IMPACT OF FIRM ATTRIBUTES ON EARNINGS QUALITY OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

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BEING 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 (M.Sc.) DEGREE IN ACCOUNTING AND FINANCE

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DECLARATION

I declare that the work in this dissertation entitled Impact of firm attributes on earnings quality of listed Deposit Money Banks in Nigeria has been performed by me in the Department of Accounting, Ahmadu Bello University, Zaria. The information derived from other literature has been duly acknowledged in the text and a list of references provided. No part of this dissertation was previously presented for another degree at this or any other institution.

_____ _____

Isah IBARHIM **DATE**
P14ADAC8016

CERTIFICATION

This dissertation, entitled "IMPACT OF FIRM ATTRIBUTES ON EARNINGS QUALITY OF LISTED DEPOSIT BANKS IN NIGERIA" written by Ibrahim Isah meets the regulations governing the award of the degree of Master of Science (M.Sc.) in Accounting and Finance of the Ahmadu Bello University, Zaria, and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

I dedicate this dissertation to God Almighty, the giver of knowledge and understanding, and to anybody who has contributed to the successful completion of my programme.

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ABSTRACT

The need for financial statements that are free from all forms of manipulation cannot be over emphasised. Stakeholders outside the company rely on information contained in the financial statement to make vital economic decisions. Therefore, the quality of their decision also depends on the quality of information contained in the financial statement they used for the decision. The literature has long recognised that some variables at the firm's level are important in explaining opportunistic behaviour of managers and reduce the quality of the reported earnings. This study thus examines the impact of firm attributes on earnings quality of DMBs in Nigeria. The study used data extracted from the financial statement of 14 listed DMBs in Nigeria for the period of 2009 to 2015. The study also employed panel data multiple regression technique. The chang et al. 2008 model of discretionary loan loss provision was use as proxy of earnings quality, while firm attributes were proxied with firm size, profitability, liquidity, leverage and ICT intensity. The result revealed that liquidity, profitability and ICT intensity have significant positive impact on earnings quality while firm size has significant negative impact on earnings quality. However, leverage was found to exert an insignificant impact on earnings quality of DMBs in Nigeria. Hence, it is recommended that large banks should create window services to enable them respond quickly to profit making opportunities, the CBN should encourage banks to invest more in less risky business venture with fixed interest charges. The NDIC should encourage banks to create liquidity cushion in addition to CBN minimum liquidity requirement and shareholders should insist on considerable amount of their annual investment in ICT.

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CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

Financial statements are the main means of communicating the affairs of the company to all the stakeholders. They carry vital information required by the creditors, shareholders, regulatory authorities and other interest groups such as the government and professionals. These stakeholders have various but different items of interest in the financial statement as they focus on items that protect their interest. For instance, while the creditors are concerned with earnings before interest and taxes, the shareholders are more concerned with earnings after interest and taxes among others. Despite these differences, all the various stakeholders are, however, concerned with the relevance and reliability of the financial statement as a whole.

Reliability is when the financial statement contains lowest possible error, bias and unfaithfulness; representing actual intended representation. Therefore, for accounting information to be heavily relied upon by the public and to be regarded as a high quality type, it must be neutral, timely, relevant, accurate, transparent, comparable, predictive, understandable, verifiable and unambiguous in its entirety (Hamidzadeh & Zeinali, 2015).

Managers on their part are more concerned with the presentation of a financial statement that depicts the company as being in a good financial position in order to satisfy the stakeholders. To achieve this, some managers may engage in earnings management. The fact that financial statements are the independent true means of communicating the manager's performance in the company (to the public alone) explains their main attraction to influence the earnings (Ugebede, Lizam & Kuseri, 2013).

Managers opportunistically use discretion over income statement classification within a period to shift expenses into categories that might be perceived as less persistent to meet up

with the analyst forecasts (Mcvay, 2006). Sometimes, these opportunistic discretions are referred to as creative accounting. One of the most important objectives of the accounting process is to achieve objectivity which is to ensures high earnings quality. On the other hand, earnings management is known to reduce the desired reliability and as such, reduces its relevance to decision making (Bugshan, 2005). Panyam (2013) further explained that earnings quality is one of the most important characteristics of financial reporting systems. High quality is believed to improve capital market efficiency, therefore investors and other users should be interested in high-quality of financial accounting information. For that reason, standard setters strive to develop accounting standards that improve earnings quality.

Firm's decisions are largely influenced by certain characteristics or attributes they possess. These attributes are variables at the firm's level that affect the firm's decision both internally and externally over the time. Those attributes include the incentive variables ranging from ownership structures, firm size, leverage, profitability, Liquidity, firm growth among others. They are the fundamental framework on which the organisations make vital decisions. Naturally, these features go a long way in determining what managers can or cannot do within the organisation and inevitably, they form the building blocks of corporate strategy and accounting policy.

A number of studies have therefore been carried out relating firm attributes to earning quality. They include those of Laura and Cristian (2014), Leslie and Okoeguale (2013) and others. These studies have deployed different proxies of firm specific as determinants of earnings quality. Firm size is used to indicate operating efficiency. That is, the larger the firm, the more likely it is for the firm to achieve economies of scale. From this point of view, larger sized firm are likely to have higher earnings quality. This is because with a greater level of efficiency, managers do not have any incentive to manipulate earnings. Leslie and Okoeguale (2013) and opined that bank size has a significant negative relationship with Loan

loss provision implying that the larger the size of bank, the higher the earning quality. In addition, some studies associate smaller size firm to internal control deficiency; the weaker the internal control, the more likely the opportunity of earning management. On the other hand, Uwuigbe, Ranti and Bernard, (2015); found a significant positive relationship between firm size and discretionary accruals which implies that the larger the firm, the lower the earning quality. They argued that larger firms have more motivation for earnings management due to the complex nature of their operations.

Leverage is used to represent the degree to which debt is used to finance the firm's business activity. Firm with higher leverage are expected to disclose more information to satisfy their creditors. Firms with large debt ratio in their capital structure are prone to higher agency cost. Hence, managers of such firms have an incentive to reduce agency cost and may be tempted to do so by means earning manipulation which usually come in form of earnings management. Leverage is also associated with closeness to debt covenant restriction. Highly levered firms with debt covenant restrictions are more likely to manage earning to avoid debt covenant violation (Dechow, Ge & Schran, 2010). Consequently, high leverage is an indication of potential low earnings quality.

Profitability is a performance measure used as a determinant of earnings quality. Previous studies, such as those of Kothahari (2015) and Ahmed (2012) Uwehave established a connection between weak performance and low earning quality. Low profitability ratio is usually related to lower earnings quality because managers will not like to present a financial statement that show their poor performances, Hence, the need to manipulate financial statement to avoid reporting poor managerial efficiency. However, sustained poor performance can limit opportunistic management of earnings leading to a higher earning quality (De Angelo, 1994). When a firm records poor performance over a long period of time,

it becomes difficult to hide since managers cannot continuously manipulate financial statement over a long period of time.

Shehu and Farouk (2014) viewed liquidity as the brain box for the survival of the business. Businesses with problem of liquidity are heading towards crises. Creditors look forward to liquidity as an important tool for financial decision. According to Khairul and Wan (2014), Creditor view of earning quality is when the firm earnings can easily be converted into cash. Any organization that is liquid will be willing to disclose it in their financial report in order to attract their creditors, increase their ability of raising capital externally. It is an indication to the investors, regulators, and other stakeholders that the firm has the ability to exist for unenforceable future without hitches.

Technological advancement has brought about changes in almost every facet of human life. The accounting data processing system has changed over time. The advent of information and communication technology (ICT) has completely changed the manner in which accounting data is generated, processed and presented. Invariably, accounting data processed electronically is associated not only with speed, but also with reliability and accuracy. ICT provides management with more accurate and timely information for better performance. Accounting information system (AIS) leads to improved decision making by managers, more efficient internal control systems, improved quality of financial reports, better performance measures and faster financial transaction processes (Imeokparia, 2013). As a result, technology has the tendency to automatically improve managerial efficiency and managers with such advantages may lack incentives for any form of manipulative accounting thereby leading to a higher earnings quality.

Furthermore, it is largely believed that computerised accounting systems have controls installed in them that can help control manipulation of accounting figures. Some installation in the accounting systems cannot be easily manipulated manager especially since

most accounting systems are programmed for real time financial reporting. Therefore, the study posited that ICT intensity has potential impact on earning quality. It is expected that the higher the level of ICT intensity of a firm the higher its earnings quality.

The Study of earnings quality of the deposit money banks in Nigeria is important because the banking sector is one of the strongest pillars of the economy. It is the medium through which the central bank implements most of its monetary policies such as the cash reserve ratio, bank rate and others. For most companies and individuals, the Deposit Money Banks (DMBs) are the main sources of credit when in need. The banking industry in Nigeria plays a very significant role in the economic development of the country. According to Nzotta (2004), the primary function of the banks in a financial system is to channel scarce financial resources from surplus economic sector to deficit sector and thereby exerting great influence on the pattern and trend of economic development through their lending and deposit mobilization activities.

The existence of large amounts of capital funds from the post 2004 banking reform led to increase in pressure on the bank managers to increase return. As a result, some managers were forced to engage in earnings management by attempting to smoothen or to manipulate the reported income. Thus, the study of financial reporting quality of the of the deposit money banks in Nigeria becomes paramount because several banking failures such as those of Oceanic and intercontinental banks were attributed to unethical accounting practice (Hussaini & Gugong, 2015). The study of firm attributes and earnings quality of deposit, money banks in Nigerian is aimed at identifying those factors at the firm level that have the potential to influence managers' decision to manage earnings and thereby exerting undue influence on the quality of the reported earnings.

1.2 Statement of the Problem

The banking failures that occurred in 2009 were associated with inters alia failure of the accounting systems to report beforehand, the impending failure of those banks. This indicates the need for examination into the practice of earnings management by such corporations. Financial scandals and the collapse of some multi-national corporations were found to be as a result of the unethical accounting practices (Hussaini & Gugong, 2015). They further explained that one of such unethical issues in accounting is earnings manipulations that come under the umbrella of earnings management, which served as a strategic tool used by management under the pretext of maximizing firm's value and reducing risks. This is possible by distorting and/or manipulating the application of Generally Accepted Accounting Principles (GAAP), As a result of this, financial reporting quality has become an issue of a great concern to the academia, accounting practitioners, financial expert, regulatory bodies and others alike. Consequently, a number of studies such as Ahmed (2012) Laura et al. (2013) and Uweigbe et al. (2015) have been carried out to analyse the association between various firm characteristics and earnings quality.

Mixed findings however emerged on examination of literature associating firm size with earnings quality. For instance, Jensen and Meckling (1976) and Ahmed (2012) associate firm size to agency cost. As firm size increases, agency cost is expected to increase and give room for greater managerial discretion and opportunism. Agency cost is expected to rise with increases in the proportion of outside funds (which tends to be higher for large firms). On the other hand, Wallace and Naser (1995) leslie et al (2013) Hussaini et at (2014); Chalaki, Didar, and Riahinezhad (2012) argued that larger firms naturally attract a large number of suppliers, customers, and analysts, which consequently increases the demand for information about their activities and which may result in higher earning quality. In light of the reported

mixed findings, the study seeks to address the question does firm size affects earnings quality of DMBs in Nigeria?

Profitability is another firm attribute that is thought to be a determinant of earnings quality. Previous researchers such as Kothahari (2005), Ahmed (2012) and Dechow, Ge and Schrand (2010) have related earnings quality to performance and they established that weak performance provides incentive for earnings management which result into poor earnings quality. On the contrary, DeAngelo (1994) Issa et al. (2015) Shehu (2013) suggested that sustained weak performance can limit opportunities for earnings management. This is an indication that empirical literature on profitability and earning quality is inconclusive as extant literatures have not yet agreed on the relationship between profitability and earnings quality. Hence, an important question that still needs to be answered is to what extend does profitability affects earnings quality of DMBs in Nigeria?

Leverage is a commonly used determinant of earnings earrings quality. It represent trade-off between tax benefit and bankruptcy cost. Studies of literatures relating leverage and earnings quality revealed mixed findings. Watt and Zimmermam, (1986); Dechow et al. (2010); Hashem (2011); Oluwokere (2016) established that high leverage is an indication that a firm is close to debt covenant violation and could manipulate financial statement to avoid debt covenant violation. However, Murya, (2010); Povolotskykaya, (2014); Mahmuda, Ibrahimm and Pokc, (2011) leslie et al. (2013) argued that highly levered firms tend to disclose private information only to their creditors and which may not reflect in their annual reports. Extant literatures have not yet reached a consensus on the extent to which leverage affects earnings quality. As such, the question that still lingers in the mind of researchers is to what extent does leverage affects earnings quality of DMBs in Nigeria?

Empirical evidence relating liquidity and earnings quality appeared inconclusive as Biddle et al (2009); Ahmed (2012); Yegon (2015); Amr (2016) argued that liquidity is an

indication of the firm's ability to take care of its short term debt obligation and as such, any firms with such advantage will be willing to disclose it to the public. Hence, managers in such organisations lack incentives to manipulate earnings. However, Alfarih (2009); Lamiri and Arab (2013); Shehu (2013); Ageyei-Mesah (2013) argued that regulatory authorities are also interested in the ability of the firm to meet its short term obligations, thus, firms with lower liquidity would be expected to disclose more information and achieve higher earnings quality. Liquidity problem has been identified as one of the major causes of banking failure, as such, banks need to strike a balance between profitability and liquidity. However, the question that researchers still need to answer is how does liquidity affect the earnings quality and quality of deposit money banks in Nigeria?

From the foregoing, it can be said that mixed findings dominate research on firm attributes and earnings quality. These mixed results are associated with among others the methodology deployed by the researcher to conduct the study. With specific reference to earnings quality studies, variations in findings are largely attributable to model used by the researcher to estimate earnings quality (Dechow et al., 2010). This study adopts the model proposed by change et al., (2008) to estimate residuals. The model is chosen for it suitability in measuring residuals especially in the banking sectors (Ahmed 2014; Shehu 2015). The Model took to cognisant the importance of loan loss provision and loan loss write-offs, which are central to argument of earnings manipulation within the banking sector to estimate discretionary loan loss provision (DLLP). However, Ahmed (2014) adopted the model but focussed on the impact of corporate governance and discretionary loan loss provision while Shehu (2015) focused on IFRS adoption on earning quality. To the best of our knowledge, no study, locally within Nigeria, have used the chang et al. (2008) model to study the impact of firm attributes on earnings quality of DMBs in Nigeria.

Furthermore, owing to the continuous association of corporate failure to the inability of the accounting systems to report beforehand those eminent failure and to the fact that modern accounting especially within banking sector are carried out using information and communication technology (ICT), researchers have conducted studies with a view to explaining the apparent relationship between ICT and earnings quality. For instance, For instance, Saleh and Torabi (2012), Imeokparia, (2013) and Tarus (2015) conducted studies with similar objective. However, their study relied on primary data to assess the role of ICT on financial reporting quality. The use of primary data may be subjected to response (error) bias as a result of individual subjective view, which may distort the validity of the data. This study is different from previous once because it used secondary data from the audited financial statements of the banks to examine the impact of ICT intensity as a firm attribute on earnings quality of listed Money Deposit Banks in Nigeria

In addition, previous studies on firm attribute and earnings quality include the works of Leslie et al. (2013) who covered the period of 2005 to 2010, Ahmad (2014), whose study was between 2006 and 2010, Ueigbe et al, (2015) who used data from 2006 to 2011 among others. The scope for most these studies were between 2005 and 2011. As such, they may not have captured the effect of the recent happenings in the banking sector. Such events includes the recent macroeconomic problems resulting from decline in economic activities as a result of global fall in oil prices and the mopping up of credit by the Central Bank Nigeria (CBN) during the implementation of the treasury single. For this reason, this current study intends to cover the period of 2009 to 2015.

1.3 Objectives of the of the Study

The main objective of the study is to examine the impact of firm attributes on the earning quality of deposit money banks in Nigeria. The specific objectives include to:

i. determine the firm size affects earnings quality of Deposit Money Banks in Nigeria.

ii. ascertain the impact of profitability on the earnings quality of Deposit Money Banks in Nigeria.

iii. examine the impact leverage affects the earnings quality of Deposit Money Banks in Nigeria.

iv. assess the impact of liquidity on the earnings quality of Deposit Money Banks in Nigeria.

v. evaluate the impact of Information and communication technology (ICT) intensity on the earning quality of Deposit Money Banks in Nigeria.

1.4 Hypotheses of the Study

To address the research objective, the following research hypotheses were formulated in null forms:

i. HO_1: Firm size has no significant impact on the earnings quality of Deposit Money Banks in Nigerian.

ii. HO_2: Profitability has no significant impact on the earnings quality of Deposit Money Banks in Nigeria

iii. HO_3: Leverage has no significant impact on the earnings quality of Deposit Money Banks in Nigeria

iv. HO_4: Liquidity has no significant Impact on the earnings quality of Deposit Money Banks in Nigeria

v. HO_5: Information and Communication Technology (ICT) intensity has no significant impact on the earnings quality of Deposit Money Banks in Nigeria.

1.5 Scope of the Study

The research focused on the relationship between firm attributes and earnings quality within the context of the Nigerian deposit money banks. The study covered the period of

seven (7) years, (2009-2015).The study period was selected to mark the time when the Central Bank of Nigeria (CBN) took action the revert an eminent banking failure through CBN and NDIC joint audit. The period also marked the time when the intercontinental banks and Oceanic banks were taken over by Access bank and Ecobanks respectively. The study adopted discretionary accruals from loan loss provision as measured by Chang, Yat-sen, Shen and Fang, (2008) as a measure of earnings quality of the listed Deposit Money Banks in Nigeria. Suitable proxies of firm characteristics which include firm size, profitability, leverage, liquidity and information and communication technology (ICT) were used as the independent variables.

1.6 Significance of the study

Investors make decisions based on the performance of the firm by relying on the financial statement. However, it is not only the content, but also the quality of the information in the financial statement is important for decision making. Thus, the outcome of this study will provide indicators for the investors on those firm attributes that have the potential to influence the quality of reported earnings.

The nature of ownership and management of the limited liability company establishes principal and agent relationship. The shareholders are the principals and major risk bearer in the company even though they do not participate directly in managing the affairs of the company. The managers who serve as the agents in managing the company may not do so in the best interest the shareholders. The shareholders rely on the quality of information in financial statement to assess the performance of the management in managing the affairs of the company. Hence, the findings of this study will be useful to the shareholders as it could enlighten them on those firm related attributes that are likely to affect the quality of reported earnings which they rely on to make decisions.

Creditors are among the worst hit stakeholders when a bank liquidates. They also analyse the financial statement before they make decision. For this reason, they are keenly interested in the quality financial statement which they rely on to make decisions. As a result, they are always looking out for certain indications that can guarantee the safety of their money. This study is useful to them because it helps them identify firm related attributes that indicate high earnings quality.

Also, researchers can benefit from the outcome of this research since it contributes to the body existing literatures by providing an empirical evidence on the relationship between firm attributes and earnings quality of deposit money banks in Nigeria.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter presents the reviews of existing literature that were found to be relevant to the study of firm attributes and earnings quality. The chapter is organized in three main parts; conceptual framework, empirical framework and the theoretical framework and model build up used to underpin the relationship firm attributes and earnings quality. The rationale behind this, is to use the evidence from previous studies to uncover gaps in the literature and also serve as a point of references for the findings of this research.

2.2 Conceptual Issues

This section covers the conceptual issues which include Earnings quality and earnings management, earnings quality measurements and Firm characteristics.

2.2.1 Concept of Earnings Quality

Earnings quality can simply be referred to the degree to which reported earnings capture a firm's economic reality a given company. It is defined from two different perspective; decision-usefulness perspective and economic-base perspective. From the decision-usefulness perspective earnings quality is regarded to be high if the reported earnings are useful for decision making (Khairul et al, 2014). Dechow et al. (2004) view earning quality from this perspective. They explained that analysts are likely to view earnings to be of high quality when the earnings numbers accurately reflect the company's current operating performance; are good indicators of future operating performance; and are a good summary measure for assessing firm value. Therefore, it is consistent with the objective of financial analysts, which is to evaluate the performance of the company, assess the extent to which current earnings

indicates future performance and determine whether the current stock price reflects intrinsic firm value.

Economic based-definition of earnings quality is based on Hicksian definition of Income (Shippers & Vincent, 2003). They further define earnings quality as the extent to which reported earnings faithfully represent Hicksian income; where representational faithfulness means correspondence or agreement with a measure or description of the phenomenon that it purports to represent. This supports the view of earnings quality as numbers that reflect "true earnings" which is not based on accounting rules and standards. 'True earnings' is a neutral and context-free benchmark, yet difficult to assess as Hicksian income (economics income) is not observable (Khairul et al. 2014) and they concluded that the more accurate or timely that reported earnings reflect shocks in the present value of expected future dividends, the higher the quality of earnings.

Different researchers define earnings quality using certain characteristics of earnings such as persistence or sustainability, predictive ability, smoothness, conservatism, value-relevance, timeliness, earnings management or earnings manipulation and accrual quality. In general, earnings that are considered of high quality are those with high level of persistence, predictability, less volatility, timely, lower level of earnings management and higher accrual quality (Khairul et al. 2014).

Earnings quality refers to the ability of reported earnings to reflect the company's true earnings, as well as the usefulness of reported earnings to predict future earnings. It also refers to the stability, persistence and lack of variability in reported earnings (Roya, Kamran & Ghadiri, 2012). They further explained that earning has more quality when it shows the real value of organization which can use to predict the future value of entity. While Mishari (2009) defined earnings quality based on earnings persistent, he defined earnings quality as the ability of past earnings to predicting future cash flows. Palepu and Healy (2008) based

their definition on the ability of the accounting system to capture the firm fundamental activities. They defined earnings quality as the extent to which accounting measurement, processes and their implementation by the firms captures the firms' underlying economic fundamentals. Hence, earnings quality means financial statement must be free from all forms of bias and it is measured using residuals from Chang et al. (2008) model of discretionary loan loss provision.

2.2.2 Firm Attributes

Companies can be differentiated from each other based on certain characteristics they possess. Such characteristics are referred to as firm attributes – which exist at the firm's level and have the potential to influence the decisions of the managers in the firm. Shehu and Farouk (2014) defined firm attributes as variables at the firm level that affect the decision of the firm both internally and externally over time. Such variables include size, leverage, growth, value, profitability, capital structure, and others. Those attributes of the firm are usually unique to a specific company and they usually portray certain perception in the mind of the user of information regarding the performance and future of the firm. Some of the attributes are discussed hereunder includes firm size, profitability, leverage, liquidity and information technology intensity.

Firm Size

Firm size is one of the most influential characteristics in organisational studies (Pandey, Chotigeat & Ranjit, 2000). Large firms are different from smaller firms, in that larger firms are likely to have more layers of management, greater number of departments increase specialisation of skill and greater bureaucracy than smaller firms (Yegon, 2015). Firm size matters for a number of reasons. Larger firms are associated with lower fixed costs per unit, cheaper access to outside financing, diversification of their financing sources and less likely to fail or liquidate (Gaddard Tavapoli & Wilson 2005). Large firms are likely to be

more diversified and less prone to bankruptcy (Rajan & Zingales 1995). Pandey et al. (2000) were of the opinion that as firm size increases, fixed costs become relatively less important. Larger firms are associated with better diversification capabilities, ability to exploit economies of scale and of scope. Bigger firms are likely to be more profitable as more profit opportunities abound with bigger capital resources than smaller sized firm with smaller capital resources does. On the other hand, larger firms are also associated rigidity and unnecessary bureaucracy that can block profitable opportunities that may require urgent attention. (Goddard, Tavapoli & Wilson, 2005).

Firm size can be viewed as in terms of assets owned by the banks because opportunities abound to the firm as result of the assets acquired which are also related to production efficiency. Firm size can be measured using total asset, total sales, and market value of equity. (Dang & Li, 2015). For the purpose of the study firm size is defined as the total asset owned by the firm measured as log of total asset.

Profitability

Profitability is one of major the areas investors pay attention to when analysing the viability of a business. Tulsian (2014) explained that the word profitability is composed of two words - profit and ability. Profit refers to the total income earned by the enterprise during the specified period of time, while profitability refers to the operating efficiency of the enterprise. It is the ability of the enterprise to make profit on sales; it is the ability of the enterprise to get sufficient return on the capital and employees used in the business operation. While profit report just about the financial and operational efficiency of an enterprise, profitability interpret the profit in relation to other elements likely to affect profit in order to help in decision making (Tulsian, 2014).

Profitability is the ability of a given firm to earn profit. It indicates how well managers of an enterprise generate earnings by using the resource of the business at their

disposal (Dogan, 2013). Simply put, profitability is the profit making ability of the business. It is a strong indication of ability to pay dividend and avoid bankruptcy (Tulsian, 2014). Profitability can be measured using return on asset (ROA), return on equity (ROE) and others (Iyoha, 2012). The gross profit margin considers amount made after direct cost of sale have been taken into account, ROA is defined as net income divided by total asset which reflect how the well the company is using its real investment to generate profit (Türel & Türel, 2012). ROA is often used to compare the efficiency and operating performance as it looks at the returns generated from the asset financed by the company. ROE on the other hand is indicating how effective a firm is in turning shareholder fund into net profit (Turrel et al, 2012). For the purpose of this study, profitability is defined as net income divide by total asset.

Leverage

Leverage is the degree to which a company uses fixed income security such as debt and preferred equity to finance its business activities (Yegon, 2015). High degree of financial leverage is usually followed by high interest payment. Banks that are highly levered may be at risk of bankruptcy if they are unable to pay their debt as at when due. Leverage has its positive side, in that it can increase shareholders wealth if the management make good use of the tax advantage associated with borrowings fund. Debt financing creates leverage because the charges on loans are tax deductible and this is expected to free up some cash for other investment purpose (Yegon, 2015).

Debts are usually cheaper sources of financing when compared to equity. Generally, there are two types of leverage; financial and operating leverage. Financial leverage is used to judge the long-term financial position of a firm while operating leverage is used to assess the short term financial position of a firm. Financial leverage compares the ratio of debt capital to equity capital while operating leverage ratio is computed from operating profits to assess

whether they are sufficient to cover fixed costs (Pandey, 2009). Tahir & Razali (2012) explains that capital structure ratios also known as leverage ratios show the proportion of debt and equity in financing the firm's assets. These ratios indicate mix funds provided by owners and lenders. In this study, leverage defined as total liability.

Liquidity

Liquidity is the measure of the firm's ability to meet up with its current obligations. Liquidity ratio is one of the performance variables used by creditors to assess the credit worthiness of the firm. Agyei-Mesah (2013) defined liquidity as the ability of the firm to meet up with its short-term obligations when they fall due. Liquidity measures the company's ability to meet its short term obligations using its most current assets. It is usually, measured using current asset to current liability often referred to as current ratio (Pandey, 2009). Jonson (2007) is of the view that high liquidity allows the firm to deal with its unexpected contingencies and to cope with its obligation during periods of low earnings. Other definition focus on the firm's ability to easily convert their current assets into cash or when the firm has the ability to access easy credit in response to meeting up with its collateral obligation (at a reasonable cost). For instance, Ndukwe (2013) defined liquidity as the availability of funds, or guarantee that funds will be available quickly to cover all cash outflow commitments in a timely manner. Thus, it can be said that liquidity is when an asset can easily be converted into cash. Specifically, in the banking sector, liquidity is kept to have a quick response to customers demand.

The study adopts the definition by Ndukwe (2013) who defined liquidity as the availability of funds, or guarantee that funds will be available quickly to cover all cash outflow commitments in a timely manner.

Information and Communication Technology (ICT)

All organizations seek to increase their profitability and revenues through the utilization of available resources and make quick decisions based on correct and accurate information in a timely manner. To achieve these, most organisations quickly embraced the use of technology. Consequently, information and communication technology (ICT) became prominent, especially within the realm of financial reporting. ICT has been defined as a series of hardware, software such as application software, including intelligent software, database, networks, including the Internet and its instruments, Internet-based protocols and other technologies that have an effect on accounting reporting which moves toward online financial reporting (Rendulić, Kuo & Dzaja, 2015). Information technology (IT) includes the uses of computers to gather, process, store, protect, and transfer information from one destination to another. Information and communication technology (ICT) is commonly used in place information technology (IT) because most networks of computer have internet connectivity (Dario & Victor, 2015).

Yegon (2015) also defined Information technology as the acquisition, processing, storage and dissemination of vocal, pictorial, textual and numeric information by a micro-electronics based combination of computing and telecommunications while Corbitt, Kumsurprom, Pittayachawan and Mingmalairaks (2010) define information Communication Technology as a component used to disseminate information to internal and external parties and also describe the scope of ICT domain as compose of input, processing and output (IPO). This study adopts the definition of ICT as defined by Rendulić, et al (2015) as it is considered most appropriate for the purpose of the study.

2.2.3 Concept of Earnings Management

Many studies use earnings management as proxies of earnings quality. The most common way to determine the level of earnings management is by the use of discretionary accrual model (Mohdi & Mohamadreza, 2015). They further explained that managed

earnings are of lower quality than unmanaged earnings. This is to say that earnings management is the opposite of earnings quality since the practice of earnings management reduces earnings quality. Several reasons that have been attributed to the preparation of misleading financial statements; they range from the demand for higher returns by shareholders on their investments, the quest to maintain a giant corporate status in the eye of the business community sporadic changes in competitiveness among others (Farouk, 2014).

Leuz, Nanda and Wysocki (2003), viewed earnings management from the managers perspective, by their definition, managers are the insiders who engage in earnings management. They defined earnings management as the alteration of a firms' reported economic performance by insiders either to mislead stakeholders or to influence contractual outcome. The definition suggests that managers' main drive for earnings management is to mislead the stakeholders.

Payam (2013) observed that there are three different earnings quality that can be viewed from the perspective of earnings management: the first view concentrated on managements approach to earning manipulation as they believe that investors prefer sustainable earning which increase constantly. This is because sometimes proportional variability of income leads to more earning quality. The second is in line with the view of Barton and Simko (2002). They concentrated on earning surprise. Their view was based on the proportion of beginning balance of net operating asset to sales. They shows that firm with low level of this ratio have met with predicted earnings surprise. According to Payman (2003) the third view was propounded by Penmanin in 2001, and it was based on the ratio of operation cash flow to income.

Studies such as Mohdi et al. (2015) and Pelepu et al. (2008) associated earnings management to opportunistic interest maximization by managers. Opportunistic earnings management is a term that is used to refer to self-interested managerial reporting behaviour

that is undesirable from a shareholder's perspective. A widely held belief in the literature is that earnings management is primarily opportunistic and it hampers earnings quality. Indeed, many studies have used discretionary accrual measures of earnings quality as negative proxies of earnings quality (Schipper & Vincent, 2003). Managers are posited to opportunistically manage earnings to maximize their utility at the expense of other stakeholders. These opportunistic behaviours are usually carried out within the legal framework of accounting as pointed out by Dechow et al. (2010). Accounting system measures unobservable cost and as such it is unavoidably involved in estimation and judgement, thus, has potential error and intentional bias (earnings management) (Dechow et al, 2010). They also pointed out that firms choose among limited set of pre-determined measurement principles (accounting standards) to measure and that no single standard will perfectly measure earnings for any given firm. Financial statement users see earnings quality in terms of absence of earnings management because intentional manipulation even within the limited of accounting standards may distort the quality of reported earnings (Khairul et al, 2014).

2.2.4 Earnings Quality Measurements

There is no general consensus among scholars on the measurement of earnings quality. The existing literatures have not yet come to a unanimous conclusion on what earnings quality is; rather it is viewed as a conceptual term that can be defined from many different perspectives. Academic researchers have introduced and operationalized different dimensions of earnings quality construct using certain characteristics of earnings and its components (Dechow et al., 2004). Even though Katsuo (2008) pointed out that features of earnings quality such as persistence, predictive ability, smoothness, and conservatism, are not necessarily separable theoretically, extant literatures contain various ways of measuring earnings quality. He further explained that one of the problems in earnings quality measurement is how the elements contained in earnings quality are theorised by various

researchers. Dechow et al. (2010), confirmed that in their general observation about the state of the literature they reviewed in its entirety is that there is no measure of earnings quality that is superior for all decision models. Francis, Lafond and Olson (2004) studied the relationship between earnings quality indicators (accrual quality, persistence, predictability, value relevance, timeliness & conservatism) and cost of capital in the USA. Their finding showed that firms with favourable earnings quality indicators have lower cost of equity than those with poorer earnings quality attributes indicators. However, their findings revealed that two earnings quality indicators predictability and conservatism show insignificant relationship with cost of capital. Therefore, their result revealed inconsistency among the different measures of earnings quality.

Persistent Measure of Earnings Quality

Earnings persistence is associated with stability, sustainability, and recurrence of earnings over time (Laura et al, 2014).This attribute is seen as a systematic behaviour of earnings, and it is desirable because they are recurring (Francis et al., 2004). According to Laura et al, (2014) persistent earnings are associated with higher-quality earnings.

Persistent measure of earnings quality is often discussed from the perspective of value relevance or decision usefulness of information connected to the capital market (Katsuo, 2008). Penman and Zhang (2012) consider persistence to be one of the characteristics which constitute earnings quality especially when viewed from the perspective of value relevance. Similarly, Scott (2003) suggests that earnings quality and ERC (earnings response coefficients) have a positive correlation, and also defines earnings quality by the predictive ability of the price return. Lipe in (1990) also confirmed that earnings with a higher predictive ability of future earnings have a higher ERC.

Earnings Smoothness

According to Schipper and Vincent (2003), smoothed earnings are persistent and their predictive ability is high, and as such smoothness raises the quality of earnings. Whereas others are of the view that managers smoothed earnings because they believe that lower variable earnings are preferred by investors. Lev (2003) argued that smoothness is a desirable attribute derived from the view that manager use their private information about future income to smooth out transitory fluctuation and thereby achieve a better representation and hence useful number.

In measuring smoothness Leuz Nanda and Wysocki (2003) used cash flow from operation as the referenced construct of unsmoothed earnings and measure smoothness as the ratio of income variability to cash flow quality from operation, while Bowen Rajgopal and Venklachalem (2003) measured earnings smoothness as the deviation from operation divided by standard deviation of earnings.

Quality Accrual Measurement

The accrual model was introduced by Jones in 1991. The main goal in accruals method is to distinguish between "abnormal" accruals from "normal". Normal accruals are supposed to reflect the fundamental firm performance, whereas abnormal accruals are adjustments that capture the distortions as result of earnings management or measurement system imperfections. Accruals are all accounting entries that adjust cash flows for financial reporting purposes to accomplish a summary measure of firm performance for a specific period (Scott, Richard, Mark & Irem 2001).

Scott et al. (2001) explained that accrual accounting attempts to record the financial effects of an enterprise on transactions, (other, event & circumstances) in the period in which those transactions, events and circumstances occur, rather than only in the periods in which

cash is received or paid by the enterprise. Martine (2007) exemplified accrual using account receivable. He explained that sale of goods is recorded as revenue in the profit and loss account, but not all the revenues of the sale of goods are received in cash and to modify this lack of cash receipt, the accrual receivables is used. Other examples of accruals are provisions for bad debts, depreciation and amortization charges, and future expenses on product warranties (Lev, 2003). Decow (1994) explained that accrual accounting is more informative since it mitigate timing and mismatching problems inherent in measuring cash flows over short intervals and therefore, accrual-based earnings is a superior measure of firm performance than various cash flow measures. He explained further that the goal of accrual accounting is to help investors assess the entity's economic performance during a period through the use of accounting based principles such as revenue recognition and matching. Martine (2007) added that accrual accounting tends to dampen the fluctuations in the underlying cash flows to generate a number that is more useful to investors than current-period operating cash flows.

Conservativeness

Extant literatures often discuss conservativeness as one of the characteristics of specifying earnings quality. According to Heil (2012), earnings conservatism refers to the faster recognition of economic losses in relation to economic gains into accounting earnings. However, it has not been agreed upon among scholars as to whether or not it is a factor which raises the quality of profits. In Ericson (2006) and Barney (1991), more conservative earnings are seen as higher quality. On the other hand, Schipper (1989) indicates that early recognition of fair value change of financial assets, impairment loss, etc. bring measurement errors into financial reporting, not only because of errors in managerial predictions and judgments but also because they can potentially be caused by simplified assumptions in incomplete contracts.

2.3 Empirical Literature Review

Information supplied in the financial statement is important for decision making. However, an important issue that undermines the usefulness of financial statement for decision making is the quality of reported earnings, which is mostly influenced through earnings management. Uweigbe et al. (2015) opined that management influence reported earnings by making accounting choices or by making operating decisions discretionally. Dechow et al. (2010) established that earning quality studies are broadly divided into determinates and consequences: They explained that determinants papers test theories about features of a firm (e.g., compensation contracts) or of the accounting measurement system (e.g., accrual choices) that cause an earnings outcome while the consequences papers propose or test theories about the impact of earnings quality on an outcome (e.g., cost of capital). Several studied have been conducted to establish the relationship between firm characteristics and earnings quality (Karami & Mohammadomid, 2014, Uweigei et al 2015).

Hussain et al. (2015) conducted a study with the aim of investigating the relationship between Audit Committee characteristics and earnings quality of listed food and beverages firms in Nigeria. The study covered the period of six years from 2007 to 2014. They used secondary data extracted from annual reports and accounts of the selected firms. The dependent variable was generated using two steps regression in order to determine the discretionary accrual of the sample firms while multiple regression was employed to run the data of the study using OLS. The results from the analysis revealed significant association between audit committee characteristics and earnings quality of the Firms. While audit committee size and committees' financial expertise showed inverse relationship with earnings management, committee's independence and frequency of meetings are positively and significantly related to earnings management. Hence, they recommended among others that

listed food and beverages firms in Nigeria should strictly comply with the provision of Companies and Allied Matters Act (CAMA) and SEC Code of Corporate Governance on the issues regarding Audit Committees. Other result from the control variable used in their study showed firm size is negatively and significantly related to earnings management of listed food and beverages firms in Nigeria while leverage had positive but insignificant relationship earnings quality. The study was however conducted on food and beverages firms. Hence, a study on other sectors may produce different result.

Siregar and Utama (2008) conducted study Indonesia to investigate whether companies listed on the Jakarta Stock Exchange (JSE) engage in efficient or opportunistic earnings management and to examine the effect of ownership structure, firm size, and corporate-governance practices on earnings management. The scope of the study was between (1995 -2002) and it used criteria to arrive at its sample size. Using multiple regressions, they found evidence that the type of earnings management by the selected JSE listed firms is efficient earnings management. They opined that their finding was inconsistent with the common view that earnings management in Indonesia is opportunistic. Family ownership had a significant influence on the type of earnings management selected. Firms with a high proportion of family ownership and non-business groups are more inclined to choose efficient earnings management than other types of firms. It is however observable that besides the fact that the study was conducted in Asian country, it time coverage was between 1995 and 2002. The time coverage may have excluded recent even within the context of earnings quality.

Mohammadreza, Javad and Mahboubeh (2014) conducted a study to examine the relationship between conservatism and earnings quality in the Tehran stock exchange. To achieve their objective, they sampled 135 firms out of accepted firms in Tehran Securities Bourse using criteria. They adopted Panel Data Regression model and Equality test

comparison, to establish a relationship between conservatism end earnings quality at 95% confidence level. The result of their study showed significant positive relation between conservatism and earnings quality. Hence they argued that conservatism can increase earnings quality and reduce the conflict of interests between the investors and the management. Thus, managers should adopt conservative accounting to improve the quality of their reported earnings. The study focus on how conservatism affect the earnings quality, a different study using other firm attributes as determinant of earnings quality may reveal a different finding.

In an attempt to establish the link between earnings quality and dividend, Jorge and Jose (2007) conducted a study aimed at presenting empirical evidence in support of the hypothesis that dividends play an important role in conveying information on the level of earnings management by companies. The study which was conducted in United State (US) used sample of 40,000 firms for the period 1987-2003. They found evidence of a significant positive relationship between dividend payments and a set of alternative measures of earnings quality. They concluded that dividends can act as a credible signal of earnings quality, with companies unengaged in earnings management being more likely to pay dividends, to have higher dividend yields amongst divided payers and to increase dividends per share. However, besides the fact that the study was conducted in developed country, the scope of the study stopped at 2003. As such, it may not have capture recent happening in the field of earnings quality.

In a different approach, Osemene, Muritala and Olawal (2014) conducted a study in order to empirically examine the impact of creative accounting on firm performance in Nigeria. They used secondary source of data from seven financial institutions over the period of 2006-2011. The model they adopted for this study is the modified Jones model (1995) as a measure of (dependent variable) creative accounting while return on asset (ROA) and return

on equity (ROE) were used as the independent variable. The results from Levin, Chin Chun unit root test showed that all the variables were non-stationary at level. The results from the panel least square shows that proxy of creative accounting is positively related to return on equity. However beside the fact that the study was conducted using modified jones mode, its time coverage was stopped at 2011. A study with more recent time coverage may show a different result.

2.3.1 Firm Size and Earnings Quality

The size of a company is one of the structural variables of the company that determines the way and manner in which it operates. As the firm size increases, agency costs are expected to increase and allow for greater managerial discretion and opportunism (Ahmed, 2012). He explained further that firms of different size may need different corporate governance structures and that small and large firms are not necessarily similar in their corporate structures. Bogshan (2005) observed that, firms structures become complex as they grow larger and diversified. Penyam (2013) stated that early papers predict firm size would be negatively associated with earnings quality because larger firms would make income-decreasing accounting method choices in response to greater political/regulatory scrutiny. However, more recent studies predicted and found size is positively associated with earnings quality because fixed costs associated with maintenance of adequate internal control procedures over financial report (Ageyei-Mensah, 2013 & Povolostkay, 2014).

Uweigbe et al. (2015) conducted a study to assess the effects of firms' characteristics on earnings management of listed companies in Nigeria. To achieve their objectives, they used judgmental sampling technique to select a total of 20 listed firms in the Nigerian stock exchange market. Their study period was between 2006 and 2010. They conducted the study using secondary data from the annual reports of the selected companies. To test the research hypothesis, they adopted the use of both descriptive statistics and econometric analysis using

the pooled ordinary least square regression for the listed sampled firms. Findings from their study revealed that firm size and firms' corporate strategy have a significant positive impact on earnings management (proxied by discretionary accruals). Thus, they concluded that large firms tend to have higher motivations and more prospects to engage in the earnings manipulation and exaggerate earnings due to the intricacy of their operations and the complexity for users to identify overstatement. It was observed that the study was conducted for the period of five years only and only three variable were used as the independent variable. A study with larger sample size and more recent time coverage and may produce a different result.

In other studies conducted to examine the relationship between firm size and earnings quality, researchers have also found negative association between them. For example, Leslie and Okoegule (2013) conducted a study to evaluate of the implications of earnings management determinants on the Nigerian banking industry, They used the twenty three (23) banks listed at the Nigerian stock exchange as at 2010 as the population of the study. Out of which, eighteen (18) banks were selected as the sample of the study for the period of six years (2005-2010). The Pearson product moment correlation was used as a technique for data analysis. The study found that audit committee size, audit fee, bank asset quality, bank size and board size were all negatively correlated with abnormal loan loss provisions (ABBL). Although the study was conducted in the Nigerian banking industry, the study used only correlation as means of data analysis which may not adequately explain the predictive relationship between firm characteristics and earnings quality. However, in another study conducted by Ahmed (2014), firm size was found to be insignificantly related to earnings quality. He conducted the study to investigate the relationship between managerial characteristics and earnings quality of listed banks in Nigeria. He used the Q test model to measure earnings quality of 17 listed bank on the Nigeria Stock Exchange between 2006 and 2010. The data for the study were obtained from secondary sources and analysed using

logistic regression analysis. The managerial characteristics variables used includes: performance, managerial ability, managerial ownership and managerial cash holding and liquidity risk. Their results revealed that managerial characteristics have significant positive effect on the level of earnings quality, while size (measured as total asset) and global financial crisis do not have significant effect on the level of earnings quality of listed banks in Nigeria. The researcher however, explained that the findings of the study could be attributed to the fact that all the banks used in the study are mega banks which met up with the N25billion minimum paid up capital fixed by the CBN. An indication of this is that all the banks in the sample can be categorised as the same in terms of size, hence, the insignificant effect of size. It is however observable the study used Q test model to measure earnings quality. A study with a more suitable measure of earnings quality in Nigerian banks may produce a better result.

Okolie, Izedomi and Enofe (2013) also had similar result as Ahmed (2014). They conducted their study to examine the impact of audit quality on earnings management by companies through discretionary accruals manipulations in Nigeria. Data were extracted from annual reports of 57 quoted companies in Nigeria between 2006 and 2011. Audit firm size, audit fees, auditor tenure and audit client as audit quality proxies while firm size (measured as the log of total asset) and leverage were used as control variables. The amount of Discretionary Accruals (DAC) was used to measure earnings Management. The results showed that audit quality was significant and negatively related to the amount of DAC of quoted companies in Nigeria and coefficient of firm size was found to be insignificant. The scope of the study only covered up to 2011 and thus, a study with more current time period may produce different result.

Chalaki, Didar, and Riahinezhad (2012) investigated the effect of corporate governance attributes on financial reporting quality on firms listed in Tehran Stock Exchange

(TSE). They used multiple regression in SPSS to analyse data for the period of 2003 to 2011. They used McNichols (2002) and Collins and Kothari (1989) model to measure financial reporting quality. Institutional ownership, ownership concentration, board independence and board size were used as corporate governance attributes, while firm size, audit size and firm age were used as control variables. The result revealed that firm size has no significant relationship with financial reporting quality.

2.3.2 Profitability and Earnings Quality

Profitability is one of the firm attributes identified to have great influence on the earnings quality of firms. Several studies have used return on asset (ROA) as a measure of profitability as determinant of earnings quality (Ahmed 2012 & Laura et al. (2013). ROA is an indicator of the management's ability to efficiently utilise corporate resources (assets) that ultimately belong to shareholders (Dechow et al, 2010). Hashem (2012) as cited by Shehu et al. (2013) showed that Return on asset used as proxy for performance of firms is significantly positively related to earnings management, which indicates that when there is any increase on performance of firms, there will be a corresponding increase in earnings manipulation and as a result of this, the quality of the earnings reported is at jeopardy. On the other hand, researchers have investigated whether firms that are performing poorly engage in accounting tactics to improve their earnings and hence lower earnings quality. Dechow et al (2010) established that specifically, weak performance provides incentives to engage in earnings management while DeAngelo et al. (1994) suggest that sustained weak performance can limit opportunities to manage earnings.

In relaton to this, Povolotskaya (2014) conducted a study with the aim of exploring the nature of the empirical relations between accruals quality and future company performance. The study involved 6,461 observation from which 497 European companies. The study period was between 2001 and 2013. Panel data regression technique was used for

data analysis. The standard deviation of accrual residuals from modified Dechow and Dichev (2002) model was used as a proxy for the quality of accruals. One-year-ahead financial ratios (net working capital turnover rate, asset turnover, return on sales (profit margin), return on assets, earnings per share, and earnings-to-price ratio) are the proxies for future company performance. The study found evidence of significant negative effect of accruals quality on one-year-ahead return on assets, return on sales, earning-to-price ratio, and earnings per share ratio while significant positive relation was found between accruals quality and one-year-ahead asset turnover ratio**.** The study was however conducted in European countries; similar study in developing countries like Nigeria many produced a different result.

Leslie et al (2013) conducted a study using the twenty three (23) banks listed on the Nigerian stock exchange as at 2010 as the population of the study. Out of which, eighteen (18) banks were used as the sample of the study for the period of six years (2005-2010). Their main aim was to evaluate the implications of earnings management determinants in the Nigerian banking industry. They used The Pearson product moment correlation as a technique for data analysis to identify the determinants of earnings management. The study found that audit committee size, audit fee, bank asset quality, bank size and board size were all negatively correlated with abnormal loan loss provisions (ABBL). While performance (measured as return on asset) had significant negative relationship and abnormal loan loss provision.

Mahmuda, Ibrahimm and Pokc, (2011) conducted a study in an attempts to address the question of whether earnings quality of Malaysian public listed firms is associated with performance. They used three (3) attributes of earnings quality namely predictive value, feedback value and timeliness along with two financial performance measures namely returns on assets (ROA) and Tobin's Q. the sample of their study consist of 285 listed on the Bursa Malaysia main board from 2000 to 2007. The data were analysed using panel data regression

technique. The result showed that with ROA has positive and significant association with feedback value and timeliness and negative insignificant relationship with predictive value of earnings. When Tobin's Q is used as performance measure, feedback value of earnings has negative and significant association with firm performance. On the other hand, predictive values of earnings and timeliness have positive but not significant association with firm performance

Shehu and Ahmed (2013) conducted a study on firm characteristics and financial reporting quality of listed manufacturing firms in Nigeria. They expressed firm characteristics from perspective of structure, monitoring and performance elements and the quality of financial reporting was measured using the modified model of Dechew and Dechev (2002). The study covered a time period of (2006 - 2010). The study adopted correlational research design with pooled balanced panel data of 24 firms which served as sample of the study and also used multiple regression as a tool of analysis. They found that Profitability has positively associated with earnings quality. The study was conducted in the manufacturing sector. Similar study in the banking sector may produce different findings.

Issah, Hussein and Hussein (2015) examined the effect of earnings quality on liquidity risk of banks in Iraq stock exchange companies. Earnings quality was measured using the Jones model (1991), while liquidity risk was measured using current asset divided by current liability. Other control variables include asset (log of total asset), leverage (total debt to equity), and profitability (both ROE & ROA). The study found that earnings quality was significantly related to liquidity risk, ROE and ROA. However, the study used the modified jones model to determine earnings quality banks and the model is not suitable for estimating earnings qualities in the financial sector.

Shehu et al. (2014) empirically investigate the impact firm attributes and earnings quality of listed oil and gas companies in Nigeria for the period of 2007-2011. They selected

seven (7) out of the nine (9) the listed Oil and Gas firms as sample size of the study. Firm attributes as the independent variable was proxied with firm size, leverage, Institutional ownership, profitability, liquidity and firm growth. While the residuals from the modified Jones model by Dechow et al (1995) was used to proxy earnings quality. They adopted multiple panel data regression techniques to analyse the data collected from secondary source through the annual reports and accounts of the firms. They found that profitability has a significant but negative relationship with earnings quality of listed oil and gas companies in Nigeria. The study covered the period of five (5) years and it was conducted in the oil and gas sector, as such, a similar study with longer time coverage and on different sector of the economy may produce a different findings.

2.3.3 Leverage and Earnings Quality

Leverage is a commonly used determinant of earning quality (Shehu et al., 2014 & Uwuigbe et al., 2015). It reflects the firm's financial risk and the possibility that the companies reporting and accrual accounting policies might be influenced (Dechow et al, 2010; Murya, 2010). High leverage is an indication that a firm is close to debt covenant restriction, hence, managers in more highly levered firms could be forced to take action to boost income by manipulating the financial statements so as to avoid debt covenant violation (Watts & Zimmerman, 1986). Such actions automatically reduce the qualities of the reported earnings.

The study conducted by Ahmed (2012) found significant relationship between leverage and earnings quality. The study was done examines the effect of firms' structure on the financial reporting quality of Bangladesh quoted manufacturing firms. The study made use of assets, leverage and share dispersion as proxies of firm structural characteristics while residuals of modified EBO model was used as the proxies of financial reporting quality. The study made use of data extracted from 12 sampled firms to represent the all quoted

manufacturing companies in Bangladesh which served as the population of the study. Multiple regression was used as a tool of analysis for the study. The proxies of firm size and leverage were found to be significantly related to earnings quality thus, the researcher concluded that there is significant positive relationship between firm structure and financial reporting quality of quoted manufacturing firms in Bangladesh.

Oluwokere, Tanko and Nyor (2016) examined structural characteristics and earnings quality deposit money banks in Nigeria. They used secondary data from the published reports of thirteen (13) listed deposit money banks in Nigeria for over a period of ten (10) years between 2005 and 2014. The aim of the study was to find the determinants of financial reporting quality and reports the findings of the impact of structural characteristics like age, size and level of leverage on financial reporting quality. The study used multiple regression as technique for data analysis, while residuals were generated through loan loss provisions. The study did not find any evidence of significant relationship between firm leverage and financial reporting quality. They explained that unexpected result was as result of the fact that most of the other studies were not done in emerging economies and they concentrated on the manufacturing sectors. The study used abnormal loan loss as a measure of earnings quality. The model may not capture the discretionary part of loan loss provision which is central argument accrual measure model.

Sossiouny et al. (2016) conducted a study to assess the impact of firm characteristics on earnings management of the listed firms in Egypt. They selected the 50 firms in the Egyptian stock exchange. They obtained data from the financial statements and the disclosure book for the period 2007-2011. They however, excluding banks and insurance companies form their study for reasons of having different disclosure requirements and different corporate governance code. The data obtained for research was analysed using the random

effect generalized least square regression model. The study found significant positive relationship between firms' financial leverage.

Hashem and Mehdi (2011) conducted a study on corporate debt and earnings quality with the aim of investigate the relationship between corporate debt financing and earnings quality and also to find negative influence of debt on earnings quality. They collected data from 81 firms listed on Tehran Stock Exchange (TSE), for the period of five (5) years (2005-2009). To test the research hypothesis, comparative method of T-test, correlation matrices and multiple regression analysis were applied. The findings of their study showed that there is a negative relationship between debt and earnings quality. They explained that debt have a positive influence on earnings quality because managers are likely to use their accounting discretion to provide private information about the firms' future prospects to lower financing costs. The study was however conducted in a country with a different legal system from that of Nigeria. A similar study in Nigeria may yield a different result.

Leslie et al. (2013), conducted a study with the aim of evaluating the implications of earnings management determinants in the Nigerian banking industry, using the twenty three (23) banks listed at the Nigerian stock exchange as at 2010 as the population of the study. Out of which, eighteen (18) banks were used as the sample of the study for the period of six years (2005-2010). The study used The Pearson product moment correlation as a technique for data analysis to identify the determinants of earnings management. The independent variable for the study are audit committee size, audit fee, bank asset quality, bank size and board size auditor change, bank complexity, bank performance, board composition, director shareholding, and bank leverage (LEV) while abnormal loan loss was used as dependent variable. The study found that bank leverage is positively correlated with abnormal loan loss provision.

Agyei-Mensa (2013) conducted a study to investigate the quality of financial reports before and after adopting IFRSs in Ghana, and also determine the influence of firm-specific characteristics which include firm size, profitability, debt equity ratio, liquidity and audit firm size on the quality of financial information disclosed by firms listed on the Ghana Stock Exchange. The sample consists of all the 35 listed firms on the Ghana Stock Exchange. The study used multiple regression for data analysis. The results of the study showed that the quality of financial information disclosures which was proxied as Total Disclosure Index (TDI) improved significantly after adopting IFRS. The study thus confirms that the implementation of IFRSs generally reinforce accounting disclosure quality. The results of the multiple regression analysis showed that debt equity ratio was insignificant but positively related to quality of financial information disclosed by firms listed on the Ghana Stock Exchange.

Laura et al. (2014) examines the effect of firm characteristics on earnings quality using a sample of Spanish hotel firms. Their study consists of 21600 observations from 1805 sampled firms for the period of twelve (12) years 2000-2011. First, they build a multidimensional measure of earnings quality including attributes as persistence, predictability, variability and earnings smoothing. Second, they examine variables that are potentially associated with earnings quality and sort these into five categories: market variables, business strategy, ownership structure, audit function and control variables (firm size and leverage). The findings suggest that location, the ownership structure and the audit function influence earnings quality in hotel firms. The study found that leverage was only significant with only variability as an attributes of earnings quality but not significant with other attributes of earnings quality.

2.3.4 Liquidity and Earnings Quality

According to Khaira et al. (2014), Creditor view of earning quality is when firm earnings can easily be converted into cash flow. Liquidity is important to the organisation because it is the brain box for survival businesses (Shehu et al, 2014). Businesses with problem of liquidity are heading towards crises and as such a reasonable part of asset is expected to be held in liquid form in order to meet day to day activities of the business. Creditors look forward to liquidity as an important tool for financial decision. Any organization that is liquid may be willing to disclose it in their financial reports in order to attract creditors, increase their ability of raising fund externally to finance future projects. Also, it is an indication to regulators, investors, potential investors and other stakeholders that the business has the ability to exist for and foreseeable future without any financial hitches. Any firm with such an advantage will be willing to inform the public through disclosure (Shehu et al., 2014). They further established that the overall, empirical evidence suggests that disclosures and accounting information of higher quality are related to improved liquidity. In others words liquidity is associated with higher earnings quality.

In a pre and post international financial reporting standard (IFRS) adaption study, Shehu (2015) established that liquidity under pre IFRS adoption has no significant relationship with earnings quality of listed deposit money banks in Nigeria. However, post adoption shows that liquidity has significant positive relationship with earnings quality in the Nigerian deposit money banks. He adopted correlational research design in which 14 banks were used as sample of the study. The study also used longitudinal balanced panel data that is based on two steps multiple regression to examine the model of the study. His aim was investigates firm attributes from the perspective of structure, monitoring, performance elements and the quality of earnings of listed deposit money banks in Nigeria. The result reveals that firms attributes (leverage, profitability, liquidity, bank size and bank growth) have significant influence on earnings quality of listed deposit money banks in Nigeria after

the adoption of IFRS, while the pre period shows that the selected firm attributes have no significant impact on earnings quality.

Lamiri and Arab (2013) examined the relationship between earnings management and the liquidity of the Tunisian market. They conducted study using a sample of 19 companies listed on the Tunis Stock Exchange for the periods of (1999 – 2011). In the study market, liquidity was calculated using relative spread (the difference between the best purchase price and the best sale price divided by the average of the two prices). To calculate earnings management, they used the Jones model 2001 as modified by Kothari 2005. The study used panel data regression as technique for data analysis. The results revealed positive and significant relationship between the earnings' management achieved by the Tunisian companies and the market liquidity.

Hamidzadeh and Zeinali (2015) conducted a study to investigation the effect of asset structure and Liquidity on financial reporting quality of listed companies on Tehran Stock Exchange (TSE). The population of their study consist of the all the firms listed in Tehran Stock Exchange, and the sample of the study was arrived at using systematic elimination sampling method. Hence, the sample was made up of 100 firms, while the period covered by the study was 2007 to 2011. The study adopted a multivariate regression technique for data analysis. The results of the research showed that liquidity has significant and positive effect on financial reporting quality. It is however notable that beside the fact the study was conducted in an Asian country, it also used primary data for analysis.

Issah, Hussein and Hussein (2015) conducted a study to determine the effect of earnings quality on liquidity risk on bank registration for Iraq stock exchange companies. The sample of the study consists of 16 banks for the period of 2004 to 2006. Earnings quality was measured using the Jones model (1991), while liquidity risk was measure using current asset

divided by current liability. Other control variables include asset, leverage, and profitability. The study found that earnings quality was significantly related to liquidity risk.

Amr (2016) examined the effect of firm`s liquidity on the quality of financial report in Egyptian firms. In the study, Proper Liquidity level is a sign of the firm ability to cover its short term debt, also a sign for its future solvency and hence better firms' viability. The Study uses simple multiple regression technique for data analysis. The sample consists of 32 firms listed in the Egyptian stock exchange for the periods of 2014 and 2015. Firm liquidity was measured quick ratio, while quality of financial reports is measured by accounting conservatism. Financial leverage, profitability and company size were used as moderating variables affecting the relationship in question. The results revealed significant positive relationship between with significance liquidity and earnings quality. The study was used conservatism as a measure of earnings quality. However, existing literatures have shown that it is still difficult to tell whether conservatism increases or increases earnings quality.

2.3.5 Information and Communication (ICT) Intensity and Earnings Quality

Earning quality is associated with accounting standard setting. Standard are promulgated focusing on the usefulness of decision designs or of earnings numbers to financial statement users. (Khairul et al, 2014). In a study of the intellectual capital and earnings quality in Malaysian firm, Pantam (2013) used human capital information technology (IC) as a measure of structural capital. He defined structural capital as a level of knowledge and technology internalized in the firms. He further explained that whenever the level of this capital goes up, the quality of information communicated to the stakeholders will be affected and thus, risk averse management will rely less on the information which is based on the discretionary accruals.

Studies have also related the earrings quality of accounting system. The benefits thought to flow from higher quality earnings are often attributed to the quality of the firm's

accounting system (Biddle et al, 2009). They also added that lower levels of the proxy for earnings quality have been attributed to accounting failures (i.e. intentional earnings management or unintentional failures) with adverse consequences for the cost of capital, investment efficiency, and future growth. However, information technology has changed manner in which accounting data is processed. Accounting data processed electronically is associated with speed, reliability and accuracy. A computerized accounting system involves the computerization of accounting information systems which is established in order to facilitate decision making and other benefits like speed of carrying out routine transactions, timeliness, quick analysis, accuracy and reporting (Muinde, 2013). Computerised accounting systems also have controls installed in them that can help prevent earnings manipulation. According to Ahmed (2012), the aim of financial reporting is to promote transparency and deliver high quality annual report to enhance comprehensive disclosure. These controls that are inherent in computerised systems can help checkmate accounting data manipulation or other errors that are not associated with intentional manipulation.

Saleh and Torabi (2012) conducted a study to assess the role of information technology in financial Reporting quality in Iran. To identify the impact of information technology on quality of financial reporting, data were generated qualitatively using questionnaire. The population consist of 30 people whom are mainly financial managers, accounting managers, accounting supervisors, book authors, faculty members, PhD scholars and researchers with at least an M.A. in accounting who are familiar enough with the subject of the study. In order to test the hypotheses, the study used T-Test, ANOVA and Duncan's Test for data analysis. The results showed that information technology enhances the relevance and reduces the reliability of accounting information. It also increases comparability, albeit in a small amount, and diminishes the negative impact of dominant limitations on qualitative characteristics of accounting information. However, the researcher

explained reduction in reliability of accounting information was due the fact that continuous improvement in ICT cannot generate continuous improvement in accounting data reliability. The main weakness of the paper is in is in its strength. Despite the fact that opinions of accounting experts were used as a basis for decision, the study cannot exonerate itself from inherent subjectivism associated with primary data through questionnaire.

In a study of the determinants of accurate financial statements reporting in listed banks In Kenya, Tarus and Mutari (2015) adopted a descriptive research design in which primary data were collected through questionnaire. Out of 280 middle and senior managers identified as the population of the study, 164 were selected as the sample size using Yaro Yamane as criteria for sample selection. The study used simple percentage as a technique for data analysis. The study found that (the staff) knowledge of computerised software affects the quality of financial report. However, in a study of the determinants of earnings quality, simple percentage cannot present an objective view of earnings quality.

Imeokparia (2013) conducted a study to investigated whether Information Technology improves the qualities required by the international financial reporting standards on financial reports, and if it affects compliance with required standards as well. The study adopted descriptive research design method with a population of 2,500 accountants and a sample size of 345 which was derived using Yaro Yamani formula. The study further made use of primary data. The data collected were analysed using simple regression analysis. The regression result indicated that information technology makes financial reporting more accurate, useable and of better quality. However, information technology does not hinder compliance with international financial reporting standards. The study was however conducted using primary data, a different study using secondary data from audited financial statement may yield a different result.

Abu-Musa (2008) conducted a study to investigate the impact of emerging information technology (IT) on internal auditors' (IA) activities, and also to examine whether there is IT evaluation performed in Saudi organizations. The study used survey approach in which self-administered questionnaire were deployed. To achieve study objectives, 700 copies of questionnaire were randomly distributed to a sample of Saudi organizations located in five main Saudi cities. In total, 218 valid and usable questionnaires – representing 30.7 percent response rate – were collected and analysed. The results of the study reveal that information technology enhances internal audit.

2.4 Theoretical Framework and Model Build up

To support the research hypotheses of the study, it is necessary to identify theoretical frameworks that underpin the study. Reviews of the literatures indicate that agency theory and signalling theory have been popularly used to explain the relationship between firm attributes and earnings quality.

The nature of financial statement as required by CAMA 2004 has given room for compromising the quality of financial reporting by the management in order to achieve their desired goal (Farouk, 2014). Firm characteristics are the platforms in which the management rely on to manipulate earnings. Thus, the research hypothesised that earnings quality is a function of firm attributes. For the purpose of the study, firm attributes are divided into Structural (STR) variables, and Resource (RES) variable and performance (PERF) variables. Thus, earnings quality measured using discretionary loan loss is presented as follows.

EQ = F (STR, RES, PER) ---------- (I)

The two firm characteristics variable that form the structural variables are firm size (FSIZE) and leverage (LEV), Earnings quality is posited to be a function of structure variables and is presented as follows:

EQ = F (FSIZE, LEV) ---------- (II)

The firm structure variables are characteristics of the firm that have the potential to affect the quality of financial reports as explained by the opportunist hypothesis of the agency theory. Agency theory explains the relationship between managers and shareholder. It is a theory that was developed as framework for analysing conflicting interests between key stakeholders, in addition to being a mechanisms developed for resolving conflicts (Tipuric, 2008). Besides the prevalent contribution within discipline of corporate governance, agency theory application is extensive. The theory may be applied in every situation in which one party (the principal) delegates work to another (the agent), who performs the work. Agency theory attempts to describe the relationship in terms of behavioural characteristics and provides mathematic instrument for evaluating situations between parties who lack mutual trust (Tipuric, 2008).

The separation of ownership from management in modern corporations provides the context for the function of the agency theory. Modern organisations have widely spread ownership, in the form of shareholders, who are not normally involved in the management of their companies. The most crucial aspect of the agency theory is that the agent does not necessarily take actions that are in the best interest of the principal. Eisenhardt (1989) explains that agency problems commence when the goals of the principal and that of the agent conflict and it becomes difficult and costly for the principal to verify what the agent is actually doing. Managers are usually motivated by their own personal gains and work to exploit their own personal interests rather than considering shareholder's interests and maximising shareholder value (Donaldson, 1995). The consequence of this is that there will be some form of information asymmetry between the agent and the principal. This is often described as the opportunistic behaviour (Serigar & Utama, 2014). Agency theory suggests

that agents will choose opportunistic self-interest behaviour rather than behaviour aimed at maximizing the principal's interest (Jensen & Meckling, 1976).

Opportunistic earnings management is a term that is used to refer to self-interest managerial reporting behaviour that is undesirable from a shareholder's perspective. Managers sometimes report opportunistically to maximize their interest. A widely held belief in the literature is that earnings management is primarily opportunistic and it hampers earnings quality (Shehu 2014). Since earnings management were primarily opportunistic, it becomes reasonable to posit that such behaviour would adversely affect reliability of financial reporting and hence diminish earnings quality.

Firm size plays an important role in restraining opportunistic earnings management (Seriga et al., 2014). They further explained that company size is used as a proxy for information asymmetry in the pre disclosure information environments as managers of small companies are able to retain their private information more successfully than their counterparts in large companies are. In addition, larger firms are more easily scrutinized by investors or regulators than smaller firms are, and hence smaller firms are expected to engage more opportunistic earnings management than the bigger firm. Furthermore Watt and Zimmerman (1983) argued that agency cost is higher for larger firms due to the fact that they have larger number of stakeholders and as such, larger firms have incentive to reduce agency cost by increasing the quality of reporting and reducing information asymmetry. Another, argument relating size and earnings quality is that larger firms are more politically visible than smaller firms are. As a result, they are exposed to more litigation and government intervention; hence they are more willing to avoid opportunistic earnings manipulation so as to reduce political cost and mitigate unnecessary government intervention (Young et al, 2003).

Agency theory has largely been used also to explain the relationship between firm leverage and earnings quality. It is argued that leverage increases wealth transfers from fixed claimants to residual claimants. High leverage indicates that debt holders would exercise control over firm's management and hence their financial reporting. Therefore, managers of highly levered firms indulge in practices that enable them present higher income than actual income or manipulate financial statements to please debt holders (Watts et al. 1986).

Dechow et al. (2010) explained that debt covenant is another potential motivation for engaging in manipulation which will lead to low earnings quality; managers engage in earnings management to avoid debt covenant violation. Higher leverage is an indication that a firm is closer to a debt covenant restriction. Managers in such firms may take action to boost income or manipulate the financial statements so as to avoid violating debt covenant (Watts et al, 1986). Such action could reduce the quality of earnings and subsequently, for other decisions. There is substantial evidence that debt levels are associated with various measures of earnings quality, including income increasing accounting method choices thus, higher leverage is associated with lower quality earnings using a multitude of proxies. However, whether the lower quality is due to closeness to covenants or other incentives (e.g., bankruptcy concerns, financial distress, and the need for financing) or to differences in the investment opportunities is still a lingering question among scholars (Watts et al, 1986). Studies that use more direct proxies for closeness to covenants do suggest that managers make accounting choices to avoid covenant violation, but this result does not necessarily imply that earnings quality is compromised. If decision makers adjust for the effects of the choices; either because they observe them or because they rationally infered that income-increasing accounting choices are taken to avoid covenant violations, then such actions may benefit all contracting parties (Dechow et el, 2010).

Another firm attributes that is hypothesised to have impact on earnings quality is firm's resources. Thus, earning quality was posited to be the function of firm resource represented by ICT Intensity (ICT). It is represented as follows.

EQ = F (ICT) ---------- (III)

Resource based theory explains the ability of the firm to utilised its resource to achieve its objectives (Flore, 2007). It is based on the argument that internal resources of a firm rather than the external environment around the firm are the primary source of performance differences among firms (Tokuda, 2005). It suggests that the resources possessed by a firm are the primary determinants of its performance, and may contribute to its sustainable competitive advantage. According to Barney (1991), the concept of resources as suggested by the by the resource based theory include all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness.

Rehana and Nasrin (2011) described accounting information as lifeblood and a critical resource required by every enterprise as competitive strategy. Accounting information system (AIS) is made up of numerous packages, software, as well as tailored-made systems. The business world is best by accounting systems that have varying levels of efficiency and costs for such information. (Yau & Pak, 2000). With the introduction of computers in business, the manual method of accounting is being gradually replaced and the presence of database technology has revolutionized the accounts department of the business organizations

The rapid change in information technology, the wide spread of user-friendly systems and the great desire of organizations to acquire and implement up-to-date computerized systems and software have made computers much easier to be used and also enabled

accounting tasks to be accomplished much faster and accurate than hitherto (Rehana & Nasrin, 2011). ICT provides managers with accurate and timely information that improves the quality of their decision. Hence, information communication technology (ICT) can be used as an organisational resource to curtail earnings management practices.

Furthermore, the firm performance variables which were posited to have impact on the quality of financial reports is explained by efficient contracting theory which associates managers to exercising accounting discretion in an efficient manner; such that in the long run firm value is maximized. Hence, performance has an important role to play in explaining in earnings quality. In this study, earnings quality is posited to be function of Performance characteristics which include profitability (PROF) and liquidity (LIQ). This is presented below:

EQ = F (PROF, LIQ) ---------- (IV)

The standard economic theory of executive compensation is the principal and agent model (Laffont & Martimort, 2002). The theory provides that firms seek to design and maintained efficient compensation package possible in order to attract retain and maintain executive or managers. Martin (2006) explained that efficient contracting theory is designed to align the mutual interest of the principal and the agent in order to ameliorate moral hazard problems (i.e. manager's opportunism)

Efficient contracting theory is one that maximizes the net expected economic value of the shareholders after transaction cost (e.g. contracting cost) and the payment to the employee. The expected outcome of the efficient contracting will be to reduce manager's opportunistic behaviour and also provide an incentive for better performance through risky compensation. Hence, the efficient contract will allocate more incentives to individuals who have the greatest impact on the firm's value. Bowen, Rajagopal and Venkatachalam (2008)

argued that the efficient contracting theory associates managers to exercising accounting discretion in an efficient manner such that in the long run firm value is maximized

The efficient contracting is line with agency theory which prescribed a situation of economic exchange relation between principal and agent, in which principal delegates work to the agent. The Agent (manager) tries to maximize personal gains by satisfying economic objectives of the principal and the agent's commitment level is a function of perceived reward value for satisfying principal's objectives (Donaldson, 1995). He further opined that the assumption that comes along with the characterisation of opportunistic behaviour is that individuals are unable to credibly commit themselves to refraining from opportunistic behaviour, unless they are some external incentive structure (pay scheme) that help them achieve their own future incentives or goal. Consequently, the overall equation is represented as hereunder. Equations two and three are used to formed equation one. Since earnings quality is hypothesized to be function of firm characteristics in equation two, three and four (given by structural, resource and performance variables respectively), equation one can be restated as follows.

EQ = F (FSIZE, PROF, LEV, LIQ, ICT) ---------- (V)

Thus, earnings quality is posited to be the function of firm size, profitability, leverage, liquidity, and ICT intensity.

Finally, three theoretical explanations have been used to anchor the firm attributes and earnings quality of Nigerian deposit money banks in the study. The theoretical explanation comprise of the agency theory linking firm size and leverage with earnings quality, the resource based theory linking ICT intensity with earnings quality while the efficiency contracting linked profitability and liquidity with earnings quality.

CHAPTER THREE
RESAERACH METHODOLOGY

3.1 Introduction

This chapter discusses the method and procedure used to examine the impact of firm attributes on earnings quality of Deposit Money Banks (DMBs) in Nigeria. It covers the research design, the sample, the population and sample of the study. The chapter also discussed the source and method of data collection. The technique of data analysis considered necessary for testing the relationship between the dependent and independent variables and the various justifications for the methods and techniques adopted are discussed.

3.2 Research Design

Correlational research design was adopted for the study. Correlational research design is used to describe the statistical association between two or more variables. It is therefore, considered most appropriate for this study because it allows for testing of expected relationships between and among the variables and for making of predictions regarding these relationships.

3.3 Population and Sample of the Study

The population of the study comprises all the fifteen (15) Listed Deposit Money Banks on the Nigerian Stock Exchange (NSE) as at 31 December, 2015. However, a single point filter was used as criterion to arrive at the adjusted population. The criterion is that any banks delisted within the period covered by the study will be excluded. Consequently, the adjusted population of the study consist of fourteen (14) banks. The study then adopted a census-sampling technique, to arrive at fourteen (14) listed DMBs as samples of the study. the main reason for the use of listed banks is that they are expected (as required by law) to submit their annual reports to the stock exchange which make them easily accessible for the purpose of the research and that such information are highly reliable.

3.4 Source and Method of Data Collection

The data used for the study was extracted from secondary sources only. The variables in respect of firm attributes include firm size, profitability, leverage, liquidity and ICT Intensity as the independent variables and that of dependent variable (earnings quality) was proxied by discretionary loan loss provision. The data was extracted from the audited financial reports of the banks within the period of the study. The use of secondary source of data is because information on the variables used for conducting the research can only be found in the financial statement of the banks. This source of data is also reliable since the financial statements have been audited by an independent audit firms.

3.5 Technique of Data Analysis

The study adopted panel data multiple regression as a technique for data analysis. The technique is used to account for individual heterogeneity associated with the sampled banks and also to enable the researcher effectively determine the impact of firm attributes on the earnings quality of the listed deposit money banks in Nigeria. The Chang *et al.* (2008) two-step regression model was also used to extract residuals. The residual from model was used as the dependent variable for the study, while five firm attributes (Firm size profitability, leverage liquidity, and ICT intensity) were used as the dependent variables.

Furthermore, the residual from the model herein described as Discretionary Loan Loss Provision (DLLP) represent the level of earnings management. Farouk (2014) described the relationship between opportunistic earnings management and earnings quality as an inverse relationship and vice versa. It therefore implies that high DLLP values are direct indicators of low earnings quality, while low DLLP values are direct dictators of high earnings quality.

3.6 Model specification

The model used to examine the hypotheses of the study is specified below:

$$EQ = \beta_0 + \beta_1 Fmsize_{it} + \beta_2 Prof_{it} + \beta_3 Lev_{it} + \beta_4 Liq_{it} + \beta_5 Ict_{it} + \varepsilon_{it}$$

Where:

EQ = earnings quality

Fmsize = firm size

Prof = profitability

Lev = leverage

Liq = liquidity

Ict = ICT intensity

β = coefficient of parameter estimate

ε = error term

t = time

i = individual firms

The study used loan loss provision LLP as a measure of earnings quality of the listed deposit money banks in Nigeria. The method is widely used as measure of banks earnings quality of banks (Leslie et al. 2013; Ahmad 2014; Shehu, 2015). The Argument in favour of loan loss provision is that managers increase the provision for loan losses during periods when earnings are high, under the assumption of income smoothing (Wahlen, 1994). The intuition underlying the choice of these variables is that in practice most bank managers decide the amount of loan loss provisions every month according to individual risk assessment on potential loans and loans write-offs (Chang *et al*., 2008). This study adopts the method used by chang et al. (2008) to estimate the discretionary component of loan loss provisions.

In the model, loan loss provision (LLP) is a linear function of loan charge-offs (LCO) and the beginning balance of allowance for bad and doubtful debts (BBAL) for that year. It is expressed as follows:

LLP = F (LCO BBSL)

Hence

$LLP_t = \alpha_0\ 1/TA_{t-1} + \alpha_1\ LCO_t/TA_{t-1} + \alpha_2\ BBAL_t/TA_{t-1} + \varepsilon_t$

Where

$DLLP_t = \varepsilon_t = LLP_{t-}(\alpha_0\ 1/TA_{t-1} + \alpha_1\ LCO_t/TA_{t-1} + \alpha_2\ BBAL_t/TA_{t-1})$

The rationale behind the model is that discretionary accruals cannot be observed directly, it is estimated by regressing LLP on the independent variables (LCO & BBAL). The discretionary loan loss provision (DLLP) is the error term, which is the difference between LLP, on the one hand and LCO for the year and the BBAL.

3.7 Variable measurement

Table 3.1: Variable measurement

SN	PROXY	TYPE	MEASUERMENT	SOURCE
1	Earnings quality (EQ)	Dependent variable	Residuals from Discretionary loan loss provision (Chang et al, 2008 Model)	Chang et al (2008) and Ahmed (2014)
2	Firm Size (Fmsize)	Independent variable	Natural Log of total assets	Ahmed (2012) Uwegbei et al (2015)
3	Profitability (Prof)	Independent variable	ROA: profit after tax divide by total assets.	Kothari et al (2005) Shehu et al. (2014)
4	Leverage (Lev)	Independent variable	Total debt divided by total asset	(Ndukwe 2013) Shehu et al. (2014)
4	Liquidity (Liq)	Independent variable	Liquid assets divideds by current liability	Agyei Mensah (2013)
5	ICT Intensity (ICT)	Independent variable	Log of total investment on ICT	

Source: compiled by the researcher

CHAPTER FOUR
RESULTS AND DISCUSSION

4.1 Introduction

In this chapter, the result obtained from various test conducted on the data collected were presented, analysed and interpreted. The chapter starts with the descriptive statistics, which show the summary of the data used for the study. This was followed by the correlation matrix showing the relationship among the variables in the study and then, the discussion of the regression results and other robustness test conducted. The chapter ended with the discussions of the major findings from the analysis and policy implications of the findings.

4.2 Descriptive Statistics

Descriptive statistics are used to enable the researcher to summarise and organise data in an effective manner to enhance understanding of the data (Chava & Davids, 2009). The descriptive statistic table shows information on the mean, standard deviation, maximum and minimum for each of the dependent and independent variables. Table 4.1 contains the summary of descriptive statistics.

Table 4.1 Descriptive Statistics

Variable	Mean	Standard Deviation	Minimum	Maximum
DLLP	1.658664	2.084269	0.0567561	17.56048
FMSIZE	8.98748	0.3462911	8.26363	9.63776
PROF	1.018136	3.284789	-20.2329	9.53641
LEV	86.16896	7.708658	69.021	123.295
LIQ	0.1603846	0.1148595	0.01928	0.85345
ICT	4.507015	3.052161	0.00	7.15564

Source*:* Output of summary of statistics obtained from STATA.

From Table 4.1, the mean of discretionary loan loss provision (DLLP) is 1.66 indicting the average level of earnings management practice across the sampled DMBs. The table also showed that the difference between the mean of DLLP and standard deviation of DLLP across the banks is 0.42. This indicates a low variability around the mean. It implies that the amount of discretionary loan loss provision is not widely dispersed among the listed banks; thus, indication that earnings management practice is not common to all banks. The table also showed that the minimum and maximum DDLP are 0.05 and 17.57 respectively, implying a very wide range. This means that the practice of earnings management is very high in some years and banks than in others. Thus, banks tend record a relatively high earnings quality in some years that in others.

The average firm size as indicated by Table 4.1 is 8.98. The standard deviation is 0.35 indicating a very low variability among the variables. It means that most of the banks are within the same range in terms of their total asset. This is because all the banks are expected to comply with 25 billion minimum capitalization requirements. The minimum and the maximum firm size are 8.26 and 9.64 respectively. This implies that the range is 1.3, indicating a very low range in total asset owned by the banks. It implies that the difference between the largest bank and the smallest is small.

Table 4.1 also shows that the mean profitability as indicated by the mean is 1.0, indicating 10% average return on asset, while the standard deviation is 3.28 representing the average variability of return on total asset among the sampled banks within the period covered by the study. This implies that the level of profitability among the banks is widely spread. Some banks tend to record relatively higher level of profitability than others do. The minimum and the maximum as shown by the tables are -20.23 and 9.64. Hence, the range is 29.87 implying that there is very wide gap between the highest profit and lowest loss.

Table 4.1 further shows that the mean for leverage is 86.17 indicating the average level of leverage across the sampled banks and the standard deviation of leverage is 7.71. The

difference between the mean and the standard deviation is 78.46. This is an indication of large variations in the leverage ratio around the mean. It means that there is a very wide variation in the in debt capitalization status of the sampled banks. The minimum and maximum are 69.02 and 123.30 respectively. This is an indication of a very wide range 54.28. The range corroborates the revelation of the standard deviation that there is a very wide gap between the bank with lowest debt capital and one with the highest debt capital.

Table 4.1 showed that average liquidity ratio across the banks within the period of the study is 0.16. The standard deviation is 0.11 indicating a moderate variability in the liquidity among the banks. The difference between the mean and the standard deviation is 0.4. This indicates a very low variability around the mean. The implication is that there is very small difference in the liquidity ratios of the DMBs in Nigeria. The minimum and maximum are 0.19 and 0.85 respectively. Thus, the range value is 0.66 representing the difference between the maximum and minimum liquidity ratio among the banks.

The average investment on information and communication technology (ICT) by the sampled banks as indicated by the mean from table 4.1 is 4.51. The standard deviation is 3.05. The difference between the mean and the standard deviation is 1.46, indicating a low variability around the mean. It is an indication that all the listed banks have invested in ICT. The table also shows that the minimum and maximum of ICT investment are 0 and 7.15 respectively. Thus, the range is equal to the maximum. The minimum spending could be as a result of the fact that some banks spending on ICT could be insignificantly low for a particular year and therefore, may not need to be disclosed for the financial year.

4.3 Correlation Matrix of Dependent and Independent Variables

The correlation matrix shows the relationship between each two pairs of variable in the regression model, the level of correlation between the variables is very important because excessive correlation may distort the standard error of estimation and lead to a wrong

conclusion (Ahmad, 2014). The correlation matrix also serves as a preliminary test for multicollineariy. However, in this study, further test of multicollinearity was conducted through variance inflation factor (VIF) and Tolerance Value (TV).

Table 4.2 Correlation Matrix of Dependent and Independent Variables

	DLLP	FMSIZE	PROF	LEV	LIQ	ICT
DLLP	1.000					
FMSIZE	-0.0404	1.0000				
PROF	-0.4813	0.1833	1.0000			
LEV	0.2634	-0.0659	-0.3740	1000		
LIQ	-0.2526	0.4948	0.1286	0.0400	1.000	
ICT	-0.3401	0.4412	0.2051	-0.0432	0.4748	1.0000

Source: output of correlation matrix obtained from STATA.

The correlation matrix shows the relationship between each pair of variables. The relationship between each independent variable and the dependent variable are expected to be strong while the relationship between each pair of independent variable is expected to be low. This is because, according to Gujarati and porter (2009), a correlation coefficient between two independent variables above ± 0.8 is considered excessive and may indicate the existence of multicollinearity. However, Table 4.2 shows that all the correlation coefficient between the pairs of the independent variables is less than 0.8, thus, suggesting that the five independent variables can be well fitted into one regression model.

The correlation matrix table revealed that the correlation coefficient between discretionary loan loss provision and firm size is -0.04. The result implies that film size has a negative relationship with DLLP of DMBs in Nigeria. The larger the firm size the lower the

level of discretionary loan loss provision and the higher the earnings quality. Similarly, the larger a bank is, (in terms of its total asset) the higher its earnings quality.

The correlation matrix also shows that the correlation coefficient between loan loss provision and profitability is -.048. This implies that there is inverse relationship between profitability and DLLP of DMBs in Nigeria. The result suggests that as profitability increases the amount of DLLP decreases, thus, the higher the profitability, the higher and the earnings quality and vice versa.

Table 4.2 shows that the correlation coefficient between leverage and DLLP is 0.26. The result means that leverage has a positive relationship with DLLP of DMBs in Nigeria. It implies that an increase in leverage will result in a decrease in earnings quality of DMBs and vice versa. The outcome suggests that, when banks deploy more debt in their capital structure, earnings quality tends to become lower.

Table 4.2 further revealed that the correlation coefficient between the DLLP and liquidity is -0.25. This means that liquidity has a negative relationship with DLLP of DMBs in Nigeria. The result implies that as liquidity increases DLLP of DMBs to decrease. Hence, increase in liquidity will result in an increase in earnings quality.

Finally, the correlation matrix showed that the coefficient of correlation between discretionary loan loss provision and ICT intensity is -0.340. The result implies that ICT has a negative relationship with DLLP of DMBs in Nigeria. That is, the more banks invest in ICT the better their earnings quality. The result suggests that computerised accounting technologies have some controls install in them that may limit managers' ability to opportunistically influence accounting figures.

4.4 Result of Robustness Tests

Robustness tests are conducted to test the validity of the statistical inference of a regression model. The robustness tests conducted for this study include multicollinearity test and heteroscedasitity test.

4.4.1 Muticolinearity Test

Muticolinearity test is conducted to check the presence of harmful correlation between the explanatory variables that could distort the regression result. In this study, muticollinearity test was conducted using Variance Inflation Factor (VIF) and Tolerance Value (TV). According to Gujarati (2004), when VIF value is more than 10 and/or when the tolerance value is less than 0.1 then there is a strong indication of the presence of multicollinearity.

TABLE 4.3 Muticollinearity

	VIF	1/VIF
FMSIZE	1.45	0.6917
PROF	1.23	0.8162
LEV	1.18	0.8501
LIQ	1.50	0.6667
ICT	1.42	0.7054
MEAN VIF	1.35	

Source: output from STATA

The multicollinearility test from Table 4.3 showed that all the VIF values are less than 10 and the tolerance values are not less than 0.1 In addition, the mean VIF as indicated by the table 4.3 is 1.35. The result means that there is no evidence of multicollinearity among the explanatory variables.

4.4.2. Heteroscedasticity Test

Heteroscedasticity test is conducted to check the homoscedasticity assumption of the regression model. The presence of heteroscedasticity violates the homoscedasticity assumption and may lead to a wrong inference. In this study, heteroscedasticity test was conducted using Breusch- Pagan/Cook-Weisberg test. The null hypothesis for the test is "constant variance" (presence of homoscedasticity). Thus, if the p-value is less than or equal

to 5%, then there is evidence to reject the null hypothesis. The result of Breusch- pagan / Cook-Weisbaerg test for the study shows that the chi2 value is 0.76 and the p-value of chi2 is 0.4137 indicating the absence of heterosckedasticity

4.5 Data Presentation, Analysis and Interpretation

The study therefore, adopted additional robust regression (Fixed & random) effect models to improve the quality of the statistical inferences. The hausman speciation test was conducted to choose between the fixed and random effect model. The result of the hausman test revealed that the value of chi2 is 4.39 and the prob>chi 0.4947. The insignificant value as reported by the probability of chi2 indicates that the hausman test is in favour random effect model. Further to this, the Breusch and Pagan lagrangian multiplier test for random effect was conducted to choose between the random effect result and OLS regression. The result revealed that the chi2 value is 0.02 with prob>chi2 = 0.90. The result indicated that the best model to be interpreted is the OLS regression model.

Table 4.4 Regression result

Variables	Coefficient	t	p-value
INTERCEPT	-19.90	-2.69	0.009
FMSIZE	2.03	2.69	0.011
PROF	-0.32	-4.30	0.000
LEV	0.04	1.41	0.163
LIQ	-4.8	-2.03	0.046
ICT	-0.24	-2.70	0.008
R-Square	0.3598		
Adj R- square	0.3246		
F- Statistic	10.23		
Prob. of chi2	0.0000		

Source: Regression Result from Output STATA

The R-square value showed the level at which the explanatory variables explain the dependent variable. Table 4.4 reveals that the R-square is 35.98%. This means that the firm attributes variables in the study explained the discretionary loan loss provision (DLLP) to the tune of 36%. The value of F - statistic is 10.23 with probability of chi2 = 0.000. The probability of chi2 is significant at 1%, indicating that the model is fit. This serves as a

substantial evidence to conclude that the firm attributes variables selected for the study are suitable for the study of the impact firm attributes on earnings on earnings quality of DMBs in Nigeria.

Findings from the regression result reveals that four of the independent variables (firm size, profitability, liquidity, and ICT) have significant impact on DLLP of DMBs, while leverage is the only variable that does not have a significant impact with earnings quality of deposit money banks in Nigeria. However, firm size is the only variable that has a significant positive relationship with earnings quality of DMBs in Nigeria.

4.5.1 Firm Size and Earnings quality

Table 4.4 shows that firm size has a t-value of 2.54 and a coefficient of 2.03, which is significant at 1%. This means that firm size has a significant positive relationship with DDLP of DMBs in Nigeria. The 1% significance level reveals that firm size has a strong statistical influence on DLLP of DMBs in Nigeria. The positive relationship indicated that as firm size increase, DLLP is expected to increase. However, the increase in DLLP also results in lower earnings quality and as such, an increase in firm size result in lower earnings quality and vice versa.

The positive relationship between firm size and DLLP may be attributable to the fact that increases in size comes with both administrative and structural complexities that create room for opportunistic behaviour. It implies that managers have the opportunity practice to unethical accounting, which will subsequently result into poor earnings quality. It also supports the view that smaller firms have higher tendencies to respond quickly to profitable opportunities that may require urgent attention and where this exists, managers tend to have less incentive to manipulate earnings. This finding is also in line with the provisions of the agency theory. The theory predicts that agency cost will increase with increasing firm size and that the management will be motivated to manage earnings to reduce agency cost.

However, it contradicts the argument that larger firms have less incentive to manipulate earrings because they enjoy economies of scale. This could be true because the banking sector is different from the manufacturing that relies so much on economies of scale.

4.5.2 Profitability and Earnings Quality

As indicated in Table 4.4, profitability has a t-value of -4.30 and a coefficient of -0.32 with a p-value = 0.000. The result means that profitability is significantly and negatively related to DLLP. The 1% level of significance as indicated by the p-value means that profitability has a strong influence on DLLP, while the negative coefficient signifies negative relationship between profitability and DLLP. However, the inverse relationship means that there is a positive relationship between profitability and earnings quality of DMBs in Nigeria. That is, as profitability increases, DLLP decrease, indicating low level of earnings management and this subsequently, leads to a higher earnings quality.

The finding is in agreement with the apriori expectation of the study. The result means that firms with higher profitability have recorded good performance and as such, do not have reasons to manipulate earnings. It is expected that when the bank managers produce good results in terms of their performances, they would want to disclose it to the public to prove they have been able to meet up with their expectations. The finding is also in conformity with the argument that when bank managers perform well, they tend to avoid opportunistic behaviour which may eventually lead to a higher earning quality.The finding also indicates that poor performance will forced managers to manipulate financial statement to meet the expectation of the stakeholders. When managers record poor performances, they may be tempted to avoid reporting such poor performances to the public and may be force to resort opportunistic earning management in order to hide their such poor performances, and this would subsequently, lead a lower earnings quality.

Furthermore, the finding corresponds to the provision of the efficient contracting theory. The theory aligns the mutual interest of the principal to that of the agent. The theory explained that when managers, record good performances they tend avoid any sort of opportunistic behaviour because it create a "win, win situation" between the shareholders and the managers.

4.5.3 Leverage and earnings quality

The regression result from Table 4.4 also revealed that leverage has a t-value of 1.41, a coefficient of 0.04 and a p-value equal to 0.163. This means that leverage has an insignificant positive relationship with DLLP. The insignificant relationship means that leverage does not have statistically significant influence on DLLP. However, the value of the coefficient of beta shows, mean that the relationship between leverage and DLLP is positive. The positive relationship means that as leverage increases, DLLP is also expected to increase, thereby giving room for more opportunistic behaviour by the managers, and consequently low earnings quality. This result is contrary to the earlier expectation that leverage has a significant impact on earnings quality of DMBs in Nigeria. However, the unexpected outcome could be as result of the fact that demand deposit dominates liability of DMBs in Nigerian. Most banks rely on demand deposit rather than fixed interest debt with covenant restriction that can force managers into earnings management. Hence, leverage may not play an important role in explaining the earnings quality of DMBs.

4.5.4 Liquidity and Earnings Quality

Table 4.4 reveals the relationship between liquidity and DDLP. It shows that liquidity has a t-value of -2.70, a coefficient of -4.85 and a p-value of 0.45. This means that liquidity has a significant negative relationship with DLLP. The significant relationship means that liquidity drives DLLP, while the negative relationship means that as liquidity increases, DLLP is expected to decrease. However, the inverse relationship between liquidity and DLLP

means that as liquidity increases, earnings quality becomes better. This is because, decrease in DLLP means a reduction in earnings management, which result in a higher earnings quality. The regression result, therefore, means that liquidity is one of the variables that influence the earnings quality of DMBs. The finding is in line with the earlier expectation that liquidity has a significant impact on earnings quality of DMBs in Nigeria. The finding suggests that optimal liquidity is an indication of good performance and has the potential to discourage earning management. That is, a bank that is considerably liquid enough to settle its debt may lack incentive to manipulate financial statement. It is also in line with the argument that in eye of the creditors, earnings are considered to be of high quality only when they are backed by adequate liquidity (to pay-off debt). In addition, in the banking sector, liquidity is very important if banks must avoid runs. Banks that are not liquid enough to cover their current debt may suffer bank runs if it is discovered by the public. To avoid this, banks managers facing liquidity problems may be tempted to manipulate financial statement.

4.3.4 Information and Communication Technology ICT Intensity and Earnings Quality

Finally, Table 4.4 shows that ICT has a t-value of -2.69 and a coefficient of -0.24 with a p -value of 0.008. The result implies that ICT is significantly and negatively related to DLLP. The 1% level of significance as reported by the p-value implies that ICT intensity has a statistically significant relationship with DLLP. In addition, the negative coefficient means that as investment in ICT has inverse relationship with DLLP. Thus, as investment in ICT increases, the level of DLLP decreases. However, this is an indication of positive relationship with earnings quality. As ICT investment increases, DLLP decreases and reduce opportunistic earnings management, which will subsequently lead to a high earnings quality.

The result is in line with the expectation that ICT intensity has the potential to influence earnings quality. The result therefore, means that the more a bank invests in ICT, the less the opportunity for manipulative accounting by the bank managers. The relationship

is explained by the fact modern accounting is performed through technology driven application software often referred to computerised accounting. Most of these accounting technologies have controls installed in them that can help limit manager's ability to manipulate accounting figure. In addition, modern accounting systems are programmed for real time update and also, have the quality to leave a permanent audit trail that makes auditing easy. The real time reporting system and the indelible record update system that characterise the computerised system accounting system help to curtail unethical accounting practice by the bank managers.

The result is also in line with the Resource Based Theory. The theory explained that organisation attain better competitive advantage through the use of their internal resources. Information and communication technology (ICT) is also part of the organisational resources used by managers to make timely and accurate decisions. ICT improves managerial decisions by availing them timely and accurate (financial) information, thereby making them more effective and efficient with organisational resources. Opportunistic behaviours are however attributed to manager's inability to meet up with their expectations. That is, managers tend not report objectively when they do not meet up the expectation of the stakeholders. However, ICT assist managers by improving their performance and thereby making them lack reasons to manipulate financial statement.

4.6 Hypothesis Testing

The study was designed to test five hypotheses. The hypotheses which were earlier stated in null forms would be the tested using the result obtained from OLS regression as presented in Table 4.5.

Table 4.5 Test of Hypotheses

Variables	t	p-value
INTERCEPT	-2.69	0.009
FMSIZE	2.61	0.011
PROF	-4.30	0.000
LEV	1.41	0.163

LIQ	-2.03	0.046
ICT	-2.70	0.008

Source: Regression Result from Output STATA

HO_1: Firm size has no significant impact on earnings quality of Deposit Money Banks in Nigeria.

The result from Table 4.5 shows that firm size has a t-value of 2.61 and a p-value of 0.01, indicating that firm size is significant at 1%. This find result implies the study has found substantial evidence to reject the null hypothesis one of this study. The implication of the result is that firm size has a strong influence on earnings quality of DMBs in Nigeria. The finding is consistent with the study conducted by Uweigbe et al. (2015), Leslie et al. (2013), Hussain et al. (2012), and Ahmed (2014), but contradicts those of Ahmed (2012), Okolie et al. (2013).

HO_2: Profitability has no significant impact on earning quality Deposit Money Banks in Nigeria.

Table 4.5 shows that profitability has a t-value of -4.30 and a p-value of 0.000. The p-value indicates that profitability is significant at 1%. Hence, the study has established enough evidence to reject the null hypothesis two of this study. This finding is in line with the findings of povolostkaya (2014), and Shehu et al. (2014) but contradict those of Issa et al. (2015), Shehu et al. (2013) and Leslie et al (2013).

HO_3: Leverage has no significant impact on earnings quality of Deposit Money Bank in Nigeria.

The result Table 4.4 reveals that leverage has t-value of 1.41 and a p-value of 0.163, indicating that leverage has an insignificant impact on earnings quality of DMBs in Nigeria. The result confirmed that the study did not find substantial statistical evidence to the reject the null hypothesis three of this study. This implies that leverage is not a major determinant of earnings quality of DMBs in Nigeria. The result is in agreement with the studies conducted by Ahmed (2012), Oluwokere et al (2016), Hashem (2011), Laura et al. (2014). However, it also contradicts the findings of Leslie et al.(2013) and Agyei-mesah (2013),

HO_4: liquidity has no significant impact on earnings quality of Deposit Money Banks in Nigerian.

Table 4.5 also shows that liquidity has t-value of -2.03 and a p-value of 0.045. The result suggests that liquidity is significant at 5%. The result further suggests that the study has established enough statistical evidence to reject the null hypothesis four of this study. The implication of the result is that liquidity is one of the firm attributes that affect earnings quality of DMBs in Nigeria. This finding is in line with the studies conducted by Anandrajan et al. (2011), Issah et al (2013), Biddle et al. (2009), and Ahmed (2012) but contradicts the findings of Shehu (2013), and Agyei-mesah (2013).

HO_5: ICT Intensity has no significant impact on earnings quality of Deposit Money Banks in Nigeria.

Finally, Table 4.5 reveals that ICT intensity has a t-value of -2.70 and a p- value of 0.008. It implies that ICT is significant at 1%. This means that the study has found enough evidence to reject the null hypothesis five of this study. The implication of this finding is that ICT intensity is one of the firm attributes that affects the earnings quality of DMBs in Nigeria. The result is in line with findings of Saleh et al. (2012) and Tarus (2015).

4.7 The Policy Implication of Findings

The results of this study confirm the potential influence of firm attributes on earnings quality of Deposit Money Banks in Nigeria.

With regards to profitability, the study provides evidence that good performance is desired, not only to increase shareholders wealth, but also to curb the opportunistic behaviour of the managers. The main implication of this result is that managers do not need to manipulate financial statement if it is speaking in their favour, however, where this is not the case, the managers may not be willing to sacrifice their reputation in favour of the authenticity of the financial statement. Hence, the regulatory authorities have been provided

with a signal that when bank managers are underperforming, they may be forced to engage in earnings management which will eventually yield low earnings quality.

The study also provides evidence to the regulators by indicating that the size of a bank can go a long way in determining its earnings quality. Although an increase in asset size of banks is a desirable attribute, it also comes with both administrative and structural complexities that create room for grater opportunistic behaviour. It therefore implies that contrary to the expectation that because bigger banks are closely watched, they may not be able to manipulate financial statement, the increase in sizes also creates room for manipulative accounting practice

In addition, the study provides evidence that liquidity plays an important role in explaining earnings quality of DMBs in Nigeria. The policy implication of this finding is that DMBs need a liquidity policy which guarantees that the banks have the ability to meet up with the needs of their current demand deposit. It is therefore in agreement with central bank of Nigeria's minimum liquidity requirement of 30%. Liquidity insolvency is an undesirable position that has the potential to drag manager into earnings management. Hence, the minimum liquidity requirement is important not only for the purpose of preventing banking failure, but also for the purpose of curtailing manipulative accounting practices.

Finally, the study provides evidence that ICT intensity is an indispensable factor if the financial reporting quality of the Nigerian DMBs is be guaranteed. It implies that DMBs should invest heavily in the accounting information technologies to improve their financial reporting quality. This is essential to both regulators and shareholders. To the shareholders, investment in ICT will serve not only as a capital intensive means of improving the profitability of banks, but also as a means of the checking the deceptive tendencies of the managers. For the regulatory authorities it provides an avenue for controlling the managers.

CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

This study was conducted to examine the impact of firm attributes on earnings quality of listed Deposit Money banks in Nigerian. The specific objectives include: to examine the impact of firm size on affects earnings quality of DMBs in Nigeria, to determine the impact of profitability on the earnings quality of DMBs in Nigeria, to identify the level at which leverage affects the earnings quality of DMBs in Nigeria, to assess the impact of liquidity on the earnings quality of DMBs in Nigeria and to evaluate the impact of ICT intensity on earnings quality of DMBs in Nigeria.

To enhance the understanding of the subject matter, the concept of earnings management, earnings quality and firm attributes (firm size, profitability, liquidity, leverage and ICT intensity) discussed. Also, relevant empirical literatures were reviewed to identify gaps and establish a theoretical backing. Some of the literatures reviewed include the works of Seregar et al. (2008), Ahmad (2012), Leislie et al. (3013), Okolie et al. (2014), Osemene et al.(2014), Mhammadeza et al (2014), Shehu et al (2014), Povelostkaya (2014) and Oluwokere et al. (2016). In addition, Agency theory, efficient contracting theory, and resource based theories were used to underpin the study. The agency theory was used to underpin the structural variables (firm size & leverage), efficient contracting theory was use to underpin the performance variables (profitability & liquidity) and the resource based theory was used to underpin the resource variable (ICT).

A correlational research design was adopted to examine the impact of firm attributes on earnings quality of DMBs in Nigeria. The population of the study consist of all 15 listed DMBs in Nigeria as at 2015. The sample size consists of 14 banks, which were arrived at

using criteria. Panel data regression was adopted for the study, in which fixed and random effect test was conducted.

The OLS regression was selected based on the Lagrangian Multiplier test for Random effect. The OLS regression model result indicated that four independent variables (firm size, profitability, liquidity and ICT intensity have significant impact on earnings quality while leverage has an insignificant impact on earnings quality of DMBs in Nigeria.

Specifically, the study found that firm size has a significant negative relationship with earnings quality of DMBs in Nigerian, indicating that larger banks have lower earnings quality. Profitability has a significant positive impact on earnings quality of DMBs in Nigeria, indicating that banks with high profitability have high earnings quality, liquidity has a significant positive relationship with earnings quality of DMBs indicating that banks with higher liquidity have higher earnings quality, ICT intensity has a significant positive relationship with the earnings quality of DMBs in Nigeria.

5.2 Conclusion

Based on the findings from the regression result, the study concludes as follows.

Firstly, the result shows that firm size is one of the firm attributes that affects the earnings quality of DMBs in Nigeria. Hence, the study concludes that, the total assets accumulated by DMBs in Nigeria influence the behaviour of their earnings quality.

Secondly, the study confirms earnings qualities of the Nigerian Deposit Money Banks are largely influenced by the bank manager's ability to use the bank's asset to generate returns. Hence, it is concluded that the rate at which a bank generate returns from its total asset affects its earnings quality.

Thirdly, the study found evidence leverage does not play an important role in explaining changes in earnings quality of DMBs in Nigeria. Hence, it that study concludes that leverage is not a determinant of earnings quality of DMBs in Nigeria.

Fourthly, the study documented evidence liquidity is one of the firm attributes that has the power to influence the opportunistic behaviour of managers. Thus, the study concludes that liquidity is a determinant of earnings quality of DMBs of Nigeria.

Fifthly, the study further documented evidence that ICT has the capacity to limit unethical accounting practice in the Nigerian DMBs. Thus, the study concluded that the level of investment in ICT influence earnings quality of DMBs in Nigeria.

5.3 Recommendations

In line with the findings and conclusions of the study, the following recommendations were proffered:

i. The study recommends that despite the structural and administrative complexities that are associated with the larger banks, directors should encourage managers to deploy flexible management approach in form of widow service to enable them respond quickly to profit making opportunities that will increase their profitability. This should discourage them from engaging in any form of opportunistic behaviour and subsequently boost the bank's earnings quality.

ii. The study recommends that the Central Bank of Nigeria (CBN) should encourage the bank managers to invest more in less risky ventures with fixed interest such as bonds. This will enable the banks to cut down losses from nonperforming loans and improve their profitability. Consequently, this should discourage manipulative accounting tendencies and hence improve the earnings quality of DMBs in Nigeria.

iii. The study further recommends that, for the Nigerian Deposit Insurance Corporation (NDIC) to effectively safeguard the interest of the depositors, it should encourage the banks to, not only comply with the CBN minimum liquidity requirement, but also establish liquidity management policy that creates a cushion against unanticipated liquidity challenges. This should improve the earnings quality of the DMBs since managers will have no reason to temper with the credibility of the financial statement.

iv. Finally, the study recommends that shareholders should insist on considerable annual investment in ICT as a mechanism for curtailing the tendency to window dressing of the financial statement. Such IT infrastructure, because of their security protocols, limits the propensity of managers to engage in window dressing of accounts and thus, improve earnings management.

5.4 Limitation of the Study

i. The study examined the impact of firm attributes on earnings quality of DMBs in Nigeria using statistical tools and data collected from the financial statement of listed DMBs within the period of the study. Most of the statistical tools have inherence assumption associated with their usage. Therefore, the validity of the findings is dependent on the ability of the tools to estimate accurately the extent of the relationship between the dependent and the independent variables. However, the inclusion of additional robustness test in the study reduces the chances of having wrong inferences.

ii. Furthermore, the study used five independent variables to study the impact of firm attribute on earnings quality of DMBs in Nigeria. There is a possibility that the study may have omitted other factors that are also important in explaining the relationship between firm attributes and earnings quality of DMBs in Nigerian. However, this limitation may not affect the validity of the findings in the study since the fitness of the combination of the variables has been confirmed by the f - statistic.

REFERENCES

Abdullahi, S.A., (2012). Distress in the Nigerian banking industry: A critical assessment of the nature, causes and extent. *Journal of Business Administration*, 2, 135-154

Abu-Musa A.A., (2008).Information technology and its implications for internal auditing: An empirical study of Saudi organizations. *Managerial Auditing Journal*. 23 (5) 438-466 www.emeraldinsight.com/0268-6902.htm

Agyei-Mensah, B. K. (2013). Adoption of International Financial Reporting Standards (IFRS) in Ghana and the Quality of Financial Statement Disclosures. *International Journal of Accounting and Financial Reporting*, *3*(2), 269. https://doi.org/10.5296/ijafr.v3i2.4489

Ahmed, A. 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)

Ahmed, A., (2014). Corporate Governance and Discretionary Loan Loss Provision of Deposit Money Banks in Nigeria. M.Sc. thesis submitted School of postgraduate studies, Ahmadu Bello University, Zaria.

Ahmed, T. A. (2014). Managerial characteristics and earnings quality of listed Deposit Money Banks in Nigeria. Ph.D. dissertation submitted to the school of postgraduate studies, Ahmadu Bello University, Zaria.

Alfaraih, M. (2009). Compliance with International Financial Reporting Standards (IFRS) and the Value Relevance of Accounting Information in Emerging Stock Markets: Evidence. *Thesis*. Retrieved from http://core.kmi.open.ac.uk/download/pdf/10899571.pdf

Amr, M. A. (2016). Analysing 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) ISSN: 2455-8834 www.ijsser.org

Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of management*, 17 (1), 99-120.

Barton, J. & pp Simko, P.J., (2002). The Balance Sheet as an Earnings Management Constraint. *The Accounting review* 77 1-27

Biddle, G., Hilary G., & Verdi R. (2009). How does financial reporting quality relate to investment efficiency? *Journal of Accounting and Economics*, 48, 112-131

Bird, R. B., & Smith, E. A. (2005). Signalling theory, strategic interaction, and symboli capital. *Current Anthropology*. 46, 221-248.

Booth, J & and Deli, D., (1996). Factors affecting the number of outside directorships held by CEOs. *Journal of Financial Economics*, 40, (1) 81–104.

Bowen, R., Rajgopal S., & VenKachalam M. (2003). Accounting discretion, corporate governance and firm performance: Working paper University of Washington and Duke University.

Brian, L. C., Trevis C.S., Ireland D. R. & Reutzel C. R (2011). Signalling theory: a review and assessment. *Journal of management* 37 (1)

Bugshan, T. (2005). Corporate governance, Earnings management, and the information content of Accounting earnings: Theoretical model and Empirical Tests. P.h Thesis, Bond University Queensland 4229, Australia

Bushman, R., Piotroski J., & Smith A. (2011). Capital allocation and timely accounting recognition of economic losses. *Journal business finance and accounting*, 38, 1- 33.

Chalaki, P., Didar, H., & Riahinezhad M. (2012). Corporate Governance Attributes and Financial Reporting Quality: Empirical Evidence from Iran. *International Journal of Business and Social Science. 3 (15) P 223-229* www.ijbssnet.com

Chang, D. R., Yat-Sen, S., Shen, W., & Fang, C. (2008). Discretionary Loan Loss Provisions and Earnings Management for the Banking Industry. *International Business & Economics Research Journal 7,(3*9) , 09-20

Chava, F., & David, N., (2009). Research methods in social science, 5th edition, Holder Ecudation and hachche , London, UK.

Corbitt, B., Pittayachawan S., Kumsuprom, S. & Mingmalairaks, P., (2010). Determinants of Successful ICT Risk Management in Thai Organizations, http://www.pacis.net.org/ file/pdf.

Dang, C. & Li F. (2015). Measuring firm size in empirical corporate finance; *JEL Classifications*: G3, G30, G31, G32, G34, G35, C23, C58, J31, J33.

Darabi, R. Kamran, R. K., & Ghadiri M., (2012).The Relationship between Intellectual Capital and Earnings Quality Research. *Journal of Applied Sciences, Engineering and Technology* 4(20): 4192-199, 2012 ISSN: 2040-7467

Dario, I. R., & Victor, K. (2015). Basic concepts of information and communication Technology, notes. Open Society for Idea Exchange (ODRAZI), Zagreb, ISBN: 978-953-56758-7-7

DeAngelo, H., L. DeAngelo, D. J., Skinne., (1994). Accounting choice in troubled companies. *Journal of Accounting and Economics* 17: 113-144

Dechow P, M., Ge, W & Schrand C., (2010) Understanding earnings quality: A review of the proxies, their determinants and their consequences, Electronic copy available at: http://ssrn.com/abstract=1485858

Dechow P.M., & Skinner, D.J. (2000) Earnings management: reconciling the views of accounting academics, practitioners, and regulators: *Accounting Horizons*, 14, (2), 235 -250

Dechow, P. M. (1994). Accounting earnings and cash flows as measures of firm performance: The role of accounting accruals. *Journal of Accounting and Economics* 18: 3-42.

Dechow, P. M. (1994). Accounting earnings and cash flows as measures of firm performance: The role of accounting accruals. *Journal of accounting and economics, 18*(1), 3-42.

Dechow, P. M., & Dichev, I. D. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The accounting review, 77*(s-1), 35-59.

Dechow, P. M., & Schrand, C., (2004). Earnings quality, New York: The Research Foundation of CFA Institute.

Dechow, P.M., (1994) Accounting earnings and cash flows as measures of firm performance. The role of accounting accruals: *Journal of Accounting and Economics,* Vol. 18, pp. 183-199

DeFond, M., & Jiambalvo, J (1994). Debt Covenant Violation and Manipulation of Accruals. *Journal of Accounting and Economics*, 17.

Dichev, D., I. Tang, V. (2009). Earnings Volatility and Earnings Predictability. *Journal of accounting and economics*, 47 160–181 journal homepage: www.elsevier.com/locate/jae

Dogan, M. (2013). Does firm size affect firm profitability? Evidence from Turkey. *Journal of Finance and Accounting*, 4, (4).

Dogan, M., (2013). Does firm size affect firm profitability? Evidence from Turkey, *Journal of Finance and Accounting*, (4), 4.

Donaldson, L., (1995). Ame,rican anti-management theories of organization: A critique of paradigm proliferation. Cambridge University Press, ISBN 0521479177, New York

Eisenhardt, K., (1989). Agency Theory: An Assessment and Review. *Academy of Management Review.* 14, 57-74,

Erickson, M., Hanlon, M., & Maydew, E., (2006). Is there a link between executive equity incentives and accounting fraud? *Journal of Accounting Research* 44, 113-143

Farouk., A. M. (2014). Possession Formation and Earnings Management of Listed Chemical and Paints Firms in Nigeria. Being a Thesis Submited to the School of Postgradute Studies Ahmadu Bello University, Zaria.

Flore B. (2007). A resource-based approach to performance and competition: An overview of the connections between resources and competition in Organization and competitive interactions' of the strategic management *Journal of Accounting Research* 44, 113-143

Francis, J., LaFond, R., Olsson, P., & Schipper, K., (2005) The market pricing of accrual quality. *Journal of Accounting and Economics* 39, 295–327

Francis, J., LaFond, R., Per M. Olsson, & Schipper, K. (2004). Costs of Equity and Earnings Attributes. *The Accounting Review, 79*(4), 967-1010. http://www.jstor.org/stable/4093083

Goddard, J., Tavapoli, M., & Wilson, (2005) Determinants of profitability in European manufacturing and services industry: Evidence from dynamic panel data. *Applied financial management.* 15 (18) 1261-1282

Gujarati, N. D., (2004), Basic econometricts. 4th Edition, McGraw- Hills, USA.

Hamidzadeh, S., & Zeinali M., (2015). The Asset Structure And Liquidity Effect on Financial Reporting Quality at Listed Companies in Tehran Stock Exchange, *Arabian Journal of Business and Management Review*, *4*(7).

Hashem, V., & Mehdi, M., (2011). Corporate Debt Financing and Earnings Quality. *Journal of Applied Finance & Banking.* 1, (3), 139-157

Heil, H., (2012). The influence of the auditor on the earnings quality of their clients: a study of the effect of different brand names auditors, auditor tenure and audit industry specialization in the Netherlands. Master thesis, accounting auditing and Control, Erasmus University, Rotterdam.

Hussaini, B., & Gugong, K., (2015), Audit committee characteristics and Earnings Quality of Listed food and beverages firms in Nigeria: *International Journal of Accounting, Auditing and Taxation* 2(8), 216-227 Available online at www.internationalscholarsjournals.org

Imeokparia, L. (2013). Information Technology and Financial Reporting by Deposit Money Bank in Nigeria : An Empirical Study. *Research Journal of Finance and Accounting*, *4*(11), 39–48.

Inchausi, B., (1997). The influence of company characteristic and accounting regulation on information disclosure by Spanish firms. *The European accounting revive* 6 (1) 45-46

Issa, S. S., Husseni, W. N., Husseni, S .S., (2015). The effect of earning quality on liquidity risk by applying on banks registered in iraqi stock exchange. *Journal of Management, DOI: 10.17626/dBEM.ICoM.P00.2015.p024*

Iyoha, F.O., (2012).Company attributes and the timeliness of financial reporting in Nigeria, *Business Intelligence Journal*, 5(1), 41-49.

Jensen, M., & Meckling, W., (1976). Theory of firm managerial behaviour, agency cost and ownership structure. *Journal of financial economics* 3 (3) 305 -360

Johnstone, R. A., & Grafen, A., (1993). Dishonesty and the handicap principle. *Animal Behaviour*, 46: 759-764.

Jones, J.,(1991). Earnings management during import relief investigations. *Journal of Accounting Research* 29: 193-228.

Jonson, B, (2007). Does size Matter? The correlation between size and prodigality of Iceland firm, *BIfrot journal of social science* 1, 43-55

Jorge, F., & José, A. M., (2007). Dividends and earnings quality: the missing link*? JEL Classification: G35, M41*

Karami. A, Mohammadomid A., (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), 71-81

Katsuo, Y., (2008), Earnings Quality, Accruals and Subjective Goodwill Accounting: The Suntory Centre Suntory and Toyota International Centres for Economics and Related Disciplines Houghton Street, London WC2A 2AE

Khairul, A. K., & Wan Adibah, W., (2014). The risk of earnings quality impairment: *Procedia - Social and Behavioural Sciences* 145 (2014) 226 – 236 Available online at www.sciencedirect.com

Klovienė, L., & Gimzauskiene, E. (2015). The Effect of Information Technology on Accounting System ' s Conformity with Business Environment : A Case Study In Banking Sector Company. *Procedia Economics and Finance*, *32*(15), 1707–1712. https://doi.org/10.1016/S2212-5671(15)01476-8

Kothari S.P., Leone A.J., & Wasley C.E., (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics* 39: 163 – 197.

Laffont, J., & Martimort, D., (2002). The theory of incentives: The principal-agent model. Princeton University press, U S A.

Lamiri, Y. R., & Arab, M. B. (2013). The Impact of Earnings Management on Liquidity: Case of the Tunisian Stock Market. *International Journal of Business and Commerce,* 2, (10) P38-57 ISSN: 2225-2436 www.ijbcnet.com

Leslie, D. E., & Okoeguale B.P., (2013). An evaluation of the implications of earnings management determinants in the banking industry: the case of *Nigeria African Journal of Social Science.* 3,(3). Online www.sachajournals.com

Leuz C., Nanda D., & Wysocki P. D., (2003). Earnings management and investor protection: An international comparison, *Journal of Financial Economics*, 69: 505-527 ISSN 1991-8178

Lev B., (2003). Corporate earnings: Facts and fiction. *Journal of economic perspectives*, 17, (2), 27 – 50

Lipe, R., (1990). The relation between stock returns and accounting earnings given alternative information. *The Accounting Review*, 65 (1)

Mahdi, N., & Mohamadreza, S., (2015), The Impact of the Internal Control Quality on Cash Flow and Earnings Quality: *Indian Journal of Natural science* 6 (31) www.trnsroindia.org Issn: 0976-0797

Mahmuda, R.,Ibrahimm M.K., & Pokc, W.P. (2011). Earnings quality attributes and performance of Malaysian public listed firms. *Journal of Corporate Finance. JEL Classification: M41, C3, C33, L25*

Martin, J. C. (2006). Executive Compensation and Incentives. The academy of management perspective, canyon, U S A. P 24-44

Martine C. V. (2007), earnings quality under international financial reporting standards (A Dutch perspective) M.Sc. Thesis submitted to accountancy and control, faculty of economics and Business University of Amsterdam.

McVay, S., (2006). Earnings management using classification shifting: An examination of core earnings and special items. *The Accounting Review* 81, 501-531.

Mikhail, M. B., Walther R., Willis, C, (2003). Reactions to dividend changes conditional on earning quality: *Journal Account, Audit and Finance*. 18(1): 121-151.

Mishari A. (2009). Compliace with international financial reporting standards (IFRS) and value of relevance of accounting information in emerging stoch market. Evidence from Kuwait. PhD thesis at the department of accounting, Queens University of technology, USA,

Mohammadreza, V., Javad, M. B, Mahboubeh, H., (2014). The relationship between conservatism and earnings quality in tehran stocks exchange. *Indian Journal of Fundamental and Applied Life Sciences* ISSN: 2231– 6345. (Online) An Open Access, *Online International Journal*.

Muinde, C. (2013). Relationship Between Financial Reporting and Analysis Practices and Fiancial Performance of Small and Medium Enterprises in Kenya. *International Journal for Management Science and Terchnology*, 2(3), 30–35.

Murya, H., (2010). The effectiveness of corporate governance and External audit on constraining earnings management practice in the uk, Durham theses, Durham University. Available at Durham E-Theses Online: http://etheses.dur.ac.uk/448/

Ndukwe, O. C., (2013). Understanding monetary policy series banking system liquidity 34th Anniversary Commemorative Edition ISBN: 978-978-52860-5-2 www.cbn.gov.ng

Njirajini A., Priya K. (2013). Impact Capital Structure on Financial Performance of the listed. *Journal of Finance,* 50 (5) 1421-1460

Nzotta S. M., (2004). Money, Banking and Finance: Theory and Practice. Hudson-Jude Publishers, Owerri, Nigeria.

Okolie, A. O., Izedonmi F. O. I, & Enofe A., (2013). Audit Quality and Accrual – Based Earnings Management of Quoted Companies in Nigeria Augustine *Journal of Economics and Finance*. 2321-5933,Volume 2, (1) 07-16.

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), 106–123. https://doi.org/10.5539/ibr.v9n1p106(Farouk, 2014)

Osemene, O. F., Muritala, Taiwo, A., & Olawale, A. A. (2014). Creative Accounting and Bank Performance - Evidence From Nigerian Banking Sector. *Fountain Journal of Management and Social Science*, *3*(2), 23–33.

Palepu, K. G., & Healy, P. M., (2008). Business Analysis and Valuation. Using Financial Statements, Thompson Learning. *City*, *OH*.

Pandey I., (2009). Financial Management. 9th ed VISKAS Publishing House PVT Limited, New Delhi.

Pandey, I. M, Chotigeat, T., & Ranjit, M. K. (2000). Capital Structure Choices in an Emerging Capital Market: Case of Thailand, Management and Change, *Journal of Management* 4, (1) 1-14.

Parte-Esteban, Laura, P., & cristina, G, (2014). The influence of firm characteristics on earnings quality. *International Journal of Hospitality Management*, *42*, 50–60. https://doi.org/10.1016/j.ijhm.2014.06.008

Payam M.,(2013). The impact of intellectual capital on earning quality: evidence from Malaysian firms, *Australian Journal of basic and applied sciences*, 7(2): 535-540, ISSN 1991-8178.

Penman S. H. (2001). Accounting models for use in equity valuation, on comparing cash flow and accrual a response to Lundholm and O'Keefe, Columbia University, *Contemporary Accounting Research.* 18(4): 681-92.

Penman, S. H., and Xi. Z, (2012) Accounting Conservatism, the Quality of Earnings, and Stock Returns, *The Accounting Review*, 77 (2)

Pincus, M., & Rajgopal S., (2002). The Interaction between Accrual Management and Hedging: Evidence from Oil and Fas firms. *The Accounting Review.* 77 (1)127–60.

Povolotskaya, Y., (2014). Master thesis does the quality of accruals affect future company performance? Master thesis submitted to the Erasmus University Rotterdam.

Rajan, R. G., & Zingales, L, (1995). What Do We Know about Capital Structure Some Evidence from International Data? *Journal of Finance*, 50, (5), 1421-1460

Rehana, F. R., & Nasrin, M., (2011). Appreciation of computerized accounting system in financial institutions in Bangladesh. *World review of business research,* 1 (2).

Rendulić, D. I, Kuo, V., Dzaja, .A, (2015), Basic Concepts of Information and Communication Technology, notes Open Society for Idea Exchange (ODRAZI), Zagreb ISBN:978-953-56758-7-7

Roya D., Kamran, R., & Ghadiri M., (2012). Relationship between Intellectual capital earnings quality. *Research Journal of Applied Sciences, Engineering, and Technology* 4(20): 4192-4199, 2040-7467

Saleh, M. and Torabi, E. (2012). The role of information technology in financial Reporting quality: Iranian scenario. *JEL classification. 3 p 55.*

Salvato, C., & Moores, K. (2010). Research on accounting in family firms: Past accomplishments and future challenges. *Family Business Review.* 23 193-215

Schipper K., (1989). Commentary on Earnings Management. *Accounting Horizons* l. (3)91-102.

Schipper, K., & Vincent, L., (2003). Earnings quality; *Accounting Horizons*, 17, 97-110.

Scott W. R., (2003), Financial Accounting Theory, 3rd ed., Prentice Hall,

Scott, A. R, Richard, G. S, Mark, T. S & Irem T. (2001) Information in Accruals about the Quality of earnings: University of Michigan Business School, *Ann Arbor*, MI 48109, First Version.

Shehu ,U. H., & Faroouk, M, F., (2014). Firm Attributes and Earnings Quality of listed Oil and Gas Companies in Nigeria, *Review of Contemporary Business Research* 3(1)1, 99-11

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.

Shehu, U. H., (2013). Financial reporting quality, does monitoring characteristics matter? An empirical analysis of Nigerian manufacturing sector. *The business & Management Review,* 3 (2)

Shehu, U. H., (2015). Adoption of International Financial Reporting Standards (IFRS) and earnings quality in Listed Deposit Money Banks in Nigeria. *Procedia Economics and Finance* 28. 92 – 101

Siregar, C. V., & Utama S., (2008). Type of earnings management and the effect of ownership structure, firm size, and corporate-governance practices: evidence from Indonesia. *The International Journal of Accounting* 43 1–27. Available online at www.sciencedirect

Sloan, R.G., (1996). Do stock prices fully reflect information in accruals and cash flows about future earnings? *The accounting review* 71, 289-315.

Sweeney, A. P., (1994). Debt-covenant violations and managers accounting responses: *Journal of Accounting and Economics,* 17, 281-308

Tahir I., & Razali, A., (2012). The relation between Enterprise Risk Management and firm value: Evidence from Malaysian Public listed Companies. International *Journal of Economics and Management.* 1(2), 32-41

Tarus, M.J., Muturi, S, & Kwasira J., (2015). Determinants of accurate financial statements reporting in listed banks in Kenya; A survey of commercial banks in Nakuru Town. *Journal of Business and Management.* 17, (4). 2319-7668.

Tasseven, O., & Teker, D., (2009). Is financial Leverage Mean Reverting: Evidence from Turkey with Unit Root Test. *Middle East Finance and Economics Journal*, 4.

Tipuric, D. (2008). Korporativno upravljanje, Sinergija, 953-6895-07-02, Zagreb

Tokuda A. (2005). The Critical assessment of the resource - based view of strategic management: The source of heterogeneity of the Firm. *Ritsumeikan international affairs* 3, 125-150.

Tulsian, M., (2014) Profitability Analysis (A comparative study of SAIL & TATA Steel). *Journal of Economics and Finance,* 3 (2). ISSN: 2321-5925.

Türel, A. & Türel, A., (2012). Financial characteristics of high performance companies in turkey: a comparative analysis of stable economy in the financial crisis era. *Accounting and Management Information Systems* 11,(1)

Ugebede, O., Lizam, R, & Kuseri, A., (2013), Corporate Governance and earning management empirical evidence from Malaysian and Nigerian Banks*: Journal of management science and education* 2.

Uwuigbe 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.

Uwuigbe.,U, & Ranti. U. O. Bernard O, (2015), Assessment of the Effects of Firms' Characteristics on Earnings Management of Listed Firms in Nigeria. *Asian economic and financial review* 2222-6737.

Wahlen, J., (1994), The Nature of Information in Commercial Bank Loan Loss Disclosures, *The Accounting Review*. 455-478.

Wallace, R., & Naser, K., (1995). Firm specifics determinant of the comprehensiveness of the mandatory disclosure in the corporate annual report of firms listed in the on stock exchange of Hong Kong. *Journal of accounting and public policy* 14 (4), 311- 368

Wang, D. (2006). Founding Family Ownership and Earnings Quality. *Journal of Accounting Research, 44*(3), 619-656. http://www.jstor.org/stable/3542336

Watts, R., Zimmerman, J., (1986). Positive accounting theory. Prentice-Hall Inc.

Yau, C., & Pak, K., A. (2000). Issues of information system for the year 2000 www.pacis-net.org/file/1995/99.pdf

Yegon, C. K., (2015). Effect of enterprise risk management determinants on financial performance of listed firms in Kenya, thesis submitted in partial fulfilment for the degree of Doctor of Philosophy in Business Administration, Jomo Kenyatta University of Agriculture and Technology.

Young, D., & Guenther, D., (2003). Financial reporting environments and international capital mobility. *Journal of Accounting Research*, 41, 553-579

APPENDICES

Listed DMBs at the Nigeria stock exchange as at 31 December 2015.

1 Access bank

2 Diamond Bank

3 Ecobank

4 First Bank

5 First City Monument Bank

6 Fidelity

7 Guarantee Trust Bank

8 Skye Bank

9 Union Bank

10 Stanbic IBTC Bank

11 Sterling Bank

12 UBA PLC

13 Unity Bank

14 Wema Bank

15 Zenith Bank

```
  ___  ____  ____  ____  ____ (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:
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         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

. edit

. *(11 variables, 97 observations pasted into data editor)

. reg llp ta lco bbal

      Source |       SS       df       MS              Number of obs =      97
-------------+------------------------------           F(  3,    93) =    2.15
       Model |  47.5166155     3  15.8388718           Prob > F      =  0.0987
    Residual |  683.863203    93  7.35336778           R-squared     =  0.0650
-------------+------------------------------           Adj R-squared =  0.0348
       Total |  731.379819    96  7.61853978           Root MSE      =  2.7117

------------------------------------------------------------------------------
         llp |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          ta |   233675.7   239822.3     0.97   0.332    -242563.9    709915.3
         lco |   .0293636   .0165169     1.78   0.079    -.0034357    .0621628
        bbal |  -.0032414   .0083196    -0.39   0.698    -.0197624    .0132796
       _cons |   1.466946   .4252753     3.45   0.001     .6224336    2.311458
------------------------------------------------------------------------------

. predict resid, residuals


summarize dllp Fmsize prof lev liq ict

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dllp |        97    1.658664    2.084269   .0567561   17.56048
       fmsize|        97     8.98748    .3462911    8.26363    9.63776
        Prof |        97    1.018136    3.284789   -20.2329    9.53641
         lev |        97    86.16896    7.708658     69.021    123.295
         liq |        97    .1603846    .1148595     .01928     .85345
-------------+--------------------------------------------------------
         ict |        97    4.507015    3.052161          0    7.15564
```

```
. pwcorr dllp fmsize prof lev liq ict, star(0.05)sig

             |    dllp   fmsize     prof      lev      liq   ict
-------------+------------------------------------------------------
       Dllp  | 1.0000
             |
             |
      fmsize |  -0.0404   1.0000
             |   0.6941
             |
        prof |  -0.4813*  0.1833   1.0000
             |   0.0000   0.0723
             |
         lev |   0.2634* -0.0659  -0.3740*  1.0000
             |   0.0092   0.5214   0.0002
             |
         liq |  -0.2526*  0.4948*  0.1286   0.0400   1.0000
             |   0.0126   0.0000   0.2094   0.6972
             |
         ict |  -0.3401*  0.4412*  0.2051* -0.0432   0.4748*  1.0000
             |   0.0007   0.0000   0.0438   0.6743   0.0000
             |

. reg dllp fmsize prof lev liq ict

      Source |       SS       df       MS              Number of obs =      97
-------------+------------------------------           F(  5,    91) =   10.23
       Model |  246.034812     5  49.2069625           Prob > F      =  0.0000
    Residual |  437.828393    91  4.81130102           R-squared     =  0.3598
-------------+------------------------------           Adj R-squared =  0.3246
       Total |  683.863206    96  7.12357506           Root MSE      =  2.1935

------------------------------------------------------------------------------
        dllp |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      fmsize |   2.030627   .7773333     2.61   0.011     .4865498    3.574704
        prof |  -.3246591   .0754399    -4.30   0.000    -.4745112   -.1748069
         lev |   .0443028   .0314984     1.41   0.163    -.0182649    .1068706
         liq |  -4.848009   2.387113    -2.03   0.045    -9.589715   -.1063023
         ict |   -.235878   .0873339    -2.70   0.008     -.409356      -.0624
       _cons |  -19.89655   7.404253    -2.69   0.009    -34.60419   -5.188912
------------------------------------------------------------------------------

. vif

    Variable |       VIF       1/VIF
-------------+----------------------
         liq |      1.50    0.666671
      fmsize |      1.45    0.691662
         ict |      1.42    0.705360
        prof |      1.23    0.816157
         lev |      1.18    0.850074
-------------+----------------------
    Mean VIF |      1.35

. tsset id yr, yearly
       panel variable:  id (unbalanced)
        time variable:  yr, 2009 to 2015
                delta:  1 year


. hettest

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

```
         chi2(1)      =    0.76
         Prob > chi2  =   0.4137


. xtreg dllp fmsize prof lev liq ict, fe

Fixed-effects (within) regression               Number of obs      =        97
Group variable: id                              Number of groups   =        14

R-sq:  within  = 0.3514                         Obs per group: min =         6
       between = 0.3527                                        avg =       6.9
       overall = 0.3513                                        max =         7

                                                F(5,78)            =      8.45
corr(u_i, Xb)  = -0.0012                        Prob > F           =    0.0000

------------------------------------------------------------------------------
        dllp |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      fmsize |   1.752638    2.12752     0.82   0.413    -2.482929    5.988205
        prof |  -.2887931   .0815482    -3.54   0.001    -.4511432   -.1264431
         lev |   .0731663   .0415747     1.76   0.082    -.0096026    .1559352
         liq |  -3.796043    2.54282    -1.49   0.140    -8.858409    1.266322
         ict |  -.2385726   .1130378    -2.11   0.038    -.4636136   -.0135316
       _cons |  -20.07835    17.4109    -1.15   0.252    -54.74079    14.58408
-------------+----------------------------------------------------------------
     sigma_u |  .88639531
     sigma_e |  2.1871723
         rho |  .14107336   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(13, 78) =     1.04              Prob > F = 0.4229

. est store fe

. xtreg dllp fmsize prof lev liq ict, re

Random-effects GLS regression                   Number of obs      =        97
Group variable: id                              Number of groups   =        14

R-sq:  within  = 0.3458                         Obs per group: min =         6
       between = 0.4433                                        avg =       6.9
       overall = 0.3597                                        max =         7

Random effects u_i ~ Gaussian                   Wald chi2(5)       =     50.91
corr(u_i, X)       = 0 (assumed)                Prob > chi2        =    0.0000

------------------------------------------------------------------------------
       dllp  |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      fmsize |   2.030076   .7982193     2.54   0.011     .4655945    3.594557
        prof |  -.3222583   .0754352    -4.27   0.000    -.4701086    -.174408
         lev |   .0460054   .0316698     1.45   0.146    -.0160663     .108077
         liq |  -4.775851   2.380493    -2.01   0.045    -9.441531   -.1101717
         ict |  -.2364488    .087947    -2.69   0.007    -.4088218   -.0640758
       _cons |  -20.05054   7.547456    -2.66   0.008    -34.84328   -5.257796
-------------+----------------------------------------------------------------
     sigma_u |  .25029867
     sigma_e |  2.1871723
         rho |  .01292708   (fraction of variance due to u_i)
------------------------------------------------------------------------------

. est store r


. hausman fe re

                 ---- Coefficients ----
             |      (b)           (B)             (b-B)     sqrt(diag(V_b-V_B))
             |       fe            re          Difference          S.E.
-------------+----------------------------------------------------------------
      fmsize |    1.752638     2.030076       -.2774378        1.972102
```

```
        prof |   -.2887931    -.3222583        .0334652        .0309781
         lev |    .0731663     .0460054         .027161        .0269347
         liq |   -3.796043    -4.775851        .9798081        .8939731
         ict |   -.2385726    -.2364488       -.0021238        .0710132
------------------------------------------------------------------------------
                          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(5) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =        4.39
                Prob>chi2 =      0.4947

. xttest0

Breusch and Pagan Lagrangian multiplier test for random effects

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

        Estimated results:
                         |       Var     sd = sqrt(Var)
                ---------+-----------------------------
                    dllp |   7.123575       2.669003
                       e |   4.783722       2.187172
                       u |   .0626494       .2502987

        Test:   Var(u) = 0
                             chi2(1) =     0.02
                          Prob > chi2 =     0.9024
```