

**EFFECT OF AUDIT COMMITTEE CHARACTERISTICS ON
EARNINGS MANAGEMENT OF LISTED DEPOSIT MONEY
BANKS IN NIGERIA**

BY

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(NSU/GDM/FAA/0060/16/17)

**M.SC FORENSIC INVESTIGATION
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**A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES,
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REQUIREMENTS FOR THE AWARD OF MASTERS OF SCIENCE DEGREE IN
FORENSIC INVESTIGATION (ACCOUNTING & AUDITING) , NASARAWA STATE
UNIVERSITY KEFFI
NIGERIA**

DECLARATION

I hereby declare that this dissertation has been written by me and it is a report of my research work. It has not been previously presented by anyone. All quotations are indicated and sources of information specifically acknowledged by means of references.

OFFOBOCHE, Joseph Lawrence

NSU/GDM/FAA/0060/16/17

CERTIFICATION

The dissertation meets the regulations governing the award of Masters of Science Degree in Forensic Investigation (Accounting & Auditing) of the School of Postgraduate Studies, Nasarawa State University, Keffi, and is approved for its contribution to knowledge.

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ABSTRACT

Managers of Deposit Money Banks in Nigeria like in other countries are in the habit of portraying favourable outlook of their banks with a view to attracting potential shareholders and convincing other stakeholders regarding the profitability and viability of their banks. This study examined the effectiveness of some of these audit committee features on earnings management in Nigeria's Deposit Money Banks (DMBs). One internal (Firm Size) and one external (engagement of one of the Big4 Audit Firms) control variables were adopted. Secondary data was collected from a sample of thirteen (13) listed DMBs on the Nigerian Stock Exchange (NSE) for a five-year period, 2012-2016 both inclusive. The dependent variable of the model was generated using two steps regression in order to determine the discretionary accrual of the sampled banks using Jones Modified Model of 1995. The STATA 12 software version was used for the regression analysis. Evidence revealed significant negative impact of audit committee Frequency of Meetings (ACFM) on earnings management while Audit Committee Size (ACS) and Audit Committee Gender Diversity (ACGD) are also negatively correlated, but yet to have significant effect on earnings management.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

One issue that has dominated conversations across Nigeria, one of Africa's biggest economies is the need to build and sustain relevant stakeholders' trust in the local economy through credible financial reporting. Numerous policies, regulations and road-maps have been designed by the Nigerian government to strengthen the nation's banking sector with a view to protecting deposits by the public, protect investors' interests and boost the contributions of the private sector to the overall nation building.

Companies' financial reports have over the years provided investors and other financial information users with critical information needed for decision making. Hence, these reports are expected to be faithfully presented to stakeholders for proper guidance. In addition, the reports are to be consistent with international best practices by providing full, timely, and transparent financial information that is not deliberately prepared to mislead interested stakeholders. However, the rising desires and pressure on management to achieve earnings targets and expectations of stakeholders have been a major driving force for managers around the world to resort to earnings management. Prices of shares are quite susceptible to companies' earnings, as such any major deviation from industry trend gets penalized in form of a drop in stock prices. Managers are also motivated to engage in earnings manipulations considering that their rewards are tied to their companies' overall fortunes. The relative laxities provided by accounting standards and guides further makes it possible for managers to engage in earnings manipulations. The prevalence of earnings management has been confirmed by numerous studies as a global

phenomenon (Mishra & Malhotra, 2016). This phenomenon has the capacity to negatively impact the credibility of financial reports while, hampering investments and other critical decisions by stakeholders. Financial information asymmetry obstructs efficient operations of capital markets and acts as impediments for regulatory authorities whose duties are to ensure adherence by companies to the ethics of transparency with a view to bringing about stability of financial markets. According to Ajit (2013), in view of the persistent flow of funds into the Indian financial markets, investors and other relevant parties need to be protected from undue manipulations of accounting figures, professional misconducts and earnings management tendencies. Accordingly many have ascribed the accounting frauds that materialized at Enron, Xerox and WorldCom to earnings management practices (Goncharov 2005; Rajpal 2012).

The above position was supported by Bricker (2017) who was also of the view that financial reporting can and should provide investors with a clear picture of a company's financial conditions. This is because the credibility of financial statements most likely has a direct effect on the price that potential investors are willing to pay for a company's securities.

As stated earlier, in spite of its significance, financial reports may not always be faithfully presented. It may sometimes contain errors, deliberate manipulations of accounting figures, as well as a misrepresentation of earnings. These lapses may cast doubt on its credibility (Kibiyaa, CheAhmada, & Amrana, 2016). This has resulted to the development of stiffer standards, regulations, as well as re-focusing of corporate governance policies. In Nigeria, a number of initiatives have been directed to achieve this aim. Significant among these is the Central Bank of Nigeria (CBN) code of governance for banks. Also, the establishment of Audit Committee (AC) is regarded by stakeholders as a major policy by regulators to boost overall reliance on financial statements. This initiative is a global phenomenon and in line with Section 30 (1) of the

Securities and Exchange Commission (SEC)'s code of corporate governance. The Companies and Allied Matters Act (CAMA), 1990 also mandates banks in Nigeria to maintain effective Audit Committees. It spells out the responsibilities of the committee which include to oversee all accounting policies as well as to ensure companies' regulatory compliance to financial reporting standards, ethics etc.

Efficient control mechanisms are expected to be emplaced by all deposit money banks in addition to audit committees to further enhance the value of financial reports and minimize the impacts of falsehood often presented by managers to the barest minimum. Effective and efficient audit committee is expected to provide the needed control and checks on companies' dubious activities (Habib & Azim, 2008). Audit committees are expected to act as mediators between external and internal auditors as well as organizational management (Carcello & Neal, 2002).

One component of Audit committee characteristics is the size of the committee. CAMA, 1990 provides that audit committee shall comprise three Non-Executive Directors and three representatives of shareholders. This is with a view to ensuring some level of independence and transparency in the functions of audit committees.

The frequency of meetings is also viewed as an important feature of an effective audit committee. It is believed that a board that meets regularly is accorded more opportunities to check unethical issues such as earnings management unlike boards that do otherwise and ends up being helpless and susceptible to management's whims and caprices (Nicola, 2006). Additionally, it is expected that independent members of committees should provide better oversight functions on management activities. According to Abdullah & Hussin (2009) independence can be viewed in two aspects, independence from management and independence from significant shareholders.

Another dimension of audit committee characteristics is Gender Diversity. This is the proportion between the two genders of audit committee members. It may be significant in the actualization of audit committee goals. This is due to the aged long general belief that women are more conservative, cautious, ethical and risk averse than men. This belief may be crucial in determining the efficacies of Audit Committees in checking earnings management.

On the other hand, the dependent variable of the study, earnings management is a tool used by management of companies to twist or influence companies' earnings so that published outcomes match an expected set of targets. It is further viewed as a means of influencing the process of accounting records and reports for selfish gains. It involves the manipulation of financial statements with a view to misleading consumers on the organization's performance.

Earnings management may be carried out through either income smoothing or financial misrepresentation. While income smoothing is permitted by GAAP (within – GAAP earnings management), financial misrepresentation is perpetuated outside the limit permitted by GAAP.

Healy (1985) was of the view that accrual policies are driven by bonus incentives associated with income reporting. In their attempt to improve on existing models, McNichols and Wilson (1988) adopted discretionary accruals as proxy for earnings management as against total accrual as suggested by (Healy, 1985).

One of the simplest methods for evaluating earnings management is the use of raw accrual amounts as its proxy. This is because legitimate business reasons, such as increase in sales and production activities can result in high accruals. Total accruals are categorized into discretionary and nondiscretionary accruals. The nondiscretionary accruals are business conditions that arise from the cause of operations and must be met. However, discretionary accruals depict

management choices which may not be objectively conceived. This is why discretionary accruals provide a better proxy for earnings management (Keefe, 2013)

In order to achieve these Discretionary Accrual estimates using Modified Jones Model, the Total Accruals have to be calculated first using data from published financial statements. This is further divided into Discretionary and Non-Discretionary Accruals (Umobong & Ibanichuka 2017).

1.2 Statement of Problem

Accounting reports provide a significant means for assessing the performance of management. As a result of this, a management not properly monitored will employ all efforts to ensure that such reports positively portray its performance. This action often misguide stakeholders who may depend on the reports for various decisions. One of the ways through which management mislead stakeholders is the application of earnings management. This is because most times earnings management practices are seen to be legal (Haryudanto & Yuyetta, 2011).

Earnings management can be evaluated through various measures, such as the persistence of a company's earnings, accrual amounts, level of compliance with corporate governance codes and controls, choice of accounting policies, etc. To this extent, Earnings management of a company is in general considered low if its financial statement figures fairly represent actual economic conditions using relevant and reliable data. However, in practice, Managers of Deposit Money Banks are allowed considerable privilege to make decisions while running their banks. This in some cases have led to misuse of banks' resources by managers to create short-term personal gains or assumed overall gains. This process of misreporting financial information may signify a red flag for fraudulent financial reporting. Especially, as most Accounting frauds in companies have been traced to an unchecked widespread earnings management (Mishra & Malhotra, 2016).

Sequel to the collapse of Enron and WorldCom coupled with the crises that hit the Nigerian banking sector in the early 2000, earnings management has become an area of interest to many researchers.

In a bid to check this trend, several studies on Audit Committee Characteristics (ACC) and Earnings Management have been conducted. This includes a scholarly publication by Mishra and Malhotra (2016). Most of these studies were anchored on Audit Committee independence, frequency of meetings, financial literacy, size, et cetera. However, the gap in studies that necessitated this work is anchored on the need to explore another critical element of audit committees. Considering the rising demands for gender equality and inclusion of the female gender in national and organizational decision making processes; especially in developing countries such as ours, this study examined the possible effect of Gender Diversity as one of the characteristics of Audit Committees on earnings management. The characteristic has not been sufficiently studied, especially in the banking industry. This has become imperative in view of recent conversations and dearth of studies on subject area in Nigeria.

1.3 Research Questions

In view of the identified gap in literature relating to the subject, the understated research questions are developed to guide the study:

- i. To what extent does Audit Committee Gender Diversity (ACGD) affect earnings management in Nigeria Deposit Money Banks?
- ii. To what extent does Audit Committee Frequency of Meetings (ACFM) affect earnings management in Nigeria Deposit Money Banks?

- iii. To what extent does Audit Committee Size (ACS) affect earnings management in Nigeria Deposit Money Banks?
- iv. To what extent does Audit Committee Independence (ACI) affect earnings management in Nigeria Deposit Money Banks?

1.4 Objectives of the Study

The main objective of this study is to examine the effect of audit committee characteristics on earnings management of listed Deposit Money Banks in Nigeria. The specific objectives of the study are to:

- i. evaluate the effect of Audit Committee Gender Diversity on quoted Nigeria Deposit Money Banks' earnings management;
- ii. assess the effect of frequency of audit committee meetings on quoted Nigeria Deposit Money Banks' earnings management;
- iii. examine the effect of audit committee size on quoted Nigeria Deposit Money Banks earnings management;
- iv. assess the effect of audit committees' independence on quoted Nigeria Deposit Money Banks earnings management.

1.5 Statement of Hypotheses

The understated research hypotheses generated from statement of the problem were tested in this study:

H₀₁: Gender Diversity of Audit Committee members has no significant effect on quoted Nigeria Deposit Money Banks' earnings management;

Ho2: Frequency of audit committee meetings has no significant effect on Nigerian Deposit Money Banks' earnings management;

Ho3: Size of Audit Committees has no significant effect on earnings management in quoted Deposit Money Banks in Nigeria; and

Ho4: Audit Committees' Independence has no significant effect on Nigerian Deposit Money Banks' earnings management.

1.6 Significance of the Study

The outcomes of this study are expected to guide relevant stakeholders on the strength and individual significance of audit committee variables examined. The study is also expected to assist practitioners to evaluate the impact of gender inclusiveness on earnings management practices.

1.7 Scope of the Study

The study examined a sample of the financial statements of thirteen (13) quoted deposit money banks in Nigeria. The sampled banks' audited annual reports for the period 2012 to 2016 financial years were studied. These banks were chosen due to their financial statements' consistencies with the recommendations of CAMA, 2004. The financial period was selected being the most recent years prior to the conduct of this study where most of the banks' audited financial statements were submitted. However, Skye bank Nigeria PLC was exempted from the study due to its inability to publish its financial statements for 2016. Similarly, Eco-bank Transnational PLC was not included in the study as a result of insufficient details on its audit committee members in the bank's published financial statements within the period.

CHAPTER TWO

LITERATURE REVIEW

2.1 Conceptual Issues

The independent variables in this study are centered on audit committee characteristics (Gender Diversity, Frequency of Meetings, Size and Independence of Audit Committee). On the other hand, the dependent variable, earnings management is proxy by Discretionary Accruals to be measured using the modified Jones Model, 1995.

2.1.1 Audit Committee Characteristics

This is one of the major committees that Deposit Money Banks are mandated to establish. According to Rezae (2009), audit committee comprises non-executive directors and shareholders' representative. Members of the committee are charged with oversight functions of ensuring strict adherence to corporate governance by managers. The committee focuses on creating long-term corporate value while protecting the interests of relevant stakeholders.

As noted, Audit Committee is an essential aspect of corporate governance. Though, this study is directed at audit committee, it is sacrosanct to examine the concept of corporate governance. There exist copious definitions of corporate governance. This study however, has identified the following authors' perspectives as more encompassing of the concept:

Kyereboah-Coleman (2007), saw corporate governance as structures and processes employed by corporate entities with a view to reducing mutual suspicion arising from agency problems occasioned by separation of ownership from control. Robins & Coutler (2005) are of the view that corporate governance is a system designed to ensure that the interests of the corporate

owners and other interested stakeholders are protected. It has also been defined by Keasey, Thomas & Wright (1997) to mean structures, processes, cultures and systems emplaced to facilitate successful operations of organizations. Deakin & Hughes (1997) viewed corporate governance as the interplay between corporations' internal governance mechanisms and public perception of the scope of corporate accountability. Mayer (1997) was emphatic when he described corporate governance as a means of uniting the interests of investors and managers in order to ensure that corporate entities are managed for the benefit of all stakeholders.

The protection of shareholders' interest and the overriding objective of maximization of corporate values constitute the central idea in the above stated conceptual definitions. Thus, good corporate governance comprises transparency of corporate operations and the continuous accountability of managers to relevant stakeholders.

It is in a bid to attain the objectives of corporate governance, that deposit money banks are specifically required to maintain Statutory Audit Committees (SAC). This is in accordance with provisions of the Companies and Allied Matters Act, CAP20, 2004 and the CBN code of corporate governance for banks. It is expected to comprise an equal number of Non-Executive Directors (NED) and Ordinary Shareholders Representative (OSR) who are to be openly elected at Annual General Meetings (AGM). It evaluates annually, the independence and performance of the External Auditors. The committee also scrutinizes annual audited reports before being passed on to the Board.

The role of AC in a bank can basically be summarized as follows:

- i. Keeping an oversight on the financial reporting process;
- ii. Ensuring that internal control systems are adequate and effective;
- iii. Acting as a bridge between external auditors and Management;

- iv. Monitoring risk management processes;
- v. Ensuring that any loopholes in the system/frauds get corrected and exposed by making the whistle-blowing process safe and foolproof.

Majority of the deposit money banks examined in this study have at least one audit committee meeting per quarter. A committee size of six (6) members was also observed with Gender Diversity and membership drawn from non-executive directors and shareholders respectively.

2.1.2 Earnings management

Before the discussion on earnings management, it's important to examine the concept of earnings. Earnings constitute a major parameter for assessing companies' performance and growth potentials. Stakeholders utilize earning figures to estimate these growth potentials. New companies may report low or even negative earnings while penetrating markets with potentials to boost demands for their products or services. These companies may receive positive estimates from investment analysts with the belief that they will grow in the near future.

Simply stated, earnings are the accounting profits of a company. They are income derived from an investment or money obtained in return for labour or services rendered. Various stakeholders use earnings to make important financial decisions. In Accounting, earnings may be in cash or in accruals. In the same vein, accrual earnings can either be Discretionary (Corporate) or Non-Discretion (Non-Corporate). As earlier noted, Discretionary Accruals (DAC) are accruals by management choices while Non-Discretionary Accruals (NDA) conceptually comes from business activities. Therefore, if earnings are managed using DAC for reporting purpose, then it can be called Earnings Management.

2.1.3 Measurement of Earnings Management

In a study by Umobong & Ibanichuka (2017), discretionary accruals were arrived at after the calculation of total accruals by subtracting non-discretionary accruals determined with the aid of Modified Jones model.

Many approaches are adopted to estimate nondiscretionary accrual proxy. However, estimating this proxy typically involves a regression model. This study adopts the cash-flow approach which requires that total net accruals or net operating accruals be calculated first. This is treated in more detail in chapter four of this study.

2.2 Empirical Review

Empirical reviews of the effect of various audit committee characteristics chosen for this study on earnings management revealed quite a number of findings. These characteristics were empirically reviewed individually as they relate to the study.

2.2.1 Audit Committee Gender Diversity and Earnings Management

In respect to Audit Committee Gender Diversity and Earnings management, it is pertinent to note that over the last few years, the issue of corporate governance has raised series of arguments among scholars and the need for an effective system of governance has remained a major challenge, thus, the financial scandals that occurred in 2008 affected a huge number of businesses across the globe (Abeysekera, 2013). Various management literatures acknowledge the existence of significant gender-based differences. These differences are particularly obvious in the areas of conservatism, risk averseness, leadership styles, communicative skills and other parameters that influence the process of decision making. These differences have potential

implications for corporate governance. The call for Gender Diversity has received greater attention in corporate governance literature in recent years. To re-emphasize its importance, Principle 2 of the Nigerian Code of Corporate Governance (NCGC), 2018 notes that an appropriate balance of skills and diversity (including experience and gender) without compromising competence, independence and integrity are essential qualities for an effective Board and by extension statutory audit committees.

Erhardt (2003) while examining relationship between board diversity and financial performance, concluded that diversity of a board correlates positively with financial reporting quality. It was agreed that gender diversity may lead to a wider knowledge base, which could result in a competitive advantage over non-diversified boards.

Peasnell & Young, (2005) noted that a more diverse boards can reduce the probabilities of committing frauds in financial statements. The proportion between the two genders of audit committee members may be significant in the actualization of audit committee goals. This is in line with the belief that women are generally more conservative, risk averse and meticulous than men.

This belief is expected to be crucial in determining the efficacies of Audit Committees in checking earnings management. In more recent times, a lot of researchers have started investigating the effect of board diversity which is described as the variation among board members (Priya & Nimalathan, 2013; Shiah-Hou & Cheng, 2012). Board gender diversity entails the reflection of female directors on the board. Studies suggest that female representation in audit committees enhances the functioning, effectiveness and efficiency towards goal attainment. (Byrnes, Miller and Schafer, 1999). From social cohesion view, infusing Gender

Diversity into corporate governance seems more appropriate in view of the increasing trend in modern establishments. Although, from economic view, the impact of gender diversity is not established *per se*. However, it should be seen to positively impact on corporate values (Gallego, García and Rodríguez, 2010). This position is accentuated by the research findings conducted by the trio of Temile, Jatmiko and Hidayat (2018), in which it was noted that the higher the proportion of females on a board or committee, the better the performance of firms and less chances of earnings management among banks in Nigeria. The study further revealed that gender diversity has a negative correlation with earnings management. However, the negative correlation is yet to significantly impact on the overall financial fortunes of companies in Nigeria. The result also shows that variables such as female membership and audit committees have negative and insignificant relationship with corporate performance. However, it was noted that the higher the proportion of females on the board, the better the performance of firms in Nigeria. This invariably would positively influence the share value of companies and reduce earnings management. Damak (2018) was in support of gender diversity due to the effective and efficient monitoring role that accompanies it. However, the researcher concludes that no empirical evidence that board gender diversity affects earnings management strategy. Meanwhile, Petracci & Olugbode (2015) noted that a gender sensitive board constraints earnings management to a reasonable extent in countries where gender equality is high.

This study shall therefore further expand on the possible impact of gender diversity in audit committees on earnings management among the deposit money banks in Nigeria.

2.2.2 Frequency of Meeting and Earnings management

Frequency of meetings plays vital roles for effective boards. A board that meets more often is expected to be more thorough in checking earnings management and other fraudulent practices than a board that seldom meets. The fewer the frequency of meetings, the more likely a committee to being rubber – stamped by management (Nicola, 2006).

Prior studies on the relationship between frequency of meetings and earnings management, have produced mixed results. McMullen and Raghunandan (1996) were of the view that companies with less audit committee meetings are prone to problems associated with financial reporting. Sullivan & Stewart (2008) also confirmed that frequency of audit committee meetings has a positive correlation with faithful disclosure of financial report. To further support these findings, Bryan & Tiras (2004); Koh (2007) opined that audit committee that meets regularly improves the transparency of reported earnings. Chen and Zhou (2008) agreed that frequency of audit committee meetings is an important mechanism for enhancing good corporate governance practice. Abbott (2004) revealed that a diligent audit committee, measured by frequency of its meetings, is significantly associated with lower earnings management. This is also consistent with findings of Mishra & Malhotra (2016). The duo reiterated that a proactive audit committee that meets more frequently during a financial year has greater opportunities to uncover process anomalies and deviation from standard accounting practices. Contrary to the above findings, Yang & Krishnan (2005) found no evidence of a significant relationship between the number of audit committee meetings and earnings management.

In spite of the foregoing, no corporate governance codes in Nigeria has made categorical statements on frequency of audit committee meetings. Deposit money banks in Nigeria are

therefore, allowed the discretion to determine frequency of meetings of its statutory audit committees. This study shall further examine the effects of frequency of meetings on earnings management.

2.2.3 Audit Committee Size and Earnings Management

This is the number of persons on an audit committee. CAMA 1990 provides that an audit committee shall consist three non-executive directors and three shareholders representatives (Dabor & Adeyemi, 2009). The expectation is that a relatively large audit committee should result in efficiency and effectiveness. It is also argued that a large audit committee increases the resources available to an audit committee thereby improves on the quality of its oversight; However, Eisenberg & Wells (1998) disagreed on the above findings. It argued that large committees have the potentials of reducing a companies' value.

In a study titled 'the corporate governance effects of Audit Committees' by Mahbub & Turley (2004), it was noted that regulatory authorities and researchers across the world have questioned the effectiveness of Audit Committees and their contributions to governance. Experiences from corporate failures arising from financial mismanagements have brought to the fore genuine concerns on the propriety of Audit Committees. It is also believed that some Audit Committees are merely symbolic (Kalbers & Fogarty, 1998) as expected benefits are more rhetorical than imperative (DeZoort, 1997). To support this, Majiyebo, Okpanachi, Terzengwe, Adabenege and Mohammed (2018) concludes that no significant effect of audit committee size on earnings management of listed deposit money banks in Nigeria.

According to Temple (2016), the magnitude of a committee is the sum-total of its memberships. Earnings management and other financial reporting shenanigans are more likely to be uncovered and corrected with a large audit and effective committee (Mohammed, 2010). This also depends

largely on the available means to the committee as a considerable size raises and enhances the level of oversight. Lipton & Lorsch (2011) remarked that the ability of an audit committee's oversight function rises with the figure of its memberships. Mansi & Reeb (2004) noted that large audit committee size spends considerable period and means to check financial reporting processes and internal control mechanism. On the contrary, Abbott, Parker & Peters (2004) revealed that committee size has no considerable influence on quality of financial reporting. Similarly, Lin, Li and Yang (2006) found negative association amid committee size and financial reporting. Yermack (1996) posits that, a lesser audit committee magnitude improves on firms' worth. This stand corresponds with Jensen's (1993) assertion that a small sized audit committee enhances the efficiency of oversight and control functions.

With respect to Nigeria, CAMA 1990 as modified in 2004 stipulates that Audit Committee of a public company should be composed of a maximum of six members representing equal number of directors and shareholders. Effective audit committee size is significant if efficient financial reporting is to be obtained. This is because audit committee members are expected to possess knowledge, experience and expertise required to enhance economic disclosure (Temple, 2016). In view of these conflicting findings, this study intends to carry out further research on the subject.

2.2.4 Independence of Audit Committee and Earnings Management

It is expected that the more independent AC members are, the better their oversight functions on management. Abdullah & Hussin (2009) viewed independence from management and independence from significant shareholders as constituting the major parameters for measuring individual's level of objectivity and independence.

Similarly, the UK Code of Best Practice defines independence as a state of being free from management and from any form of business or social relationship aside fees and shareholding that may materially impede judgment. The independence of members of a supervisory governance mechanism from management is regarded as a necessary precondition for its effectiveness (Lee, 2011). Ofurum (2016) statistically examined the influence of audit committee characteristics on quality of financial reporting in quoted deposit money banks in Nigeria. The outcome of the study indicates that audit committee independence has no significant effects on earnings management. It emphasizes on the need for AC to be well-thought-out in order to minimize earnings management. The study recommends the continuous orientation and vetting of audit committee members to ensure that their oversight influences are sustained. According to Abott (2002), an increase in number of independent members in audit committee reduces earnings management tendency.

Cohen (2011) attributes effectiveness and reliability of financial reports to the level of independence of audit committee members. However, other empirical studies reported different results. The effect of audit committee independence on earnings management has little or no prior study supports. For instance, Uzun (2004) revealed a negative correlation between audit committee independence and earnings management in his research study. Meanwhile, Lin (2006) finds no significant relationship between the variables in their work.

In other to check the excesses of some managers, Statutory Audit Committees of Deposit money banks in Nigeria are expected to comprise an equal number of Non-Executive Directors and representatives of shareholders to be elected at Annual General Meetings. This is to ensure some level of independence of members of the committee. This study intends to further evaluate the relevance of this characteristic of audit committees in relation to earnings management.

2.3 Theoretical Framework

The theoretical framework of this study is based on the Agency Theory. This is because audit committee was designed to fill observed gaps from Agency Theory. The delegation of management of public companies to agents creates agency relationship. This ceding of powers by business owners results in separation of responsibilities. It is also expected to enhance efficiency and add value to companies (Jensen & Meckling, 1976). Delegation implies that principals have absolute faith in their agents. In return, agents are expected to always act in their principals' best interests. In practice however, conflict of interests do arise between expectations of principals and the inordinate interests of agents (Jensen & Meckling, 1976). As a result of their foreknowledge, sometimes agents may possess superior information than their principals in respect of companies' activities. This gives managers the leverage to influence their rewards and explore relationships with third parties that may not be of benefit to business owners. These scenarios create undue agency conflicts. Hence, the need for principals to emplace monitoring mechanism to curtail these activities of agents with a view to ensuring goal congruence. Agency model was therefore, developed to resolve these concerns to the barest minimum by putting in place measures to marry the interests of both parties (Fama & Jensen 1983).

This reason may have necessitated the mandatory establishment of statutory audit committees to bridge the gap between the principal and agent relationship.

2.3.1 The overlap between Earnings Management and Financial Fraud

Earnings management share some features with fraud. It's observed that management in an attempt to influence performance, may take comprising decisions. Some of these decisions are within accounting guidelines while others are outright fraud. Decisions taken within the confines

of accounting guiding principles are regarded as earnings management. However, determining when such decisions cross the line of legitimacy to fraud is not always easy owing to a number of reasons, some of which are explained below:

- (i) **SIMILARITY OF OBJECTIVE:** Earnings management and fraud share the same objective which is aimed at deceiving or misleading other stakeholders. They are both actions deliberately taken to achieve selfish gains with the potentials to cause material loss for the affected stakeholders who may rely on such falsehood or half-truth. L.Perols & Lougee (2011) state that fraud and earnings management have the same objective.
- (ii) **INCREASING DISCRETIONARY ACCRUALS:** Unchecked discretionary accruals often metamorphose into fraud. Efforts are gradually made by managers to reverse hitherto inflated earnings achieved via income-increasing accruals (Healy, 1985). Companies with these accruals are often under pressure to either face the consequences or commit fraud to cover their actions (Dechow & Sweeney, 1996). Managers may run out of ways to manage accumulated discretionary accruals. This could lead to outright fraud as revealed by (Beneish, 1997). To further amplify this tendency, Mulford & Comiskey (2002) noted that entangled managers may stretch the flexibility of GAAP beyond its intended limits with a view to legally conceal their actions. In the same vein, Perols & Lougee (2011) affirmed the high possibility of managers who previously managed earnings even without evidence of inflated revenue to committing fraud.
- (iii) **INCENTIVE TO MAXIMISE MANAGEMENT COMPENSATION:** Prior studies indicate that earnings are managed to favourably influence forecasts by interested

stakeholders (Dechow, Richardson, & Tuna, 2000). Furthermore, many companies engage in earnings management with a view to maximizing management bonuses/reward or to prolong and avoid meeting debt covenants (Balsam, 1998).

Based on the foregoing reasons, some questionable accounting practices may be classified within existing frameworks. Especially, as some actions classified under the frameworks as earnings management are a times outright fraud. These reasons make the establishment of a strict distinction between aggressive earnings management and fraudulent practices quite challenging. As both practices are propelled with intents to deceive.

2.3.2 The Theory of Fraud Triangle

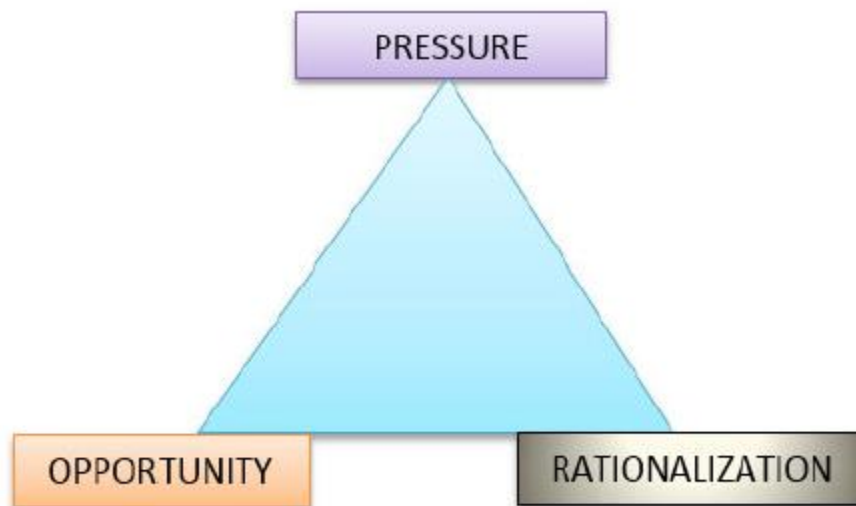
As was observed above, earnings management practices and fraud are similar in many respects. Both are significantly perpetuated with the aim to deceive which is propelled by the motivation for private gains. These interwoven similarities make it seemingly herculean to assess the propriety of management behaviour in terms of creativity or outright fraud. In addition, aggressive earnings management leads to high propensity for fraud and fraudulent activities. Outright frauds are perpetuated to achieve earnings management objectives previously set (Perols & Lougee, 2011).

The loopholes in established financial regulations and standards coupled with deviations from real operational activities further promote earning management tendencies. Additionally, agency conflicts, incentives, rationalization, opportunity plus having the capability among the managers to manipulate financial statements lead managers to engage in earnings management which most times metamorphose to fraud. (Rahman & Zazemian, 2016).

Considering how closely related earnings management is to financial fraud, this study shall examine the theory of fraud. Research has shown that the best model for explaining why fraud is committed is the fraud Triangle developed by Donald Cressey in 1950. The work which focuses on people he described as trust violators comprises three components which jointly lead to fraudulent dispositions by these group of persons.

These are discussed below:

Figure 1: Fraud Triangle



*Figure 1: Fraud Triangle
Source: Wells J. T. (2005)*

i. Motivation/Pressure

Motivation is typically based on either greed or need. Research has however revealed that greed remains the main cause of fraudulent practices around the world and especially in developing countries like Nigeria. Cressey (1953) identified pressure as a major pre-

condition for fraud. Skousen (2008) finds a significant relationship between pressure and fraud.

ii. **Opportunity**

Opportunity is also identified as one of the pre-conditions for fraud. Ineffective internal control measures provide loopholes that are exploited by management to manipulate transactions or accounts. Beasley (2000) states “that effective corporate governance regulations minimize potentials for fraud to the barest level”. Farber (2005), revealed that companies that are victims of fraud have had poor governance policy in preceding years to a fraud detection. Research has shown that while some managers are totally faithful, others who may be hitherto honest get eventually swayed by opportunities.

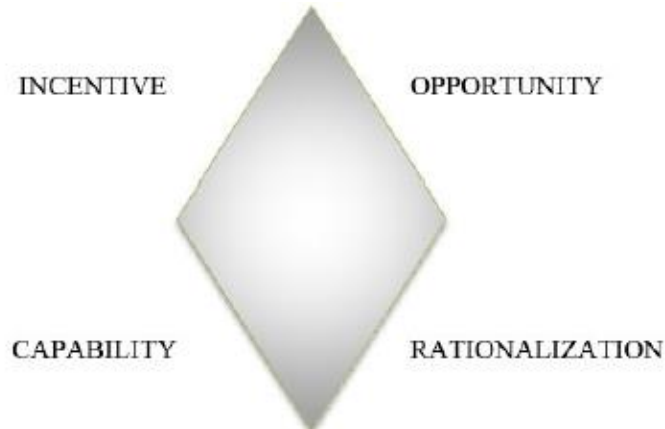
iii. **Rationalization**

This involves perpetrators seeking to justify their actions for committing fraud. Skousen (2008), affirms that accruals are proxy for management’s decision-making that provide insight into their reporting rationalization. Francis & Krishnan (1999) also opined that undue discretionary accruals may result to qualified audit opinions being offered. People tend to have various reasons to back up their fraudulent tendencies.

2.3.3 The Fraud Diamond Theory

This was developed in a bid to expand the fraud triangle. It was promoted by Wolfe and Hermanson in (2004). In this theory, the fourth element known as “capability” was added to those earlier described. It is agreed that pressure might coexist with an opportunity to commit fraud and a rationalization for doing so. However, it is almost impossible for any fraud to be committed without the capacity of the perpetrator to carry out the act. Below is a diagrammatical representation of the fraud diamond theory:

Figure 2: Fraud Diamond Theory



*Figure 2. The fraud diamond
Source: Wolfe and Hermanson (2004)*

The elements of Fraud Diamond Theory are interwoven. An individual may be able to perpetrate fraud except all of the elements are present. The theory is of the view that pressure may push a person to seek opportunity. Both pressure and opportunity may motivate rationalization. However, without capability no individual can successfully perpetrate fraud even with the existence of pressure, opportunity and rationalization. (Hooper and Pornelli, 2010).

The concept of capability as stated above, represents a situation of one having the necessary skills and abilities to commit fraud. It is the capacity of a potential fraudster to identify loopholes and to actually take advantage of such opportunities to perpetrate fraud. Positions of authority, ego, power, intelligence, ability to coerce others, and undue stress, are identified amongst others as supporting elements of capability (Wolfe & Hermanson, 2004). It is believed that when individuals perform a certain roles repeatedly, their capacity to commit fraud increases.

Again, the understanding of the behaviors of some managers of banks as depicted by fraud triangle and diamond theories led to the mandatory legal requirements for the establishment of

statutory audit committees to reduce earnings management to the barest minimum in compliance with CAMA 2004.

2.3.4 The Theory of Fraud Pentagon: Arrogance and Fraud

The pentagon theory examines in details, the push factors of fraud. This theory which was developed by Crowe Howarth in 2011 was an extension of the previous theory of fraud triangle. The theory introduced additional two fraud elements of competence and arrogance. Competence is akin to capability as previously described in the fraud diamond theory. However, arrogance according to Crowe (2011); Yusof & Simon (2015) is viewed as a trait associated with a sense of superiority coupled with an inherent lack of awareness by individuals in positions of authority. Politicians who double as CEOs of companies may have greater leverage for impunity and earnings manipulation tendencies.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

Causal research design was used to evaluate cause/effect relationship between the variables of the study. Additionally, correlation research design was used to examine the nature of the relationship between the variables of the study.

3.2 Population Sample and Sampling Technique

The Study population is made up of the entire fifteen (15) quoted Deposit Money Banks in Nigeria between December 31st, 2012 and 2016 respectively. This financial period was chosen for the gathering of required data because when the study began, the period stood as the latest period when complete financial statement data were readily obtainable for the listed banks. Meanwhile, a sample of thirteen (13) of the banks population was carefully selected for the study using the purposive or judgmental sampling technique with the following criteria:

- i. Availability of published annual financial reports for the period of the study;
- ii. Must be quoted on the Stock Exchange (NSE) and
- iii. Availability of detailed Audit Committee Reports in the published annual accounts.

The sample excluded two (2) banks from the population because **Eco-bank** Transnational Incorporated's published financial statements within the period didn't have information on audit committee reports which is required for the study. Similarly, **Skye bank** PLC was excluded from the sample as its annual reports for financial year, 2016 was yet to be submitted to the Nigerian Stock Exchange (NSE) as at when data for this study was collected. The bank subsequently metamorphosed into Polaris Bank.

3.3 Methods of Data Collection

In view of the research design and in agreement with the objectives of the study stated in chapter one, the data for this study was collected from secondary source via published financial statements by the Nigeria Stock Exchange (NSE) and official websites of the selected banks.

3.4 Technique for Data Analysis and Model Specification

The data for this study are panel data for the thirteen (13) banks for the period 2012 – 2016. Thus, the analysis is done using the panel regression to examine the effect of audit committee characteristics on earnings management of listed deposit money banks in Nigeria.

The regression model is:

$$DAC_{it} = \beta_0 + \beta_1 ACGD_{it} + \beta_2 ACFM_{it} + \beta_3 ACS_{it} + \beta_4 ACI_{it} + \beta_5 BIG4_{it} + \beta_6 FIRMSIZES_{it} + \varepsilon -$$

(Eq.1)

Where:

DAC_{it} = Discretionary Accruals for bank 'i', year 't' (Proxy for Earnings Management)

β_0 = Intercept

$\beta_1 - \beta_6$ = Coefficients of the independent variables

$ACGD_{it}$ = Gender Diversity of Audit Committee for bank 'i' and time 't';

$ACFM_{it}$ = Audit Committee Frequency of Meetings for bank 'i' and time 't';

ACS_{it} = Audit Committee Size of bank 'i' and time 't';

ACI_{it} = Audit Committee Independence for bank 'i' and time 't'.

$FIRMSIZES_{it}$ = Firm Size (Control variable) for bank 'i' and time 't'.

$BIG4_{it}$ = Big four Audit firms (Control Variable) for bank 'i' and time 't'

ε = Error term/random term

Meanwhile, $TAC = DAC + NDA$

$TAC = \text{Net Income} - \text{CFO}$

$$NDA = \alpha_1(1/ATA) + \alpha_2(\Delta GE - \Delta Rec / ATA) + \alpha_3(GPPE / ATA) + \varepsilon \quad (\text{Eq.2})$$

To obtain the specific coefficients α_1 , α_2 , α_3 , a computer regression was run with the values of TAC as dependent variables and a select data items which have some relationship to nondiscretionary accruals as independent variables (Modified Jones Model. 1995).

$$TAC_{it} = \alpha_1 (1/ATA_{it}) + \alpha_2 \{ (\Delta GE_{it} - \Delta REC_{it}) / ATA_{it} \} + \alpha_3 (GPPE_{it} / ATA_{it}) + \varepsilon_{it} \quad (\text{Eq.3})$$

Where:

TAC_{it} = Total Accruals for bank 'i' and year 't';

ATA_{it} = Average Total Assets for bank 'i' in year 't'

ΔGE_{it} = Change in Gross Earnings (Difference between current and previous year Gross Earnings).

GE = The addition of : Interest Income, Fee Commission, FX Income, Trusteeship Income, Investment Income, Share Income and other incomes);

ΔREC_{it} = Change In Accounts Receivable (Difference between Loans & Advances to banks/customers for the current and previous year);

$GPPE_{it}$ = Gross Property Plant & Equipment for bank 'i' in year 't'

$\alpha_1, \alpha_2, \alpha_3$ = Industry specific estimated coefficients for year t (model parameters);

ε_i = Error term

Table 1: Measurement of Variables

VARIABLES	LABEL	MEASUREMENT
Discretionary Accruals (Dependent Variable)	DAC	Determined by Jones (1995) modified model. With DAC as a Continuous variable
AC Gender Diversity (Independent Variable)	ACGD	Measured by the proportion of females in an AC. (Mulder,2017)
Audit Committee Size (Independent Variable)	ACS	The no. of members in an A.C in any given FY. (Lin & Yang (2006)
Audit Committee Frequency of Meetings (Independent Variable)	ACFM	The no. of meetings of Audit Committee in a FY. Ghosh et al. (2010)
Audit Committee Independence (Independent Variable)	ACI	Measured by the no. of NEDs and Shareholders Reps in an Audit Committee (AC). (NCCG,2018)
Firm Size (Control Variable)	LOGATA	Natural logarithm of the each year's Average Total Assets for each bank (Xie et al. (2003)
BIG 4 Audit Firm (Control Variable)	BIG 4	Rep 1 if a bank is audited by a BIG 4 audit firm (PwC, KPMG, Ernst& Young or Akintola Williams Deloitte), and 0 if otherwise.

Meanwhile, the researcher is not unaware of other extraneous factors which could impact on the variables of the study. This accounts for why firm size and big4 were chosen to represent internal and external control variables respectively. Prior studies suggest that earnings management may be influenced by other factors aside A.C characteristics (Bartov et al., 2000). This study include these control variables to check confounding factors with a view to boosting the robustness of the tests. These control variables have been found to majorly influence deposit money banks' performance globally. To adjust for firm size differentials, all variables in DAC equation are scaled by Total Assets within each financial year. The study also adopts Log of Average Total Assets (LOGATA) to check influences arising due to a bank's size. It is believed that banks that

engage Big4 auditors are less motivated to perpetrate earnings management. This is because Big4 audit firms provide better control and are more likely to unravel unscrupulous accounting practices (Becker et al., 1998).

Furthermore, in respect of the AC Independence, it is imperative to note that a Non-Executive Director (NED) is not a member of a company's executive team. Such a Director does not engage in the daily management of the organization, but is involved in policy formulation and direction. Accordingly, in a bid to ensure the effectiveness of the board and absence of bias in decision making, the Code of Conduct issued by the Financial Reporting Council of Nigeria (FRCN), 2016 requires Non-Executive Directors to be totally independent of the company. Criteria such as not being a substantial shareholder or employee of the company are used to measure independence.

3.5 Justification of Methods

The study adopts causal as well as correlation research designs. These designs are considered more appropriate being that the study is on a cause-effect relationship. The modified Jones model is also used to determine the nondiscretionary accruals from which the discretionary accruals used as a proxy for earnings management is estimated.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Data Presentation

4.1.2 Descriptive Statistics

Table 2 below provides a descriptive statistics for the independent and control variables. The mean for Gender Diversity is observed to be 0.18. This implies that an average of only 18% of the total Audit Committee members are female across the sampled banks.

The average frequency of meetings for the sampled banks within the period is 4. This means that, on the average four (4) audit committee meetings are held per annum across the banks.

On the other hand, the mean size of audit committee is 6. This means that on the average most of the banks have six (6) audit committee members as recommended by the CAMA, 1990. The variation as indicated by the minimum and maximum values of 6 and 8 can be said to be minimal; as only Zenith Bank had eight (8) members in its 2015 financial year.

Meanwhile, all the banks complied with the required minimum standard set by CAMA, 1990. Under the new corporate laws in Nigeria (CAMA, 2004 and CBN Corporate Governance Codes, 2006), Audit Committees are expected to comprise the same number of Non-Executive Directors (NED) and Ordinary Shareholders Representative (OSR) to be elected at Annual General Meetings (AGM). By this, all members of committees are expected to be independent. To this end, the sampled banks complied 100% with this requirement. As observed in table 2, the mean of Audit Committee Independence (ACI) is 1. This implies 100% compliance as 1 was used to represent Audit Committees whose members were completely independent.

Table 2: Descriptive Statistics

```
. xtsum DAC ACGD ACFM ACS ACI FIRMSIZE BIG4
```

Variable		Mean	Std. Dev.	Min	Max	Observations
DAC	overall	1.999966	10.00092	-12.8	36.3	N = 65
	between		10.18336	-11.312	30.7	n = 13
	within		1.673002	-5.500033	7.599965	T = 5
ACGD	overall	.180303	.1280629	0	.5	N = 55
	between		.1035745	0	.3333333	n = 13
	within		.0816707	.0469697	.4025253	T-bar = 4.23077
ACFM	overall	4.109091	1.271813	0	7	N = 55
	between		.8208943	3	6.2	n = 13
	within		.9945841	.9090909	6.909091	T-bar = 4.23077
ACS	overall	6.036364	.2696799	6	8	N = 55
	between		.11094	6	6.4	n = 13
	within		.2434322	5.636364	7.636364	T-bar = 4.23077
ACI	overall	1	0	1	1	N = 65
	between		0	1	1	n = 13
	within		0	1	1	T = 5
FIRMSIZE	overall	18.18542	.8330246	16.35319	19.69318	N = 65
	between		.7998527	16.98911	19.41484	n = 13
	within		.3068404	16.94519	19.16434	T = 5
BIG4	overall	.8461538	.363609	0	1	N = 65
	between		.3755338	0	1	n = 13
	within		0	.8461538	.8461538	T = 5

Source: STATA 12.1 output using data from study sample

The table provides a statistical description of all the variables of the study. The mean of Firm Size is 18.19. This means that average total assets of the sampled banks within the period was 18.19 billion naira. The minimum (16.35) and maximum (19.69) values suggest non-significant variation in the size of the sampled banks when the standard deviation of 0.83 is taken into consideration. Meanwhile, 85% of the banks within the financial period under study were audited by one of the Big4 auditing firms. This could be due to the high level of Corporate Governance compliance measures being placed by regulatory authorities on the banks in Nigeria.

This explains why a high proportion of the sampled banks employed a Big4 auditor. Only Union and Wema Banks engaged non Big4 audit firms within the period. The table above also shows a minimum (11.3) and maximum (30.7) values for Discretionary Accruals (DAC) which suggests a relatively significant variation in discretions used by managers across the sampled banks within the period.

4.1.3 Correlation Matrix

Pearson’s correlation analysis is employed to check the presence or otherwise of collinearity among the independent variables.

Table 3: Correlation Matrix showing Pearson’s r for this study’s variables

```
. correlate ACGD ACFM ACS FIRMSIZE BIG4
(obs=49)
```

	ACGD	ACFM	ACS	FIRMSIZE	BIG4
ACGD	1.0000				
ACFM	0.0165	1.0000			
ACS	0.1614	-0.0186	1.0000		
FIRMSIZE	0.3156	-0.1750	0.2035	1.0000	
BIG4	0.0825	-0.4536	0.0589	0.4566	1.0000

Source: Stata 12.1 output using data sample from this study

From the table above, the absence of collinearity can be observed among the study variables. According to Gujarati (1995), collinearity is said to be absent if correlation among the independent variables are less than 80%.

4.2 Data Analysis and Results

The data for this study are panel data. Consequently, the Hausman test is conducted to determine which model between Fixed Effects (FE) and Random Effects is most appropriate for the study panel regression analysis. Tables 4 and 5 below revealed the FE and RE outputs obtained from STATA 12 using the variables of this study.

Table 4: Fixed Effects Test Results for the study variables

```
r(198) ;
. . xtreg DAC ACGD ACFM ACS FIRMSIZE BIG4, fe
note: BIG4 omitted because of collinearity

Fixed-effects (within) regression           Number of obs   =       49
Group variable: Bid                         Number of groups =       13

R-sq:  within = 0.0770                      Obs per group:  min =       1
        between = 0.0050                    avg =       3.8
        overall = 0.0009                    max =       5

corr(u_i, Xb) = -0.0941                      F(4, 32)        =       0.67
                                                Prob > F        =       0.6195
```

DAC	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
ACGD	-1.514998	3.90311	-0.39	0.700	-9.465372	6.435377
ACFM	-.5006797	.3226644	-1.55	0.131	-1.157926	.1565663
ACS	-.5427787	1.240787	-0.44	0.665	-3.070178	1.984621
FIRMSIZE	-.0832978	.9396296	-0.09	0.930	-1.997261	1.830665
BIG4	0	(omitted)				
_cons	10.14494	18.39117	0.55	0.585	-27.31665	47.60653
sigma_u	10.146893					
sigma_e	2.1878496					
rho	.9555744	(fraction of variance due to u_i)				

```
F test that all u_i=0:      F(12, 32) =      61.89      Prob > F = 0.0000
```

Source: STATA 12 Fixed Effects estimates from study variables

Table 5: Random Effects Test Results for the study variables

```

.xtreg DAC ACFGD ACFM ACS BIG4 FIRMSIZE, re

```

```

Random-effects GLS regression           Number of obs   =       49
Group variable: Bid                     Number of groups =       13

R-sq:  within = 0.0483                   Obs per group:  min =        1
      between = 0.1366                               avg  =       3.8
      overall  = 0.1455                               max  =        5

                                           Wald chi2(5)    =       79.93
corr(u_i, X) = 0 (assumed)                Prob > chi2     =       0.0000

```

(Std. Err. adjusted for 13 clusters in Bid)

DAC	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
ACFGD	-.8034434	4.59503	-0.17	0.861	-9.809537	8.20265
ACFM	-.5265246	.163113	-3.23	0.001	-.8462202	-.206829
ACS	-.1279049	.3205101	-0.40	0.690	-.7560932	.5002834
BIG4	5.777877	3.666156	1.58	0.115	-1.407656	12.96341
FIRMSIZE	.9110972	1.281503	0.71	0.477	-1.600603	3.422797
_cons	-16.31295	21.40513	-0.76	0.446	-58.26624	25.64034
sigma_u	5.6000086					
sigma_e	2.1878496					
rho	.86757643	(fraction of variance due to u_i)				

Source: STATA 12 Random Effects estimates from study variable.

Based on the outputs of FE and RE in tables 4 and 5 above, a hausman test is conducted as shown in table 6 below to choose either of the models.

Table 6: Hausman Test

	(b) Fe	(B) fre	(b-B) Difference	Sqrt (diag (V_b-v_B)) S.E.
ACGD	-1.169806	-1.143413	-.0263926	1.37526
ACFM	-.0174475	-.0016086	-.0263926	.0816978
ACS	-.05499957	-.4543705	-.0158389	.2128769
FIRMSIZE	-.0470058	-.089477	-.1364828	.3972349

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, coefficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$$\begin{aligned} \text{Chi2 (4)} &= (b-B)' [(V_b-V_B)^{-1}](b-B) \\ &= 0.49 \end{aligned}$$

$$\text{Prob>chi2} = 0.9741$$

By this result, the null hypothesis cannot be rejected, considering that the p-value (Prob>chi2) is greater than 5%.

Note the understated hypotheses that guide decisions arising from Hausman test:

Ho: R.E is efficient and consistent;

H1: R.E is not consistent.

Therefore, this study adopts the R.E model. It can be concluded that RE estimators are consistent and efficient for the study panel regression.

Random effect is used when the dependent variable are influenced by variations across entities.

With the above result, the independent variables in table 5 are further subjected to a multicollinearity test using the Variance Inflation Factor (VIF) approach as indicated in table 7 below.

Table 7: Test of Multicollinearity – Variance Inflation Factor (VIF)

. vif

Variable	VIF	1/VIF
BIG4	1.55	0.645526
FIRMSIZE	1.44	0.695197
ACFM	1.26	0.790871
ACGD	1.13	0.883966
ACS	1.06	0.947141
Mean VIF	1.29	

Source: STATA 12 Output based on study data

The Variance Inflation Factor (VIF) as depicted in table 7 for each independent variable is well below 2. It can therefore be concluded that multi-collinearity is absent among the study's independent variables. Multi-collinearity is said to be absent if the Variance Inflation Factor (VIF) value lies between 1 and 10 otherwise there is multicollinearity (Baldwin & Berkeljon, 2010).

In other to further enhance the quality of the outcome of this study, other tests of validity of the data set were conducted after the multiple regression analysis.

One of which was the test of normality. It is to check whether or not the data are normally distributed.

Normality Test through Histogram

A histogram plot can be used to indicate normality of residuals. A bell-shaped curve shows the normal distribution of the series.

Plot 1: Histogram showing normality of distribution

```
. histogram resid, normal
```

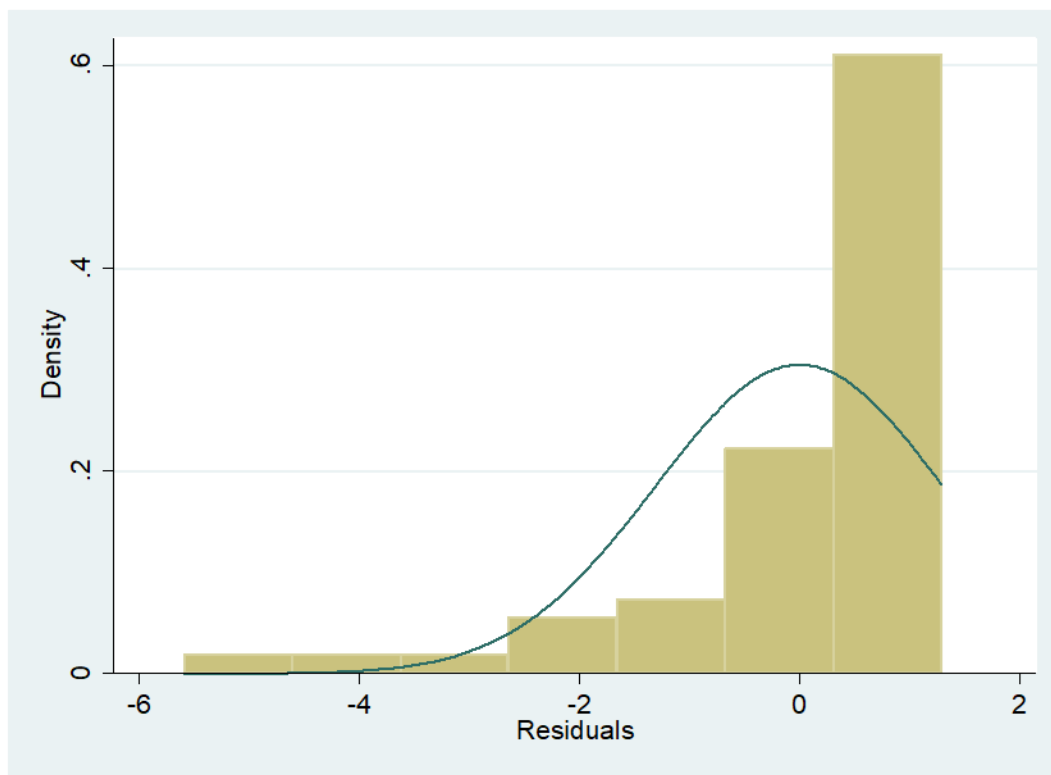


Figure 1: Histogram plot indicating normality in STATA

The data is also subjected to a test of Heteroscedasticity. This is done via the Breusch-Pagan test. This test provides that under null hypothesis, the error variances are all equal

(homoscedasticity). Whereas, the alternate hypothesis attributes the error variances to multiple functions of one or more variables (heteroscedasticity).

```
. estat hettest  
  
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity  
Ho: Constant variance  
Variables: fitted values of dac  
  
chi2(1)      =      0.45  
Prob > chi2  =      0.5024
```

The above analysis indicates a p-value of chi-square statistic greater than 0.05. The null hypothesis can therefore be accepted at 5% level of significance. This implies that heteroscedasticity is absent in the residuals.

Meanwhile, in practice, the structure of heteroskedasticity is usually not known. It is therefore safe to apply the robust standard errors even in the absence of heteroskedasticity. In this case, the robust S.E is akin to conventional OLS standard errors (Takashi, 2009). Consequently, this study adopted the robust standard errors on the RE model regression output even though the result shows there is no heteroskedasticity.

The table below contains summary of coefficients from the multiple linear regression table as well as from the fixed and random effect tests.

Table 8: Showing pooled coefficients of variables of the study

VARIABLES	POOLED COEFFICIENTS	FIXED EFFECTS	RANDOM EFFECTS
CONSTANTS	-16.31295	10.14494	-16.31295
ACGD	-.5265246	-1.514998	-.8034434
ACFM	-.1279049	-.5006797	-.5265246
ACS	-0.1668106	-.5427787	-.1279049
BIG4	5.777877	0	5.777877
FSIZE	.9110972	-.0832978	.9110972
R2	0.1455	0.0009	0.1455
F-STAT	4.07	0.67	79.93

Source: STATA output data extracted from Tables 4, 5 & appendix F.

From the table 6 above, the study regression model can now be restated as follow:

$$DAC = \beta_0 + \beta_1ACGD + \beta_2ACFM + \beta_3 ACS + \beta_4ACI + \beta_5BIG4 + \beta_6FS + \varepsilon - \text{(Eq.2)}$$

$$DAC = -16.3 - 0.8(ACGD) - 0.53(ACFM) - 0.13 (ACS) - 5.8 (BIG4) + 0.9 (FIRMSIZE) + 40.4$$

Table 8 above comprises summarized statistical data and estimates of regression coefficients. The model related F-statistic is 79.93 which is greater than the threshold of 4. This shows that the study's model is a good fit. The model significantly predicts the outcomes of the study with a p-value of $F < 0.05$ at 95% confidence level. The R2 for the model is 0.1455. This means that only 15% of the variance in earnings management is explained by the independent variables used in this study. By implication, 75% of the variance in the dependent variable is attributed to other extraneous factors not considered in this study.

The results in table 5 further revealed that both Firm Size and Big4 are not significant to earnings management. Both factors, are positively correlated to earnings management. This implies that banks are more susceptible to earnings management when they grow bigger irrespective of the engagement of Big4 audit firms.

Meanwhile, A.C Independence (ACI) is delisted from further analysis due to its constant and non-variability values as observed among the sampled banks. This was made possible by the strict adherence to the governance codes in respect of AC membership by all the DMBs sampled within the period.

4.2.1 Hypothesis Testing

4.2.2 First Hypothesis (ACGD & EM)

This hypothesis posits that Audit Committee Gender diversity has no significant effect on earnings management of Deposit Money Banks in Nigeria. This is tested with the help of STATA 12.1 as depicted in table 12 below:

Linear Regression Results for ACGD and EM

Variable	Coef.	Robust Std. Err.	Z	P>t	[95% Conf. Interval]	
ACGD	-.8034434	4.59503	-0.17	0.861	-9.809537	8.20265

Source: STATA 12.1 Output derived from table 5

Utilizing the output from the above table, and judging by the Probability Value (P. Value) of 0.861 which is greater than 0.05 ($P > 0.05$) significance level (two tailed), the study accepts the null hypothesis and conclude that A.C Gender Diversity has no significant effects on earnings management in quoted Nigeria DMBs within the period. Also, the z-statistics indicate a negative correlation (-0.17 or 17%) of Gender Diversity to Earnings Management. This indicates that a low negative correlation of 17% exists between A.C Gender Diversity and earnings management in the industry.

4.2.3 Second Hypothesis (ACFM & EM)

This hypothesis posits that the frequency of audit committee meetings has no significant effects on earnings management in quoted Deposit Money Banks in Nigeria. This is also tested with the help of STATA 12.1 as depicted in the table 13 below:

Linear Regression Results for ACFM and EM

Variable	Coef.	Robust Std. Err.	Z	P>t	[95% Conf. Interval]
ACFM	-0.5265246	0.163113	-3.23	0.001	-0.8462202 0.206829

Source: STATA 12.1 Output derived from table 5

From the output above, the Probability Value of 0.001 can be observed. This is less than the threshold of 0.05 ($P > 0.05$) significance level. The study therefore, rejects the null hypothesis and concludes that frequency of audit committee meetings has significant effects on earnings management of quoted DMBs in Nigeria during the period of the study. Meanwhile, it can be observed that the Pearson correlation is negative (-3.23). This indicates that a strong negative correlation does exist between Audit Committee Frequency of Meeting (ACFM) and earnings management among the deposit money banks studied in this research within the selected period. Therefore, deposit money banks need to increase the Audit Committee frequency of meetings to nip earnings management and other related unethical practices among management of banks in the bud.

4.2.4 Third Hypothesis (ACS & EM)

This hypothesis posits that the size of audit committees has no significant effects on earnings management of quoted DMBs in Nigeria. This is also tested with the help of STATA as depicted in table 14 below.

Linear Regression Results for ACS and EM

Variable	Coef.	Robust Std. Err.	Z	P>t	[95% Conf. Interval]
ACS	-0.1279049	0.320510	-0.40	0.690	-.7560932 .5002834

Source: STATA 12.1 Output derived from table 5

From the above table, the Probability Value is 0.690. This is more than 0.05 significance level ($P < 0.05$). The study therefore, accepts the null hypothesis and concludes that A.C Size has no significant effects on earnings management of quoted DMBs in Nigeria within the period. It can also be observed that the correlation is negative (-0.40). This indicates that a significant and negative relationship between Size of Audit Committee (ACS) and earnings management among the deposit money banks studied in this research within the selected period. The regression results seem to posit that a larger audit committee has greater chances of uncovering earnings management. This may not be unconnected to the general believe that larger committee with diverse expertise could result in effectiveness. However, this is yet to be significant within the study period.

4.3 Discussion of Findings

Analyzing the first hypothesis, the study reveals that that A.C Gender Diversity has no significant effect on earnings management. As seen from Table 12, the result is in tandem with the findings of Temile, Jatmiko, et al (2018) in their study titled: Gender Diversity, Earnings Management Practices and Corporate Performance in Nigeria Quoted Firms; where it was revealed that ACGD had no significant relationship with earnings management. The variables were also negatively correlated. Additionally, the works of (Mulder, 2017; Damak, 2018; Petracci & Olugbode, 2015) also consented to this report findings.

However, while most researchers seem to agree on the negative correlation between ACGD and Earnings Management, the point of disagreement is on the level of significance or insignificance (Sun, Liu and Lan, 2011). The result from this study implies that an average of 18% female gender inclusion in Audit Committee across DMBs within the period is yet to significantly constrain earnings management in the sector.

Therefore, the outcome of this study is consistent with previous findings that Gender Diversity hasn't any significant effects on earnings management.

The result also answers the associated research question. That is, to what extent does Audit Committee Gender Diversity (ACGD) affect earnings management in Nigeria Deposit Money Banks?

Discussing the second findings, the results of this study indicates that A.C Frequency of Meetings has significant negative effects on earnings management of quoted DMBs in Nigeria as depicted in table 13. In support of this finding, Xie *et al.* (2003) agreed that A.C Frequency of Meetings (ACFM) is negatively correlated with earnings management. In their report on the study of the collapse of firms, Andersen & Co also noted that ACFM is plays important roles in

sustaining the culture of corporate governance. The result is further consistent with findings of Mishra & Malhotra (2016). The duo noted that an audit committee that meets regularly is afforded greater opportunities to unravel and spot deviate practices by management. Similarly, Abbott (2004) agreed on the negative correlation of ACFM, the researcher also concludes that ACFM is significantly associated with lower earnings management and other financial misstatements. Unlike the findings of this study, Yang & Krishnan (2005) found no evidence of a significant correlation between ACFM and earnings management.

It can therefore be accepted that the possibility of uncovering suspected financial irregularities and block identified loopholes in a financial reporting process is high with an increased ACFM.

The second Research Question: To what extent does Audit Committee Frequency of Meetings (ACFM) affect earnings management in Nigeria Deposit Money Banks? Is also answered by the above result of the study.

Meanwhile, the various corporate governance codes both the United States of America and Nigeria, have not made any specific statement regarding the minimum required number of AC meetings within a financial year. DMBs in Nigeria for instance, are allowed to appropriately determine the frequency of meetings of their statutory audit committees. During the course of this study, it was observed that majority of audit committees of the sampled banks met at least once in every quarter.

This study further concludes that Audit Committee Size (ACS) has a negative but insignificant effects on earnings management of quoted DMBs in Nigeria. Most of the sampled banks studied had six audit committee members. This result aligns with the conclusion of Mansi & Reeb (2004) where it was opined that a large ACS is more likely to have considerable means to

evaluate financial reporting processes. This is because the larger a committee, the more likely it is to engage members with requisite knowledge and experience for effective disclosure of inimical management practices (Temple, 2016). Some researchers also were also of the view that Audit Committees are merely symbolic (Kalbers & Fogarty, 1998) as expected benefits are more rhetorical than imperative (DeZoort, 1997). To further support this, Majiyebo, Okpanachi, Terzengwe, Adabenege and Mohammed (2018) concludes that there exist no significant effect of audit committee size on earnings management of listed deposit money banks in Nigeria

Meanwhile, Fodio *et al* (2013) in a study of corporate governance mechanisms, revealed that ACS is negatively but significantly correlated with earnings management. Same conclusion was reached by Leslie (2013). Other researchers provided similar findings (Vafeas, 2005; Dezoort & Salterio, 2001; Anderson *et al.*, 2004; Lin et al., 2006; Malhotra, & Mishra, 2016)

However, Yang & Krishman (2005); Boo & Sharma, (2008) provided contrary findings in their reports. Likewise, Majiyebo, Okpanachi, et al (2018) as earlier stated. The researchers averred that ACS is positively correlated with an insignificant effect on earnings management of listed DMBs in Nigeria. The follow-up Research Question is also answered with the outcome/finding as discussed above.

Conclusively, the relationship between Audit Committee Independence and earnings management could not be ascertained using the regression analysis. This is because the independence of the audit committee, represented by equal number of shareholders' representatives and non-executive directors of three members each remains constant among the selected banks studied. The non-variability of the independent variable made it impossible to test the hypothesis.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

Over the years, records have shown that investors, stakeholders and interested members of the public depend on the information provided through companies' annual reports for varied decisions. Published reports are expected to be credible and reliable. These qualities are the minimum standards required to guide relevant stakeholders. The reports are also expected to be consistent with international best practices by providing full, timely and unambiguous information not deliberately prepared to mislead interested third parties.

However, as a result of the growing dynamics and complexities in modern day businesses coupled with divergent interests of various stakeholders, some financial information have been found to have compromised on expected credibility and reliability which are attributed to errors, deliberate manipulations of accounting figures, as well as misrepresentation of earnings, thereby casting doubt on the fidelity which financial statements are hitherto known for.

In an effort to check these growing malpractices, regulatory bodies in the banking industry developed corporate governance codes for banks. These efforts led to establishment of audit committees.

Consequently, all duly registered and listed DMBs in Nigeria are mandated to maintain effective Audit Committees. This is to add credence and boost the values accorded accounting information through persistent reduction to the barest minimum, effects of misleading reports presented for public consumption. It is also expected to provide an effective and strong control mechanism within the banking industry. This study examined the major characteristics of audit committees

with a view to assessing their impacts on earnings management among the selected banks. The four characteristics examined are briefly outlined below:

- i. Gender diversity;
- ii. Frequency of meeting;
- iii. Size of committee and
- iv. Independence.

The above audit committee characteristics were adopted as the independent variables of study. Earnings management, the dependent variable of this study is represented by Discretionary Accruals (DAC) estimates. Recall that accrual concept implies that revenues and expenses are matched within the period of occurrence, irrespective of cash involvement. The advantage of this concept is for published accounts to reflect all expenses incurred with the corresponding reported revenues within a financial year. However, there exists discretionary and nondiscretionary accruals. While Non-Discretionary Accrual (NDA) component is an unavoidable / mandatory expense that is recorded in account statements, even though it is yet to be fulfilled, discretionary accrual component identifies management choices. It is a non-mandatory expense/asset recorded within a financial year irrespective of its realization. Management bonus provides an apt example of NDA. Abnormal Discretionary Accruals (DAC) could potentially signify a likelihood for earnings management (Kelly, 2016). It is on this note that this study adopted Operating discretionary accruals as a proxy for earnings management.

Based on the foregoing, several related literatures were reviewed with a view to accessing greater insights into the requirement of the variables being studied. The Study population was made up of the entire fifteen (15) listed DMBs in the Nigeria between December 31st, 2012 and 2016 respectively. The financial period was chosen for the gathering of required data because

when the study began, the period stood as the latest period when complete financial statements were readily obtainable for the listed banks. Meanwhile, a sample of thirteen (13) of the banks population was carefully selected for the study. The data for the study was collected using secondary source via published financial statements on the NSE website and official websites of the banks being studied.

In order to calculate the dependent variable (DAC), the researcher adopted the Jones modified model of 1991. With the use of Microsoft excel and STATA 12.1 version, the data collected was analyzed and tested as shown in the previous chapter.

5.2 Conclusion

From the foregoing, this study has shown that both Audit Committee Gender Diversity and audit committee size have insignificant but negative effects on earnings management. However, Audit Committees Frequency of Meetings has a significant negative effects on earnings management. Even though, the effect of the former variables are yet to substantially reduce earnings management in the banking sector, it is believed that continuous adherence to the established tenets of corporate governance codes by DMBs in Nigeria will eventually result in significant reduction in selfish creative accounting tendencies as exhibited by managers of some banks.

The advent of globalization coupled with the ever increasing dynamics and complexities associated with businesses have made it imperative for the involvement of all critical stakeholders in strategic business decision making processes. The challenges of mutual suspicion among agents and principals in the management of public companies as established in the agency theory are expected to be gradually eroded or minimized with the continuous involvement of all stakeholders in the financial reporting process.

The audit committee characteristics evaluated in this study revealed varying degrees of relationship with earnings management as it concerns the attainment of the above stated goals.

The major findings are summarized below:

- i. A.C Gender Diverity has no significant effects on earnings management of quoted Nigerian DMBs;
- ii. A.C Frequency of Meetings has a significant and negative effects on earnings management of quoted DMBs in Nigeria;
- iii. It is also concluded that A.C Size has an insignificant but negative effects on earnings management of quoted DMBs in Nigeria;
- iv. As a result of the overwhelming compliance to the FRCN's Act which requires members of Audit Committee whether Non-Executive Directors or Shareholders Representatives to be totally independent of the banks, the behavior of the variable couldn't be tested against the dependent variable using the regression analysis due to the non-variability of the independent variable;
- v. Findings also indicate that the bigger the size of a bank, the more susceptible it is to earnings management. Also, the engagement of a BIG4 audit firm did not significantly reduce earnings management within the period.
- vi. The study showed that only about 15% of the variance in earnings management is explained by the independent variables considered in the study. This therefore, implies that 85% of the variance in earnings management is caused by other extraneous factors beyond the independent variables considered in this model.

While, it is being advocated by stakeholders especially, those holding strong views for Gender Diverity, this study has shown that it is yet to significantly constrain earnings management in the

banking industry. Meanwhile, considering its negative correlation with earnings management, it is believed that over time the increasing consideration female gender participation giving special cognizance to cognate experience, integrity and independence of the individuals selected for such responsibilities will gradually change the narrative.

Furthermore, among all the Audit Committee Characteristics (ACC) examined in this study, ACFM seems to be the most potent in constraining EM. As observed from the hypothesis result, the variable has a significant effects in constraining EM with a similar strong negative correlation. Policy formulators in the sector may wish to focus more on this Audit Committee Characteristic. All other factors being equal, it is believed that a bank with high frequency of meetings, stands a better chance to check and uncover Earnings Management practices. Shareholders and other critical stakeholders who depend on financial statements for varied decisions, may also wish to emphasize on the effectiveness and efficiency of audit committee frequency of meetings.

5.3 Recommendations

Based on the foregoing and the researcher's observations during the course of this study, the under-listed are recommended:

- i. Even though, this study reveals that Gender Diversity is yet to significantly constrain earnings management, the potentials of the variable to change the discourse is considerable and imminent. It is therefore, recommended that management of various DMBs in Nigeria consciously continue to formulate and implement policies that will include gender participation with special consideration for competence, integrity and independence of such members on the board with a view to stimulating performance measures in the long run and to drive Deposit Money Banks in the right direction;

- ii. Regulatory bodies should conduct regular vetting of audit committee members to ensure that they remain independent of the banks throughout the tenure of their appointments. This is to guarantee a sustained independence status of members and their expected objective and unbiased functions. This is re-emphasized by the Financial Reporting Council of Nigeria (FRCN) Act, 2018.
- iii. Any member of the audit committee who is unable to attend at least 50% of the committee's meetings without reasonable cause should be appropriately sanctioned and replaced. This will increase commitment of all members to the objectives of the committee and the overall transparency of the bank's financial statements;
- iv. It is further recommended that members of audit committees be entitled to some remunerations as against the current practice. This is expected to boost their commitment to the overall objectives of the committee. It is also expected that with some incentives, the effectiveness of ACFM as observed within the period of this study will be sustained and improved upon.

5.4 Limitations of the Study

Like in many similar research works, this study was not without its limitations. For instance, the scope of the study was restricted to five (5) year period to enable the researcher effectively collate the large amount of data in respect of the sampled banks within the relatively short time required for the completion of this research. The study could not also capture all the deposit money banks in the country due to either inconsistency of financial statement publication within the period of the study as was the case with Skye Bank before it eventually metamorphosed into Polaris Bank or non-inclusion of the required Statutory Audit Committee (SAC) reports in the published financial statements as was the case with Eco-bank Transnational Incorporated.

5.5 Suggestions for further Studies

Section 11.4.4 of the FRCN Act, 2018 provides that a Statutory Audit Committee (SAC) shall have a chairman to be elected from amongst its members. A member to be elected as Chairman is expected to be financially literate. Meanwhile, within the period of this study, it was observed that most SAC Chairmen were representatives of shareholders.

It is therefore recommended for further research that a comparative study be carried out to determine whether audit committees chaired by Shareholders' Representatives (SR) are more effective in checking earnings management than those chaired by Independent Non-Executive Directors (INED). This is expected to guide industry regulators towards the development and formulation of appropriate laws for the appointment of suitably qualified officials to direct activities of audit committees for greater efficiency.

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$$NDA = \beta_0 + \beta_1(1/ATA) + \beta_2(\Delta Sales - \Delta Rec / ATA) + \beta_3(GPPE / ATA) + \varepsilon$$

NET	CFO	NOA	ATA	1/ATA	ΔSALES	ΔREC	ΔSALES -	ΔSALES - ΔREC /
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INCOME							ΔREC	ATA
64026135	-1.6E+08	2.21E+08		4.2E-09	28938997	3.95E+08	-365999892	-1.537337414
			238073885.8					
61321089	-1.8E+08	2.43E+08	185520324	5.39E-09	83453537	2.28E+08	-144490808	-0.778840856
42520929	-2.9E+08	3.34E+08	163209771	6.13E-09	38327000	3.12E+08	-273823000	-1.677736561
31046067	-8.1E+07	1.12E+08	121721001	8.22E-09	5345160	1.91E+08	-185357513	-1.522806348
31597683	-1.8E+08	2.08E+08	116596497	8.58E-09	82207789	65993453	16214336	0.139063663
3260525	-1.2E+08	1.27E+08	118750630	8.42E-09	874983	1.77E+08	-176521493	-1.486488897
4731656	-1.4E+08	1.41E+08	111084505	9E-09	5914274	-1.7E+08	180725003	1.6269146
22453893	46224599	-2.4E+07	125019316	8E-09	22937490	2.36E+08	-212820856	-1.702303794
30334675	2.12E+08	-1.8E+08	96780777	1.03E-08	36849111	54085887	-17236776	-0.178101236
22183668	35525156	-1.3E+07	75652661	1.32E-08	29661198	2.57E+08	-227729813	-3.010202285
6520000	-9.5E+07	1.01E+08	144237889	6.93E-09	4490000	1.09E+08	-104966000	-0.727728343
15617000	1.07E+08	-9.2E+07	136858000	7.31E-09	10797000	47724000	-36927000	-0.269819813
13714000	53565000	-4E+07	131891667	7.58E-09	5483000	1.03E+08	-97987000	-0.742935488
8085000	15048000	-6963000	135152125	7.4E-09	7781000	63451000	-55670000	-0.411906213
19681000	43178000	-2.3E+07	101595556	9.84E-09	46029000	87108000	-41079000	-0.404338552
7507000	-1209000	8716000	38129000	2.62E-08	283000	-4145000	4428000	0.116132078
2163000	929000	1234000	40404429	2.47E-08	-1E+07	1514000	-11689000	-0.289299968
5974000	2107000	3867000	31974444	3.13E-08	-5.8E+07	1792000	-59811000	-1.870587648
70840000	-4.2E+07	1.13E+08	38976375	2.57E-08	74987000	1549000	73438000	1.884167011
-957000	29000	-986000	38711000	2.58E-08	58243000	2.79E+08	-220476000	-5.695435406
3730260	-774574	4504834	18766597.9	5.33E-08	906462	0	906462	0.048301882
2523055	5312976	-2789921	18482609	5.41E-08	-2471986	0	-2471986	-0.133746594
5396908	7880607	-2483699	18795756	5.32E-08	302890	0	302890	0.016114808
6027752	-1490927	7518679	18783170	5.32E-08	-1.1E+08	-3.5E+08	240027667	12.7788689

				08					
12032745	2.14E+08	-2E+08	63593829	6.93E-09	41133641	31469115	9664526	0.151972702	
1.27E+08	2.87E+08	-1.6E+08	217778340	4.59E-09	97040570	1.51E+08	-54361065	-0.249616491	
97201000	10429148	86771852	207057182	4.83E-09	9644814	83422000	-73777186	-0.356313098	
89916649	-9.2E+07	1.82E+08	177217333	5.64E-09	35855803	2.55E+08	-219584817	-1.239070769	
88725558	3.07E+08	-2.2E+08	158697150	6.3E-09	16151033	1.84E+08	-168218107	-1.059994505	
84733693	-3.5E+07	1.19E+08	147301566	2.62E-08	31723000	63097394	-31374394	-0.2129943	
609000	2105000	-1496000	92857000	1.08E-08	-8459000	0	-8459000	-0.091097063	
9871000	10395000	-524000	12650333	7.9E-08	-3333	0	-3333	-0.000263471	
13136000	10548000	2588000	94454000	1.06E-08	19385000	23491000	-4106000	-0.043470896	
21028000	81450000	-6E+07	76304600	1.31E-08	19366000	93012000	-73646000	-0.965158064	
1053000	1141000	-88000	18877000	5.33E-08	-5.6E+07	-252960	-56078040	-2.97070721	
7295988	-1.2E+08	1.32E+08	63907863.4	1.56E-08	1043772	1.3E+08	-128479827	-2.010391526	
12577887	54691995	-4.2E+07	72677402	1.38E-08	6514615	-3.3E+07	39034617	0.537094281	
8169165	-755006	8924171	74958130	1.33E-08	11936450	49502525	-37566075	-0.501160781	
7829998	-4.4E+07	51782580	64345198	1.55E-08	22772000	92322874	-69550874	-1.080902323	
7201188	-1.5E+07	22080211	52747813	4.59E-09	21116000	67358000	-46242000	-0.876661939	
74437000	-2.1E+08	2.88E+08	211632083	4.73E-09	22517000	2.77E+08	-254403000	-1.202100345	
55761000	58408000	-2647000	184694750	5.41E-09	19144000	96293000	-77149000	-0.417710845	
38886000	-9.3E+07	1.32E+08	194904833	5.13E-09	14484000	1.1E+08	-95901000	-0.492040133	
55650000	-136104	55786104	184784750	5.41E-09	36844000	2.25E+08	-187757000	-1.016084931	
50909000	2.03E+08	-1.5E+08	193306500	1.08E-08	51331000	4502000	46829000	0.242252589	
15885000	-70133	15955133	80248000.8	1.25E-08	4337000	1.41E+08	-136569000	-1.701836789	
25400000	10975000	14425000	83178100	1.2E-08	8545000	46612000	-38067000	-0.457656523	

18190000	-121957	18311957	76744667	1.3E-08	6596000	92254000	-85658000	-1.116142702
16530000	-70818	16600818	77135076	1.3E-08	4187000	68873000	-64686000	-0.83860681
8993000	30511000	-2.2E+07	93913363	1.56E-08	27693000	-1241000	28934000	0.30809247
2183798	-2.3E+07	25504324	44789240.6	2.23E-08	5825971	31071392	-25245421	-0.56364923
5835130	-3.7E+07	42526300	36943418	2.71E-08	1478096	26807783	-25329687	-0.685634637
10271654	-3.2E+07	42520512	34442093	2.9E-08	14520657	24105773	-9585116	-0.27829656
-2.3E+07	23788331	-4.6E+07	36693572	2.73E-08	9067574	6188228	2879346	0.078470038
7635998	-2.6E+07	33992724	35974562	2.78E-08	7492727	71166087	-63673360	-1.769955114
2437844	15892427	-1.3E+07	35101753	2.85E-08	8455008	-31749	8486757	0.241775874
2295460	14676273	-1.2E+07	33061943	3.02E-08	3682574	36302741	-32620167	-0.98663793
2373498	-4.3E+07	44886085	29427870	3.4E-08	6541309	50662024	-44120715	-1.499283332
1700488	14012504	-1.2E+07	27572706	3.63E-08	4929172	24886097	-19956925	-0.723792761
4989816	9633527	-1.5E+07	24570460	4.07E-08	7942465	6509123	1433342	0.058335986
1.19E+08	-1E+08	2.24E+08	356978000	2.8E-09	58155000	2.89E+08	-230752000	-0.64640398
98784000	-4.2E+08	5.14E+08	288487692	3.47E-09	24638000	2.69E+08	-244337000	-0.846958143
92479000	-5.2E+07	1.44E+08	263370692	3.8E-09	60740000	4.54E+08	-392951000	-1.492007319
83414000	2.36E+08	-1.5E+08	239891083	4.17E-09	44388000	2.62E+08	-217153000	-0.905214972
95803000	1.25E+08	-2.9E+07	221535091	4.51E-09	64062000	68319000	-4257000	-0.019215917

lished Financial Statements of sampled banks

Appendix B: Calculating the NDA equation's coefficients

$$\alpha_1 (1/ATA) + \alpha_2 (\Delta GE - \Delta Rec / ATA) + \alpha_3 (GPPE / ATA) + \varepsilon$$

BANKS	α_0	α_1	α_2	α_3
OCEANIC	4.39e+08	0	1.11e+07	-4.90e+08
DIAMOND	4.03e+07	-3.47e+15	2.97e+07	2.40e+08
FIDELITY	3.84e+07	-5.96e+14	4.34e+07	2.38e+08
FIRST BANK	-2.10e+08	1.27e+16	2.20e+07	-3.06e+09
FCMB	56020.24	3.37e+13	423481.2	5.03e+08
GTB	2.74e+08	1.42e+14	-1.22e+08	-4.89e+08
STANDBIC IBTC	1.80e+07	-3.30e+14	-3944760	1.24e+07
STERLING	-1.51e+07	5.19e+15	-2.89e+07	-7.27e+07
UBA	3.92e+08	-8.39e+15	6.86e+07	-5.31e+08
UNION	-8631716	2.03e+15	-530164.2	-2559839
UNITY	-5.17e+07	3.08e+15	8089662	2.64e+07
WEMA	4.76e+07	1.93e+14	2169463	-8.39e+07
ZENITH	-7.48e+09	-5.75e+17	-6.44e+08	3.36e+10

Source: Regression coefficients obtained from STATA 12 using data from appendix A

Appendix C:

List of Sampled Banks for this Study

S/N	BANKS
1	ACCESS
2	DIAMOND
3	FIDELITY
4	FIRST BANK
5	FCMB
6	GTB
7	STANBIC IBTC
8	STERLING
9	UNION BANK
10	UBA
11	UNITY BANK
12	WEMA BANK
13	ZENITH BANK

Note that **Eco-bank** Transnational Incorporated was not included in the above list because its published financial statements within the financial year excluded audit committee reports which is required for the study. Similarly, **Skye bank** PLC was excluded from the sample as its annual reports for financial year, 2016 was yet to be submitted to the Nigerian Stock Exchange (NSE) as at when data for this study was collected. The bank later metamorphosed into Polaris Bank.

Appendix D: Independent and Control Variables of the study.

<i>YEAR</i>	<i>BANKS</i>	<i>ACFM</i>	<i>ACS</i>	<i>ACI</i>	<i>ACGD</i>	<i>BIG4</i>	<i>BIG4</i> <i>=1 ;0</i>	<i>LOGATA</i>
2016	ACCESS	7	6	1	0.166667	PWC	1	19.28809
2015	ACCESS	2	6	1	0.166667	PWC	1	19.03867
2014	ACCESS	2	6	1	0.166667	PWC	1	18.91055
2013	ACCESS	6	6	1	0.166667	PWC	1	18.61724
2012	ACCESS	6	6	1	0.166667	PWC	1	18.57423
2016	DIAMOND	4	6	1	0.166667	PWC	1	18.59254
2015	DIAMOND	4	6	1	0.333333	PWC	1	18.5258
2014	DIAMOND	4	6	1	0.166667	PWC	1	18.64398
2013	DIAMOND	4	6	1	0	PWC	1	18.38796
2012	DIAMOND	4	6	1	0	PWC	1	18.14166
2016	FIDELITY	4	6	1	0	E & Y	1	18.78697
2015	FIDELITY	NA		1	#VALUE!	E & Y	1	18.73445
2014	FIDELITY	3	6	1	0	E & Y	1	18.69749
2013	FIDELITY	2	6	1	0.333333	E & Y	1	18.72191
2012	FIDELITY	NA	NA	1	#VALUE!	E & Y	1	18.43651
2016	FIRST	3	6	1	0.166667	KPMG	1	17.45649
2015	FIRST			1	#DIV/0!	KPMG	1	17.51445
2014	FIRST	NA	NA	1	#VALUE!	KPMG	1	17.28045
2013	FIRST			1	#VALUE!	KPMG	1	17.47847
2012	FIRST BANK	3	6	1	0.333333	KPMG	1	17.47163
2016	FCMB	3	6	1	0	KPMG	1	16.74759
2015	FCMB	4	6	1	0	KPMG	1	16.73234
2014	FCMB	5	6	1	0	KPMG	1	16.74914
2013	FCMB			1	#DIV/0!	KPMG	1	16.74847
2012	FCMB	5	6	1	0	KPMG	1	17.96803
2016	GTB	4	6	1	0.333333	PWC	1	19.19899
2015	GTB	4	6	1	0.166667	PWC	1	19.14851
2014	GTB	4	6	1	0.166667	PWC	1	18.99289
2013	GTB	4	6	1	0.166667	PWC	1	18.88251
2012	GTB	4	6	1	0.166667	PWC	1	18.80799

2016	STANBIC IBTC	6	6	1	0.166667	KPMG	1	18.34657
2015	STANBIC IBTC	4	6	1	0.166667	KPMG	1	16.35319
2014	STANBIC IBTC	4	6	1	0.166667	KPMG	1	18.36362
2013	STANBIC IBTC	4	6	1	0	KPMG	1	18.15024
2012	STANBIC IBTC	1	6	1	0	KPMG	1	16.75345
2016	STERLING	4	6	1	0.5	E & Y	1	17.97295
2015	STERLING	5	6	1	0.333333	E & Y	1	18.10154
2014	STERLING	4	6	1	0.333333	E & Y	1	18.13244
2013	STERLING	4	6	1	0.166667	E & Y	1	17.97977
2012	STERLING	4	6	1	0.166667	E & Y	1	17.78103
2016	UBA	4	6	1	0.333333	PWC	1	19.17036
2015	UBA	4	6	1	0.333333	PWC	1	19.03422
2014	UBA	4	6	1	0.333333	PWC	1	19.08802
2013	UBA	4	6	1	0.333333	PWC	1	19.0347
2012	UBA	4	6	1	0.333333	PWC	1	19.07979
2016	UNION	5	6	1	0.166667	KPMG	1	18.20063
2015	UNION	5	6	1	0.166667	KPMG	1	18.23649
2014	UNION	4	6	1	0.166667	KPMG	1	18.15599
2013	UNION	NA	NA	1	#VALUE!	KPMG	1	18.16107
2012	UNION	NA	NA	1	#VALUE!	KPMG	1	18.35788
2016	UNITY	7	6	1	0.333333	A.Z & CO	0	17.61748
2015	UNITY	7	6	1	0.333333	A.Z & CO	0	17.4249
2014	UNITY	5	6	1	0.166667	A.Z & CO	0	17.35479
2013	UNITY	5	6	1	0.166667	A.Z & CO	0	17.41811
2012	UNITY	7	6	1	0.166667	A.Z & CO	0	17.39832
2016	WEMA	4	6	1	0	AK. W. DE	0	17.37376
2015	WEMA	4	6	1	0	AK. W. DE	0	17.31389
2014	WEMA	NA	NA	1	#VALUE!	AK. W. DE	0	17.19745
2013	WEMA	4	6	1	0	AK. W. DE	0	17.13234
2012	WEMA	NA	NA	1	#VALUE!	AK.	0	17.01706

						W. DE		
2016	ZENITH	5	6	1	0.333333	KPMG	0	19.69318
2015	ZENITH	4	8	1	0.25	KPMG	0	19.48016
2014	ZENITH	4	6	1	0.166667	KPMG	0	19.38907
2013	ZENITH	4	6	1	0.333333	KPMG	0	19.2957
2012	ZENITH	4	6	1	0.166667	KPMG	0	19.21609

Source: Published Financial Statements of sampled banks

Appendix E

SUMMARY OF DISCRETIONARY ACCRUALS CALCULATION

Step 1. Discretionary Accruals (DA) and Non-Discretionary Accruals (NDA) make up the Total Accruals (TAC) estimate of any company.

Therefore, $TAC = DAC + NDA$ (eq.1)

Consequently, $DA = TAC - NDA$ (eq.2)

However, $TAC = \text{Net Income (NI)} - \text{Cash Flow from Operations (CFO)}$ (eq.3)

NI and CFO are stated in the sampled banks' published financial statements.

NI is defined as Profit before taxation and extraordinary items)

Step 2. In order to estimate the NDA from equation 2 above, the Modified Jones Model is used. According to Keefe (2013), there are many approaches used in an attempt to estimate this NDA which typically involves a regression model.

Step 3. For the purpose of estimating the coefficients in the regression model stated in step 2, TAC is used as the dependent variable (Keefe, 2013).

While data items that should have some relationship to NDA are treated as the independent variables in the regression equation model as stated below:

$$\mathbf{TAC}_{it} = \alpha_1 + \alpha_1 (1/ATA_{it}) + \alpha_2 \{(\Delta GE_{it} - \Delta REC_{it}) / ATA_{it}\} + \alpha_3 (GPPE_{it} / ATA_{it}) + \epsilon_{it}$$

(Eq.4)

Where:

TAC_{it} = Total Accruals for bank i in year t

ATA_{it} = Average Total Assets for bank i in year t

ΔGE_{it} = Change in Gross Earnings (Difference between current and previous year Gross Earnings);

ΔREC_{it} = Change In Accounts Receivable (Difference between Loans & Advances to banks/customers for the current and previous year);

$GPPE_{it}$ = Gross Property Plant & Equipment for bank i in year t

$\alpha_1, \alpha_2, \alpha_3$ = Industry specific estimated coefficients for year t (model parameters);

ϵ_i = Error term

All variables in the empirical model are scaled by lagged Average Total Assets (ATA) in order to take care of variation of the size of the banks to avoid spurious correlation among the variables. (Roychowdhury, 2006; Yero, 2012).

Step 4. The coefficients: α_1, α_2 , and α_3 were estimated for the banks within the period. This was computed by the computer running a regression equation with TAC as a dependent variable. These coefficients along with each of the bank's data were used to estimate the individual bank's NDA for the period. See Appendix D.

$$\text{NDA} = \alpha_0 + \alpha_1 (1/\text{ATA}) + \alpha_2 (\Delta\text{GE} - \Delta\text{Rec} / \text{ATA}) + \alpha_3(\text{GPPE} / \text{ATA}) + \varepsilon$$

Step 5. This study used Time-Series Analysis to estimate the NDA. Bank-specific data for each independent variable were used for each financial year over the five year period of the study. See Appendix A curled from Microsoft Excel Spreadsheet.

Step 6. The Discretionary Accrual (DA), the study's dependent variable is therefore arrived at using the equation below:

$$\text{DAC} = \text{TAC} / \text{ATA} - \text{NDA} / \text{ATA}.$$

Step 7. The resultant DAC together with the study's independent variables is subsequently used for the descriptive analysis as well as the hypotheses testing with the aide of the STATA 12 software application. See Appendix A.

Appendix F

Multiple Linear Regression Results

```
. regress DAC ACFGD ACFM ACS ACI BIG4 FIRMSIZE
note: ACI omitted because of collinearity
```

Source	SS	df	MS	Number of obs =	49
Model	2079.17372	5	415.834744	F(5, 43) =	4.84
Residual	3695.37597	43	85.938976	Prob > F =	0.0013
				R-squared =	0.3601
				Adj R-squared =	0.2856
Total	5774.54969	48	120.303119	Root MSE =	9.2703

DAC	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
ACFGD	-8.89441	11.15988	-0.80	0.430	-31.40045 13.61163
ACFM	-.2050135	1.175092	-0.17	0.862	-2.574812 2.164786
ACS	10.47105	4.812105	2.18	0.035	.7665149 20.17559
ACI	0	(omitted)			
BIG4	1.809876	4.710454	0.38	0.703	-7.689659 11.30941
FIRMSIZE	6.219714	1.912059	3.25	0.002	2.36368 10.07575
_cons	-173.1544	40.42359	-4.28	0.000	-254.6764 -91.63251

Source: STATA 12.1 Output Derived from Sampled Data