-Caleb E., & Olusanmi, O.A. (2016). Earnings management and board Structure: Evidence from Nigeria, *SAGE Open*, 1–15. DOI: 10.1177/2158244016667992

Ojeka, S.A; Mukoro, D.O. & Kanu, C (2015). Does financial reporting disclosures enhance firm financial performance in the Nigerian manufacturing companies? *Mediterranean Journal of Social Sciences*, *6*(6), 332-337. DOI:10.5901/mjss.2015.v6n6p332

Okolie, A.O., Izedonmi, F.O.I., & Enofe, A.O. (2013). Audit quality and accrual based earnings management of quoted companies in Nigeria. *IOSR Journal of Economics and Finance, 2*(2), 07-16. Retrieved from http://www.iosrjournals.org/iosr-jef/papers/vol2-issue2/B0220716.pdf

Olowokure, O.A, Tanko, M. & Nyor, T. (2016). Firm structural characteristics and financial reporting quality of listed deposit money banks in Nigeria. *International Business Research, 9*(1), 106-115. DOI:10.5539/ibr.v9n1p106

Omoro, N., Aduda, J. & Okiro, K (2015). Demographic diversity in top management team and financial reporting quality in commercial state corporations in Kenya. *Donnish Journal of Accounting and Taxation, 1*(1), 001-016. Retrieved from http://donnish journals.org/ djat/ pdf/2015 /april/Omoro-et-al.pdf

Onatuyeh, A. E & Proso, T. (2016). Corporate governance attributes and earnings management: A study of listed companies in Nigeria. *Journal of Policy and Development Studies, 10*(3), 20-35. Retrieved from https://www.arabianjbmr.com /pdfs/JPDS_VOL_10_3/2.pdf

Onuorah, A.C. & Imene, O.F (2016). Corporate governance and financial reporting quality in selected Nigerian companies. *International Journal of Management Science and Business Administration,* 2(3), 7-16. Retrieved from https://researchleap.com/wp-content/uploads/2016/04/1.-Corporate-Governance-and-Financial-Reporting-Quality-in-Selected-Nigerian-Company.pdf

Pattaraporn, P. (2016). Ownership structure and the quality of financial reporting in Thailand: The empirical evidence from accounting restatement perspective. *I J A B E R, 14*(10), 6799-6810. Retrieved from https://www.researchgate.net/publication/308582305 _Ownership_structure_and_the_quality_of_financial_reporting_in_Thailand_The_empirical_ evidence_from_accounting_restatement_perspective

Paulinus, E.C,, Oluchulwu, N., & Somtochukwu, O. (2017). Empirical investigation of corporate governance and financial reporting quality of quoted companies in Nigeria. *International Journal of Economics, Business and Management Research*, *1*(5), 117-137. Retrieved from https://www.academia.edu/35183708/EMPIRICAL_INVESTIGATION _OF_CORPORATE_GOVERNANCE_AND_FINANCIAL_REPORTING_QUALITY_OF_ QUOTED_COMPANIES_IN_NIGERIA

Ronen J. & Yaari V. (2008): *Earnings management, emerging insights in theory, practice and research*. Springer Science and Business media LLC, Newyork, USA. Retrieved from https://www.sciencedirect.com/science/article/pii/S0020706311000239

Roodposhti, F.R., Banimahd, B., Rezaei, S. & Salehi, A. (2012). Analysis of power and specification of accruals -based models to detect earnings management. *Journal of Basic and Applied Scientific Research, 2*(10), 9961-9969. Retrieved from https://www.textroad.com/pdf/JBASR/J.%20Basic.%20Appl.%20Sci.%20Res.,%202(10)9961-9969,%202012.pdf

Saftiana, Y. Mukhtaruddin, Putri, K.W., & Ferina, I.S. (2017). Corporate governance quality, firm size and earnings management: Empirical study in Indonesia Stock Exchange. *Investment Management and Financial Innovations*, *14*(4), 105-120. DOI:10.21511 /imfi.14(4).2017.10

Sara W. B., Mohamed M.S & Aiman R. (2016). The impact of firm characteristics on earnings management: An empirical study on the listed firms in Egypt. *The Business and Management Review*, *7*(2), 91-99. Retrieved from http://www.abrmr.com/myfile/conference_proceedings/Con_Pro_36030/conference_62266.pdf

Schipper, K. & Vincent, L. (2003). Earnings quality. *Accounting Horizons,* 17, 97-110. DOI: 10.2308/acch.2003.17.s-1.97

Shehata, N.F. (2014). Theories and determinants of voluntary disclosure. *Accounting and Finance Research, 3*(1), 18-23. DOI:10.5430/afr.v3n1p18

Shehata, N.F., Dahawy, K., and Ismail, T (2014). The relationship between firm characteristics and mandatory disclosure level: When Egyptian accounting standards were first adopted. *Mustang Journal of Accounting and Finance*, 5, 85-101. Retrieved from https://scholar.cu.edu.eg/?q=tismail/files/mustang_journal_paper.pdf

Shehu, U.H. (2013). Financial reporting quality, does monitoring characteristics matter? An empirical analysis of Nigerian manufacturing sector. *The Business & Management Review, 3*(2), 147-158. Retrieved from http://www.abrmr.com/myfile/conference_proceedings/Con_Pro_12315/16-dubai13.pdf

Shehu, U. H. & Abubakar A. (2012). Ownership structure and opportunistic accounting: A case of listed food and beverages firms in Nigeria. *Journal of Physical and Social Sciences,* 2(7), 236-253. Retrieved from https://pdfs.semanticscholar.org/ee23/e2ab3c8111be057b37b09930ea78186058c4.pdf

Shehu, U. H. & Ahmad, B. (2013). Firm characteristics and financial reporting quality of listed manufacturing firms in Nigeria. *International Journal of Accounting, Banking and Management, 1*(6), 47 – 63. Retrieved from http://www.ijabm.com/IJABM_Vol.%201,%20No.%206,%20November%202013/FIRM%20CHARACTERISTICS.pdf

Shehu, U. H. & Farouk M.A (2014). Firm attributes and earnings quality of listed oil and gas companies in Nigeria. *Research Journal of Finance and Accounting*, *5*(17), 10-16. Retrieved from https://www.iiste.org/Journals/index.php/RJFA/article/view/15819

Swastika, D.L.T. (2013). Corporate governance, firm size, and earning management: Evidence in Indonesia stock exchange. *IOSR Journal of Business and Management, 10*(4), 77-82. Retrieved from http://www.iosrjournals.org/iosr-jbm/papers/Vol10-issue4/I01047782.pdf

Takhtaei, N., & Mousavi, Z., (2012). Disclosure quality and firm's characteristics: Evidence from Iran. *Asian Journal of Finance & Accounting, 4*(2), 290-296. DOI:10.5296/ajfa.v4i2.1690

Unuagbon, E.O., & Ozeigbe, D.J. (2016). Financial reporting and voluntary disclosure in Nigeria quoted companies. *Igbinedion University Journal of Accounting, 1,* 42-58. Retrieved from http://www.iuokada.edu.ng/publication/wp-content/uploads/2019/02/EDOGIAWERIE-O.-Unuagbon-DAVID-Jerry-Oziegbe-FINANCIAL-REPORTING-AND-VOLUNTARY-DISCLOSURE-IN-NIGERIA-QUOTED-COMPANIES-1.pdf

Uwuigbe, U., Uwuigbe, O.R., & Okorie B., (2015). Assessment of the effects of firms' characteristics on earnings management of listed firms in Nigeria. *Asian Economic and Financial Review, 5*(2), 218-228. DOI: 10.18488/journal.aefr/2015.5.2/102.2.218.228

Unwuigbe, U., Peter D. S., & Oyeniyi A. (2014). The effects of corporate governance mechanisms on earnings management of listed firms in Nigeria. *Accounting and Management Information Systems, 13*(1), 159–174. Retrieved from http://www.cig.ase.ro/articles/13_1_7.pdf

Urhoghide, R.O., & Emeni, F.K. (2014). Corporate governance and audit fee determination in Nigeria. *ESUT Journal of Accountancy, 5*(2), 101-108. Retrieved from http://eprints.covenantuniversity.edu.ng/5160/#.XIuq2qB7nIU

Yoon, S.S., Kim, H.J., & Woodruff, G. (2012). On the models and estimation of discretionary accruals. Retrieved February 13, 2018 from http://ifas.xmu.edu.cn/uploads/soft/121226/%E8%AE%BA%E6%96%87.pdf

Appendices

Regression Results:

A. First stage regression to determine FRQ using account payable as financial structure variable

I. Portfolio 1

```
  ___  ____  ____  ____  ____ (R)
 /__    /   ____/   /   ____/
___/   /   /___/   /   /___/   11.0   Copyright 1984-2009
  Statistics/Data Analysis             StataCorp
                                       4905 Lakeway Drive
     Special Edition                   College Station, Texas 77845 USA
                                       800-STATA-PC        http://www.stata.com
                                       979-696-4600        stata@stata.com
                                       979-696-4601 (fax)

Single-user Stata license expires 31 Dec 9999:
       Serial number:  71606281563
         Licensed to:  STATAForAll
                       STATA

Notes:
      1.  (/m# option or -set memory-) 50.00 MB allocated to data
      2.  (/v# option or -set maxvar-) 5000 maximum variables
      3.  New update available; type -update all-

. edit

. *(6 variables, 18 observations pasted into data editor)

. xtset id year, yearly
       panel variable:  id (unbalanced)
        time variable:  year, 2008 to 2016, but with a gap
                delta:  1 year

.
. reg totalaccrual changeinrev changeinnrec ppe
```

Source	SS	df	MS		
Model	.036662091	3	.012220697	Number of obs	= 18
Residual	.037946812	14	.002710487	F(3, 14)	= 4.51
				Prob > F	= 0.0206
				R-squared	= 0.4914
				Adj R-squared	= 0.3824
Total	.074608903	17	.004388759	Root MSE	= .05206

totalaccrual	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
changeinrev	.2047421	.1263292	1.62	0.127	-.0662071	.4756913
changeinnrec	.6719129	.2728585	2.46	0.027	.0866897	1.257136
ppe	-.0294921	.0428354	-0.69	0.502	-.1213648	.0623806
_cons	-.0022746	.0157103	-0.14	0.887	-.0359698	.0314205

```
. predict FRQ, residuals
```

II. Portfolio 2

```
  ___  ____  ____  ____  ____ (R)
 /__    /   ____/   /   ____/
___/   /   /___/   /   /___/   11.0   Copyright 1984-2009
  Statistics/Data Analysis            StataCorp
                                      4905 Lakeway Drive
     Special Edition                  College Station, Texas 77845 USA
                                      800-STATA-PC        http://www.stata.com
                                      979-696-4600        stata@stata.com
                                      979-696-4601 (fax)

Single-user Stata license expires 31 Dec 9999:
       Serial number:  71606281563
         Licensed to:  STATAForAll
                       STATA

Notes:
      1.  (/m# option or -set memory-) 50.00 MB allocated to data
      2.  (/v# option or -set maxvar-) 5000 maximum variables
      3.  New update available; type -update all-

. edit

. *(6 variables, 18 observations pasted into data editor)

. xtset id year, yearly
       panel variable:  id (unbalanced)
        time variable:  year, 2008 to 2016, but with gaps
                delta:  1 year

.
. reg totalaccrual changeinrev changeinnrec ppe
```

Source	SS	df	MS	Number of obs =	18
				F(3, 14) =	2.01
Model	.01785419	3	.005951397	Prob > F =	0.1587
Residual	.041431596	14	.0029594	R-squared =	0.3012
				Adj R-squared =	0.1514
Total	.059285786	17	.003487399	Root MSE =	.0544

totalaccrual	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
changeinrev	-.0011589	.0766339	-0.02	0.988	-.1655222	.1632045
changeinnrec	-.5564059	.2841585	-1.96	0.070	-1.165865	.0530535
ppe	-.0706725	.0855336	-0.83	0.423	-.2541239	.1127788
_cons	.0090417	.06437	0.14	0.890	-.1290182	.1471015

```
. predict FRQ, residuals
```

III. Portfolio 3

```
  ___  ____  ____  ____  ____ (R)
 /__    /   ____/   /   ____/
___/   /   /___/   /   /___/   11.0   Copyright 1984-2009
  Statistics/Data Analysis            StataCorp
                                      4905 Lakeway Drive
     Special Edition                  College Station, Texas 77845 USA
                                      800-STATA-PC        http://www.stata.com
                                      979-696-4600        stata@stata.com
                                      979-696-4601 (fax)

Single-user Stata license expires 31 Dec 9999:
       Serial number:  71606281563
         Licensed to:  STATAForAll
                       STATA

Notes:
      1.  (/m# option or -set memory-) 50.00 MB allocated to data
      2.  (/v# option or -set maxvar-) 5000 maximum variables
      3.  New update available; type -update all-

. edit

. *(6 variables, 18 observations pasted into data editor)

. xtset id year, yearly
       panel variable:  id (unbalanced)
        time variable:  year, 2008 to 2016, but with gaps
                delta:  1 year

.
. reg totalaccrual changeinrev changeinnrec ppe
```

Source	SS	df	MS	Number of obs =	18
				F(3, 14) =	2.44
Model	.031474809	3	.010491603	Prob > F =	0.1077
Residual	.060229482	14	.004302106	R-squared =	0.3432
				Adj R-squared =	0.2025
Total	.091704291	17	.00539437	Root MSE =	.06559

totalaccrual	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
changeinrev	-.233262	.1051982	-2.22	0.044	-.4588896	-.0076344
changeinnrec	-.2811666	.2256862	-1.25	0.233	-.7652154	.2028822
ppe	-.0599129	.0733652	-0.82	0.428	-.2172657	.0974398
_cons	-.0132642	.0495081	-0.27	0.793	-.1194485	.09292

```
. predict FRQ, residuals
```

IV. Portfolio 4

```
  ___  ____  ____  ____  ____ (R)
 /__    /   ____/   /   ____/
___/   /   /___/   /   /___/   11.0   Copyright 1984-2009
  Statistics/Data Analysis             StataCorp
                                       4905 Lakeway Drive
     Special Edition                   College Station, Texas 77845 USA
                                       800-STATA-PC        http://www.stata.com
                                       979-696-4600        stata@stata.com
                                       979-696-4601 (fax)

Single-user Stata license expires 31 Dec 9999:
       Serial number:  71606281563
         Licensed to:  STATAForAll
                       STATA

Notes:
      1.  (/m# option or -set memory-) 50.00 MB allocated to data
      2.  (/v# option or -set maxvar-) 5000 maximum variables
      3.  New update available; type -update all-

. edit

. *(6 variables, 18 observations pasted into data editor)

. xtset id year, yearly
       panel variable:  id (unbalanced)
        time variable:  year, 2008 to 2016, but with gaps
                delta:  1 year

.
. reg totalaccrual changeinrev changeinnrec ppe
```

Source	SS	df	MS	Number of obs =	18
				F(3, 14) =	2.28
Model	.178128544	3	.059376181	Prob > F =	0.1239
Residual	.364373985	14	.026026713	R-squared =	0.3283
				Adj R-squared =	0.1844
Total	.542502529	17	.031911913	Root MSE =	.16133

totalaccrual	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
changeinrev	.0038947	.0355413	0.11	0.914	-.0723337	.0801231
changeinnrec	.3709764	.3996421	0.93	0.369	-.4861707	1.228123
ppe	-.4459822	.1999087	-2.23	0.043	-.8747438	-.0172207
_cons	.1364027	.1096858	1.24	0.234	-.0988498	.3716553

```
. predict FRQ, residuals
```

B. Second stage regression

```
  ___  ____  ____  ____  ____ (R)
 /__    /   ____/   /   ____/
___/   /   /___/   /   /___/   11.0   Copyright 1984-2009
  Statistics/Data Analysis             StataCorp
                                       4905 Lakeway Drive
     Special Edition                   College Station, Texas 77845 USA
                                       800-STATA-PC        http://www.stata.com
                                       979-696-4600        stata@stata.com
                                       979-696-4601 (fax)

Single-user Stata license expires 31 Dec 9999:
       Serial number:  71606281563
         Licensed to:  STATAForAll
                       STATA

Notes:
      1.  (/m# option or -set memory-) 50.00 MB allocated to data
      2.  (/v# option or -set maxvar-) 5000 maximum variables
      3.  New update available; type -update all-

. edit

. *(13 variables, 72 observations pasted into data editor)

. xtset id fyear, yearly
       panel variable:  id (strongly balanced)
        time variable:  fyear, 2008 to 2016
                delta:  1 year
```

I. Normality Test

```
. swilk frq fage leve size liqu bsiz afee

                    Shapiro-Wilk W test for normal data
```

Variable	Obs	W	V	z	Prob>z
frq	72	0.68529	19.820	6.505	0.00000
fage	72	0.90529	5.964	3.890	0.00005
leve	72	0.96084	2.466	1.966	0.02463
size	72	0.95036	3.126	2.483	0.00652
liqu	72	0.70656	18.480	6.353	0.00000
bsiz	72	0.98465	0.967	-0.074	0.52951
afee	72	0.93663	3.991	3.015	0.00129

II. Descriptive Statistics

```
. summarize frq fage leve totalassetsize liqu bsiz auditfee
```

Variable	Obs	Mean	Std. Dev.	Min	Max
frq	72	.0550278	.0634642	.0017	.4074
fage	72	21.75	12.63212	1	39
leve	72	.5379083	.2468053	.062	1.2792
totalasset~e	72	8552.042	13912.05	516	83162
liqu	72	1.297017	1.307336	.0195	7.7884
bsiz	72	8	2.062407	4	12
auditfee	72	7.377083	7.636421	.75	31

III. Correlation Coefficients

```
. pwcorr frq fage leve size liqu bsiz afee,star(0.05)sig
```

	frq	fage	leve	size	liqu	bsiz	afee
frq	1.0000						
fage	0.0056 0.9628	1.0000					
leve	0.3249* 0.0054	0.3339* 0.0042	1.0000				
size	-0.1169 0.3280	-0.4631* 0.0000	-0.5267* 0.0000	1.0000			
liqu	-0.1355 0.2564	-0.1970 0.0972	-0.4513* 0.0001	0.1235 0.3015	1.0000		
bsiz	0.3752* 0.0012	-0.0714 0.5514	-0.1751 0.1413	0.4355* 0.0001	0.0233 0.8457	1.0000	
afee	-0.1834 0.1231	0.1319 0.2695	-0.3987* 0.0005	0.7153* 0.0000	-0.0173 0.8851	0.3341* 0.0041	1.0000

IV. OLS Result

```
. reg frq fage leve size liqu bsiz afee
```

Source	SS	df	MS
Model	.098065367	6	.016344228
Residual	.18790194	65	.002890799
Total	.285967307	71	.004027709

```
Number of obs =      72
F(  6,    65) =    5.65
Prob > F      =  0.0001
R-squared     =  0.3429
Adj R-squared =  0.2823
Root MSE      =  .05377
```

frq	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
fage	-.0007116	.0008981	-0.79	0.431	-.0025052	.001082
leve	.0870619	.0353039	2.47	0.016	.0165553	.1575686
size	-.0204851	.0299114	-0.68	0.496	-.0802223	.039252
liqu	-.0001204	.0056406	-0.02	0.983	-.0113855	.0111447
bsiz	.0162483	.0035156	4.62	0.000	.009227	.0232695
afee	-.0105499	.0298284	-0.35	0.725	-.0701214	.0490216
_cons	-.0264528	.1044554	-0.25	0.801	-.2350646	.182159

V. Multicollinearity

```
. vif
```

Variable	VIF	1/VIF
size	6.60	0.151598
afee	5.02	0.199361
fage	3.16	0.316354
leve	1.86	0.536298
liqu	1.34	0.748740
bsiz	1.29	0.774462
Mean VIF	3.21	

VI. Heteroscedasticity

```
. hettest

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

         chi2(1)      =    63.44
         Prob > chi2  =   0.0000
```

VII. Fixed Effects Model

```
. xtreg frq fage leve size liqu bsiz afee,fe

Fixed-effects (within) regression               Number of obs      =        72
Group variable: id                              Number of groups   =         8

R-sq:  within  = 0.2048                         Obs per group: min =         9
       between = 0.0074                                        avg =       9.0
       overall = 0.0220                                        max =         9

                                                F(6,58)            =      2.49
corr(u_i, Xb)  = -0.8907                        Prob > F           =    0.0327

------------------------------------------------------------------------------
         frq |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        fage |   .0041057   .0048126     0.85   0.397    -.0055277    .0137391
        leve |  -.0045418    .059018    -0.08   0.939    -.1226791    .1135955
        size |  -.1016436   .0530254    -1.92   0.060    -.2077855    .0044982
        liqu |  -.0006725   .0070181    -0.10   0.924    -.0147208    .0133759
        bsiz |   .0189785   .0058226     3.26   0.002     .0073232    .0306337
        afee |   .0911822   .0714036     1.28   0.207    -.0517477     .234112
       _cons |   .1232233   .1565264     0.79   0.434    -.1900983     .436545
-------------+----------------------------------------------------------------
     sigma_u |  .09510614
     sigma_e |  .05284449
         rho |  .76409808   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(7, 58) =     1.33                 Prob > F = 0.2543

. est store fe
```

VIII. Random Effects Model

```
. xtreg frq fage leve size liqu bsiz afee,re

Random-effects GLS regression                   Number of obs      =        72
Group variable: id                              Number of groups   =         8

R-sq:  within  = 0.1262                         Obs per group: min =         9
       between = 0.8935                                        avg =       9.0
       overall = 0.3428                                        max =         9

Random effects u_i ~ Gaussian                   Wald chi2(6)       =     30.96
corr(u_i, X)       = 0 (assumed)                Prob > chi2        =    0.0000

------------------------------------------------------------------------------
         frq |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        fage |  -.0006854   .0009127    -0.75   0.453    -.0024742    .0011035
        leve |   .0844365    .036331     2.32   0.020     .0132291    .1556439
        size |   -.020649   .0300561    -0.69   0.492    -.0795578    .0382598
        liqu |  -.0002437   .0057167    -0.04   0.966    -.0114481    .0109608
        bsiz |   .0162975    .003616     4.51   0.000     .0092102    .0233848
        afee |  -.0103126   .0304243    -0.34   0.735    -.0699431    .0493178
       _cons |  -.0254091    .106009    -0.24   0.811     -.233183    .1823647
-------------+----------------------------------------------------------------
     sigma_u |  .00662856
     sigma_e |  .05284449
         rho |  .01549027   (fraction of variance due to u_i)
------------------------------------------------------------------------------

. est store re
```

IX. Hausman Specification

```
. hausman fe re

                 ---- Coefficients ----
             |      (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
             |       fe           re         Difference          S.E.
-------------+----------------------------------------------------------------
        fage |   .0041057    -.0006854         .004791        .0047252
        leve |  -.0045418     .0844365        -.0889784         .04651
        size |  -.1016436     -.020649        -.0809946        .0436844
        liqu |  -.0006725    -.0002437        -.0004288        .0040711
        bsiz |   .0189785     .0162975          .002681        .0045637
        afee |   .0911822    -.0103126         .1014948        .0645975
------------------------------------------------------------------------------
                           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)
                          =        9.87
                Prob>chi2 =      0.1303
```

X. Lagrangian Multiplier Test for Random Effects

```
. xttest0

Breusch and Pagan Lagrangian multiplier test for random effects

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

        Estimated results:
                 |       Var     sd = sqrt(Var)
        ---------+-----------------------------
             frq |   .0040277       .0634642
               e |   .0027925       .0528445
               u |   .0000439       .0066286

        Test:   Var(u) = 0
                           chi2(1) =     1.50
                        Prob > chi2 =     0.2201
```