EFFECT OF AUDIT QUALITY AND CORPORATE GOVERNANCE ON REAL ACTIVITIES MANIPULATION IN NIGERIAN BANKS

Abstract:
Nigerian banking industry has in recent times suffered different degrees of financial malfeasances which rendered many banks distress and bankrupt. This is in spite of the regulatory mechanisms put in place to monitor and control the operations of the banks. Investigations by regulators and researchers to determine the possible causes of the problem are still going on. One of the factors identified is managerial unethical practices which affect the quality of corporate reporting adversely. However, despite an extensive studies on accrual-based earnings management in the banking industry, there has been none or limited research examining whether the audit quality and corporate governance mechanisms constraint real earnings management of banks in Nigeria. This paper examined the effect of audit quality and corporate governance on real earnings management of banks in Nigeria. The paper examined two real earnings management activities; revenue manipulation to alter cash flows from operations and manipulation of discretionary expenses to smooth earnings. Correlation research design was adopted using a cross-section of 15 banks for a period of 10 years (2004-2013). Generalized Least Squares (GLS) technique of analysis was used and the study found an insignificant negative relationship between Big4 auditor and real earnings management (revenue and discretionary expenses manipulation); and positive relationship between joint audit and real earnings management. The results show that governance mechanisms (board independence and board size) have significant positive effect on cash flows manipulation, while audit committee (size, independence and financial knowledge) has a significant negative effect on cash flows manipulations during the period. Overall, the results indicate a significant relationship between aggregate real earnings management and the audit quality measures and governance mechanisms. The study recommends among others that regulators and policy makers in the Nigerian banking industry should consider real and accrual earnings management when making policy to mitigate unethical practices.

Keywords:
Earnings Quality; Earnings Management; Corporate Governance; Financial Reporting Quality
1. Introduction

The critical roles that banks play in any economy make them attract stringent prudential regulations of their operations and high supervisory framework. The stringent regulations and intensive supervisory framework in the banking industry are aimed at safeguarding the banking public confidence in the industry, and achieving a sustainable performance capable of enhancing the value of the owners and other stakeholders. Recently, banking industry in Nigeria has experienced some factors that slow the desired level of economic growth and development, which according to Soludo (2004) include weak internal control, high incidence of fraud and poor corporate governance. This is in spite of the presence of independent external audit and a code of best practices on corporate governance. While the external audit services and corporate governance are among the main monitoring and control mechanisms in corporations, their presence do not seems to produce the true and fair view of the financial performance and position of banks in Nigeria. This pointed to the possibilities of creative accounting (earnings management/manipulation) in the industry, which affect financial reporting quality adversely.

For instance, Watts and Zimmerman (1986) state that financial statements audit is a monitoring mechanism that helps reduce information asymmetry and protect the interests of the principals, especially, stockholders and potential investors, by providing reasonable assurance that financial statements prepared by management are free from material misstatements and intentional errors. Thus, external audit is critical to the quality of financial reports and the level of confidence by the users of accounting information. Therefore, quality audit is mandatory for auditors and is required by the laws and regulations of the accounting profession. Audit quality is usually regarded as a measure of the auditor’s ability to reduce noise and improve fitness in accounting data (Wallace, 1980). In the words of Lee, Leu and Wang (1999) regarded audit quality as the probability that an auditor will not issue an unqualified report for statements containing errors (intentional and unintentional). DeAngelo (1981) see it as a joint probability that a given auditor will both detect material misstatements in the client’s financial statements and report the material misstatements.

On the other hand, Heirany, Sadrabadi and Mehrjordi (2013) posit that recent attention given to the issues of corporate governance assumed that when corporate governance mechanisms are strong, managers find it unfavorable to manipulate accounting information and this consequently increases the quality and reliability of their financial reporting. Hence, corporate governance refers to the set of principles, guidelines and mechanisms adopted in order to ensure that directors and managers make decisions and act in the best interest of all the stakeholders (Sanda, Mikailu & Garba, 2005). According OECD (1999), corporate governance entails a set of relationship between company directors, its shareholders and other stakeholders; and it provides the structure through which the company’s objectives are set and the means of attaining those objectives and monitoring performance. This indicated that corporate governance is concerned with both the internal aspects of the company, such as internal control, and the external aspects. However, it
is in view of the recent defaults and failures including fraud and misstatement in the Nigerian banking industry that this study intends to critically evaluate audit quality and corporate governance in relation to real earnings management.

According to Schipper (1989) earnings management is a purposeful intervention in the external financial reporting process, with the objective of obtaining some private gain. Healy and Wahlen (1999) further explain that, earnings management occurs when managers use judgment in financial reporting and in structuring transaction to alter financial reports to either mislead some stakeholders about the underlying economic performance of a company, or to influence outcomes that depends on reported earnings. In a study by Bello (2011) earnings management is considered as ethical misconduct of accountants and it is related to the recent times corporate failures and loss of investors’ confidence on both financial reports and auditors. Extant literature shows that earnings management is perpetrated either through accrual-based manipulations or real activities manipulations. While accrual-based earnings management involved the manipulations of accruals (non-cash transactions at the discretion of the managers), real activities manipulation is a management actions that deviate from normal business practices to mislead at least some stakeholders, undertaken with the primary objective of meeting certain earnings thresholds (Roychowdhury, 2006).

A major strand of the earnings management literature examines managers’ use of discretionary accruals to shift reported earnings among fiscal periods (Bartov, Gul & Tsui, 2000). That is, managing earnings by manipulation of accruals, which has no direct cash flow consequences. This involved under provisioning for bad debt expenses and delaying asset write-offs (Roychowdhury, 2006). He added that managers also have incentives to manipulate real activities during the year to meet certain earnings targets. This manipulation affects cash flows and in some cases, accruals. Therefore, this study is motivated by the trend in the current research on earnings management which generally focuses on detecting abnormal accruals. Moreover, the previous researches have concentrated on non-financial institutions, prompting a research question of whether banks are immune to real activities manipulations or not? This constitute the gap that this study attempt to fill. This study contributes to the literature on earnings management by presenting evidence on the management of real activities, which has received little attention to date. Hence, the study examine revenue manipulation and discretionary expenses manipulation in relation to audit quality and corporate governance mechanisms.

To the best knowledge of this study, only a few studies have examined the effect of audit quality and corporate governance on real earnings management. These studies include Osma (2008) in United Kingdom, Visvanathan (2008), Zhao et al. (2012), and Ge and Kim (2013) in USA who studied corporate governance in relation to real activities manipulations.
1.2 Research Questions

The study is designed to provide answers to the following research questions:

i. What is the effect of audit quality and corporate governance on the revenue manipulation in the Nigerian banking industry?

ii. To what extent does audit quality and corporate governance affect discretionary expenses manipulation in the Nigerian banking industry?

iii. How does audit quality and corporate governance affect aggregate real activities manipulation in the Nigerian banking industry?

1.3 Research Objectives

The main objective of the study is to examine the effect of audit quality and corporate governance on real earnings management in the Nigerian banking industry. The specific objectives of the study are:

i. To evaluate the impact of audit quality and corporate governance on revenue manipulations in the Nigerian banking industry.

ii. To assess the effect of audit quality and corporate governance on discretionary expenses manipulations in the Nigerian banking industry.

iii. To examine the impact of audit quality and corporate governance on the aggregate real activities manipulations in the Nigerian banking industry.

1.4 Research Hypotheses

Consistent with both theoretical and empirical predictions and in line with the objectives of the study, the following hypotheses are formulated in null form;

H$_{01}$: Audit quality and corporate governance have no significant effect on revenue manipulations in the Nigerian banking industry.

H$_{02}$: Audit quality and corporate governance have no significant effect on discretionary expenses manipulations in the Nigerian banking industry.

H$_{03}$: Audit quality and corporate governance have no significant effect on aggregate real activities manipulations in the Nigerian banking industry.

1.5 Significance and Scope of the Study

This research is significance in investigating the relationship between the two major control mechanisms (audit and corporate governance) in the corporate world, and real earnings
management in the banking sector. The study will contribute to the existing body of literature on earnings management and corporate governance from financial institutions, which is largely ignored in the literature. Therefore, the findings of the study are expected to be useful to managers, regulators (SEC and CBN), accounting standard bodies, investors and researchers.

Real earnings management has many aspects, this study is restricted to sales (revenue) manipulations and discretionary expenses manipulations, which are common and peculiar to financial institutions. On the other hand, audit quality attributes considered in this study are the BIG4 auditor type and joint audit, while corporate governance is proxy by the board of directors' size, composition and audit committee attributes. The study covers a period of ten years (2004-2013). The study is however restricted to Deposit Money Banks (DMBs) listed on the floor of the Nigerian Stock Exchange (NSE) market during the period covered by the study.

The study proceed as follows. Section two presents related literature and theoretical framework. The data and methodology are presented in section three. Sections four present the results, while section five presents conclusions and recommendations.

2. Literature Review

2.1 Audit Quality

An audit refers to a systematic process of objectively obtaining and evaluating evidence in respect of certain assertion about economic actions and events to ascertain the degree of correspondence between those assertions and established criteria and reporting the results to interested parties over a particular period of time (the Institute of Chartered Accountants' of Nigeria, ICAN 2010). The institute also defined an auditor as a person or audit firm with final responsibility for the audit. Specifically, ICAN regarded external auditor as independent auditor who is not subject to management controls and linked him to independent audit which refers to the providing reasonable assurance that published audited financial statements are free from material misstatement and are in accordance with legislation and relevant accounting standards. However, Angus (2004) argue that the recent well publicized audit failures in Enron and other high-profile companies make interest in audit quality at an all-time high. Similarly, it created a crises of public confidence concerning the corporate governance and auditing of publicly listed companies.

Many authors attempt to conceptualized audit quality. For example, Wallace (1980) defined audit quality as a measure of the auditor’s ability to reduce noise and improve fitness in accounting data. DeAngelo (1981) defined audit quality from market perspective, in which it refers to the market-based joint probability that a given auditor will both detect material misstatements in the client’s financial statements and report the material misstatements. She emphasizes the role of the market in assessing audit quality through financial reporting. From her definition, the auditor’s ability to detect material misstatements is termed auditor competence, while the willingness to
report discovered material misstatements is regarded as auditor independence. Titman and Trueman (1986) see audit quality as the accuracy of the information reported by auditors. Audit quality according to Lee, Leu and Wang (1999) refers to the probability that an auditor will not issue an unqualified report for statements containing errors, intentional and otherwise.

Audit quality received adequate attention from all stakeholders due to the deep concern about the quality of reported accounting earnings. One of the audit quality models indicated that audit quality comprises of technical quality and service quality (Angus, 2004). The components of the technical quality includes status (reputation and capability), independence and knowledge (expertise and experience); while the service quality are the responsiveness, Non-audit services and understanding (empathy and client service). Therefore, an audit assignment with technical and service quality is capable of detecting and reporting material misstatement and fraud including real activities manipulations in the financial reports.

Based on an in-depth interviews of 20 experienced auditors Commerford et al., (2013) provide detailed insights into auditors’ perspectives concerning real earnings management. The interviews reveal that auditors are aware of various real activities manipulations techniques, and that most interviewees care about real activities manipulations primarily because it may signal the use of other, less acceptable earnings management methods that clients may be using to meet targets. In terms of specific real earnings management methods, auditors are most concerned about inventory overproduction and sales manipulation, each of which can result in future accounting issues.

Some of the early empirical works on audit quality provide an insight into the relation between earnings management and audit quality. For example, DeAngelo (1981) revealed that auditor size has a positive relationship with audit quality, because large audit firm has more to lose by failing to report a discovered material misstatement in a client’s records. Teoh and Wong (1993) used Big8 audit firm as proxy for size and found that Big 8 clients are associated with higher earnings response coefficients. DeFond and Jiambalvo (1993) show that auditor-client conflicts relating to income increasing accounting practices are more likely to occur if the auditor belongs to the Big Eight. They conclude that the Big Eight are better able to resist managerial pressure and are more likely to maintain an independent opinion. Francis et al. (1999) also observe a lower level of abnormal accruals among Big Six-audited companies.

2.2 Corporate Governance

In response to series of corporate failures that are related to governance, the Organization for Economic Corporation and Development (OECD) embarked on a project that led to the production of code of best practices on corporate governances for public companies. This followed the council of OECD Ministers’ meeting in April 1998, and in May 1999 the Ministers approved the principles of corporate governance standards and guidelines for corporate entities (OECD, 1999).
to mitigate the issues believed to be cause of corporate failures. Corporate governance is defined by OECD (1999) as a set of relationship between company directors, its shareholders and other stakeholders; It also provide the structure through which the company’s objectives are set and the means of attaining those objectives and monitoring performance.

The SEC (2003) and CBN (2006) see corporate governance as a system by which corporations are governed and controlled with a view to increasing shareholder value and meeting the expectation of the other stakeholders. The code further emphasizes that, the need for the practice of good corporate governance by corporation particularly financial institutions, is the retention of public confidence through the enthronement of good corporate governance considering the utmost importance given to the banking industry. According to the Code, the primary responsibility for ensuring good corporate governance in banks lies with the board of directors. And, the principal objective of the board is to ensure that, banks are properly managed and management performance is effectively overseen to protect and enhance the interest of all the banks stakeholders.

Following the persistent corporate crises in Nigeria, on June 15, 2000 a seventeen (17) member committee headed was inaugurated by the Nigerian Securities and Exchange Commission (SEC) in collaboration with the Corporate Affairs Commission (CAC) to align the corporate governance of companies in Nigeria with the international best practices (SEC, 2003). The committee’s terms of reference include the identification of weaknesses in the corporate governance practices in Nigeria, examining practices in other jurisdiction with a view of adopting international best practices in corporate governance, making recommendations on necessary changes to current practice and evaluating any other issue relating to corporate governance in Nigeria. Specifically, the committee was saddle with the responsibility to identify weaknesses in the corporate governance in Nigeria and come out with possible changes capable of improving the corporate governance practice. The committee successfully come up with Nigerian Code of Best Practices on corporate governance for public companies and private companies with multiple stakeholders in 2003. Moreover, following some cases of corporate failures in Nigeria, a committee was set up to review the SEC 2003 code of corporate governance to address its weaknesses and to improve the mechanisms for its enforceability. The committee came up with a reviewed code of best practices for public companies in Nigeria effective April, 2011.

In another efforts to preserve public confidence in banks, the CBN in 2006 established a code of corporate Governance for Banks in Nigeria post-consolidation, effective April 2006. The code identified weak internal controls, non-compliance with laid-down internal controls and operations procedures; poor risk management practices resulting in large quantum of non-performing credits including insider-related credits, and abuses in lending, as problems of the Nigerian banking sector (CBN, 2006). According to the code the board of directors of banks should be of sufficient size relative to the scale and complexity of the bank operations and should contain individuals in such a way as to ensure diversity of experience without compromising independence, compatibility, and integrity in carrying out their role. Moreover, the board is composed of executive
and non-executive directors, the number of non-executive directors should be more than that of executive directors subject to a maximum board size of 20 directors, and at least two non-executive directors should be independent directors.

Specifically, the code mandated at least three major board committees that a bank should have; these are the Board Credit Committee, Board Audit Committee, and the Board Risk Management Committee. These committees are designed to ensure the effectiveness and efficiency of the board in monitoring and controlling the management and the operations of the banks with an eye of achieving the desired level of performance. However, the board audit committee functions involve the evaluation of the system, processes, procedures and rules governing the operations and reporting the state of affairs to the stakeholders. Therefore, the code mandated an effective and efficient audit committee in the board of every bank, it is required that all the members of the audit committee should be non-executive directors and ordinary shareholders appointed at the annual general meeting. The code also required that some of the committee members should be knowledgeable in financial matters and internal control processes. Moreover, banks audit committee is responsible for the review of the integrity of the bank’s financial reporting and oversee the independence and objectivity of the external auditors. This critical role of audit committee is believed to be a means of improving economic efficiency and stakeholders' confidence.

Researchers have examined the relationship between corporate governance and earnings management in different jurisdiction using different methodologies. For instance, Cornett et al. (2009) examined the effect of corporate governance mechanisms on earnings and earnings management at the largest publicly traded bank holding companies in the United States. They find that CEO pay-for-performance sensitivity (PPS), board independence, and capital are positively related to earnings and that earnings, board independence, and capital are negatively related to earnings management. They also show that PPS is positively related to earnings management. Finally, they assert that PPS and board independence are positively related and the relationship is bidirectional. While both PPS and board independence are associated with higher earnings, their results indicate that more independent boards appear to constrain the earnings management that greater PPS compels.

Dimitropoulosb and Asterioua (2010) assess the effect of board composition on the informativeness and quality of annual earnings. They find that the informativeness of annual accounting earnings is positively related to the fraction of outside directors serving on the board, but it is not related to board size. Moreover, firms with a higher proportion of outside board members proved to be more conservative when reporting bad news but on the contrary they do not display greater timeliness on the recognition of good news. Additionally, they indicate that firms with a higher proportion of outside directors report earnings of higher quality compared to firms with a low proportion of outside directors.
Ge and Kim (2013) investigate the effect of board governance and takeover protection on real earnings management. The study consider four types of real earnings management; sales manipulation, overproduction, the abnormal reduction of research and development (R&D) expenses, and the abnormal reduction of other discretionary expenditures. They find that the level of real earnings management (sales manipulation, abnormal declines in R&D expenses, and other discretionary expenses) increases with better board governance and decreases with higher takeover protection. These two governance factors generally have no significant effect on overproduction. They further find that firms substitute accrual-based earnings management with sales manipulation and abnormal cuts in discretionary expenses, and the substitution effect is more pronounced in firms with stronger board governance. Overall, the findings indicate that the level of real earnings management is higher when a firm is faced with tough board monitoring, and that takeover protection may reduce managerial incentives for real earnings management.

Other studies that examined the effect of corporate governance on real earnings management includes Visvanathan (2008) in U.S who finds that most key governance variables, except board independence, do not play a role in limiting real earnings management. Osma (2008) using UK data finds that, in the United Kingdom, independent boards efficiently constrain the manipulation of R&D expenditures, while Zhao et al. (2012) find that staggered boards reduce managerial pressure to resort to real earnings management.

2.3 Real Earnings Management

Earnings management has been a top topic in financial reporting literature, the concept is defined by Schipper (1989) as a purposeful intervention in the external financial reporting process, with the objective of obtaining some private gains. According to Healy and Wahlen (1999) earnings management is a situation that occurs when managers use judgment in financial reporting and in structuring transaction to alter financial reports to either mislead some stakeholders about the underlying economic performance of a company, or to influence outcomes that depends on reported earnings.

According to Dechow and Skinner (2000) cited in Gunny (2005), earnings management can be classified into three categories: fraudulent accounting, accruals management and real earnings management. Fraudulent accounting involves accounting choices that violate GAAP, and accruals management involves within-GAAP choices that try to “obscure” or “mask” true economic performance. Real earnings management occurs when managers undertake actions that deviate from the first best practice to increase reported earnings. Moreover, Commerford et al., (2013) stated that companies manage earnings through the use of accruals, estimates, and accounting policies (accounting earnings management). They manage earnings through the strategic timing of investing, financing, and operating decisions (real earnings management).
Roychowdhury (2006) is among the first to provide a comprehensive overview of real earnings management of operational activities. Specifically, he develops empirical methods to detect real activities manipulation, focusing on poor-quality sales manipulation, overproduction and reduction in discretionary expenses as the primary ways of engaging in real earnings management. He studies real activities manipulation in the setting of firms trying to beat the zero earnings benchmark and finds evidence consistent with the hypothesis that firms try to avoid losses by using real activities manipulation.

Roychowdhury (2006), Cohen et al. (2008), Cohen and Zarowin (2010), and Zang (2012) construct and documented four real earnings management measures: abnormal cash flow from operations (proxy for sales manipulation), abnormal production cost (proxy for overproduction), the abnormal reduction of R&D expenses, and the abnormal reduction of discretionary expenses (other than R&D). For instance, according to Graham et al., (2005) managers can increase sales by offering more lenient credit terms (sales manipulation), while offering more lenient credit terms, such as a longer payment period, increases a firm’s risk of exposure to uncollectible accounts. Similarly, managers can also produce excessive amounts of goods to inflate earnings.

David et al. (2001) stated another form of real earnings management which is abnormally large cuts in discretionary expenses. Discretionary expenditures (such as R&D, employee training, and advertising expenses) are incurred in the current period while payoffs are often realized over the long term. An abnormal cut of discretionary expenses inflates earnings immediately at the expense of future payoff. Hence, real earnings management reserves earnings in the current period while deferring its negative effects to the future.

2.4 Theoretical Framework

The principal-agent relationship between the management and shareholders informed the need to hire auditors and institute a code of corporate governance to minimize the agency problems. According to Dang (2004), in situations where interests of management conflicts with the interests of stockholders and the fact that management compensation often is based on reported earnings and in order to maximize their wealth, managers have incentives to manage reported earnings and they often have the ability to do so. Therefore, from the agency theory, audit is a monitoring mechanism that provides reasonable assurance that financial statements prepared by managers are free of material misstatement and therefore protects the interest of stakeholders. However, high audit quality is essential for auditors to successfully discharge this responsibility. Therefore, the higher the audit quality, the more likely that the audit exercise could detect management’s manipulations in the financial statements.

Some of the instances that induce accounting manipulations by the managers according to Brau and Fawcett (2006) follows from the fact that accounting earnings represent the most important positive signal that executives attempt to send to outside investors. Graham et al. (2005) added
that managers manipulate earnings to meet earnings benchmarks, because of its importance to establish credibility with the capital market and to maintain or increase a firm’s stock price. They also pointed to the managers’ career concern. Frequent failures to meet earnings targets is a sign of incompetent manager. Thus, by managing earnings to meet earnings targets, managers can extract rents from shareholders (in a form of compensation and reduced likelihood of dismissal over poor performance).

Consistent with this view, prior empirical studies (Gramlich and Sorensen, 2004; Morsfield and Tan, 2006; Fan 2007; Chang et al., 2010) find evidence that firms engage in accrual-based manipulation to increase reported earnings. However, Roychowdhury (2006) has developed empirical models based on real activities manipulations that allow researchers to separate the normal from the abnormal levels of real operational activities as reflected in cash flows from operations, production costs, and discretionary expenditures. He provides evidence that that managers engage in real activities manipulation to meet certain earnings targets. Moreover, the model developed by Roychowdhury confirmed that expected or normal levels of real activities are associated with optimal operational decisions, while their unexpected, abnormal levels are associated with sub-optimal decisions based on managerial opportunism to boost reported earnings.

However, Fama and Jensen (1983) posit that the board of directors is the highest internal control mechanism responsible for monitoring the actions of top management. Most of the accounting and finance researches (like Klein 2002; Xie et al. 2002; Peasnell et al. 2005; Cornett et al. 2006) indicate that boards play an important role in reducing the incidence of financial statement fraud or constraining accrual-based earnings management. In essence, Ge and Kim (2013) summarize that under effective monitoring perspective, the effect of strong board governance on real earnings management should be negative. While under the market pressure perspective, the effect of board governance on real earnings management is positive. Therefore it is based on these theoretical frameworks that this study intends to examine the role of audit quality and corporate governance on real earnings management in the Nigerian banking industry.

3. Research Methodology

3.1 Research Design

This study adopted correlation research design in assessing the effect of audit quality, and corporate governance on real earnings management in the deposit money banks in Nigeria. Similarly, a two stage research design is applied; in the first stage, the study estimated the abnormal (unexpected) portion of the revenue and discretionary expenses from the total revenue and total discretionary expenses. While in the last stage the effect of the audit quality and corporate governance on real earnings management of the deposit money banks is examined.
The population of this study comprises of all the 17 deposit money banks listed on the floor of the Nigerian Stock Exchange (NSE) Market as at 31st December, 2013. However, all the banks that were not in the NSE listing for all the period (2004 through 2013) covered by the study were filtered out, because of the difficulties in accessing their data. Based on this, the population was reduced to 15 banks, and hence the sample of the study.

3.2 Data and Technique of Data Analysis

The study used secondary data from the NSE fact-book and the annual reports and accounts of the sampled deposit money banks for the period of ten years (2004-2013). Therefore, our database consists of 150 observations, that is, 15 banks for 10 years.

The study employed panel regression technique of data analysis using Generalized Least Squares (GLS) regression estimators. This is due to the fact that the data is not normal and the presence of heteroskedasticity. This is necessary, because the use of OLS in the presence of heteroskedasticity provide spurious regression problem that can lead to statistical bias (Granger & Newbold 1974). Similarly, Gujarati (2004) opined that whatever conclusion is drawn or inference we make may be very misleading. Moreover, the traditional OLS assumes that the variance of the error term has to be constant and the same for all observations (homoscedastic) and if this assumption is violated that is the variance is non-constant (heteroskedasticity), the usual standard error terms of the estimated parameters are biased and inconsistent (Adren, 2007). Therefore, estimation with OLS when heteroskedasticity problem is been addressed is capable of producing estimators that are BLUE (Best Linear Unbiased Estimators). The analysis is conducted using Statistics/Data Analysis Software (STATA 11.2).

3.3 Variables Measurements and Models Specification

In this study, the empirical models developed by Roychowdhury (2006), and used by Cohen et al. (2008), Cohen and Zarowin (2010), Zang (2012) and Ge and Kim (2013) are adopted. The models are mathematically expressed as follows;

\[ \frac{CFO_{it}}{A_{it-1}} = \alpha_0 \left( \frac{1}{A_{it-1}} \right) + \beta_1 \frac{REV_{it}}{\left( \frac{1}{A_{it-1}} \right)} + \beta_2 \Delta REV_{it} \left( \frac{1}{A_{it-1}} \right) + \mu_{it} \] \hspace{2cm} \text{i}

The abnormal cash flow from operations is the residual from model a (i.e the difference between normal cash flows and the unexplained portion)

\[ \frac{DISCX_{it}}{A_{it-1}} = \alpha_0 \left( \frac{1}{A_{it-1}} \right) + \beta_1 \frac{REV_{it}}{\left( \frac{1}{A_{it-1}} \right)} + \mu_{it} \] \hspace{1cm} \text{ii}
The abnormal discretionary expenses is the residual from model b above. While aggregate real earnings management (REM) is the sum of abnormal cash flow from operations and the abnormal discretionary expenses.

Where CFO$_{it}$ is operating cash flows of bank I in year $t$; REV$_{it}$ is gross revenue of bank I in year $t$; ΔREV$_{it}$ is changes in revenue (difference between REV in year $t_1$ and $t_1$) of bank I in year $t$; A$_{it-1}$ is lag total assets of bank I in year $t$; and DISCX$_{it}$ is discretionary expenses (sum of selling and distribution expenses, administration expenses and advertising expenses) of bank I in year $t$. And $\alpha$ is the intercept, while $\beta_1$, and $\beta_2$ are the coefficients/estimators. $\mu_i$ is the Residual.

However, to examine the effects of audit quality, corporate governance on the real earnings management of deposit money banks in Nigeria, the study estimates the following models:

$$ABCFO_{it} = \alpha_0 + \beta_1 BIG4_{it} + \beta_2 JAUD_{it} + \beta_3 BIND_{it} + \beta_4 BSIZ_{it} + \beta_5 ACOM_{it} + \mu_{it}$$ ..................................iii

$$ABDISCX_{it} = \alpha_0 + \beta_1 BIG4_{it} + \beta_2 JAUD_{it} + \beta_3 BIND_{it} + \beta_4 BSIZ_{it} + \beta_5 ACOM_{it} + \mu_{it}$$ ..................................iv

$$REM_{it} = \alpha_0 + \beta_1 BIG4_{it} + \beta_2 JAUD_{it} + \beta_3 BIND_{it} + \beta_4 BSIZ_{it} + \beta_5 ACOM_{it} + \mu_{it}$$ ..................................v

Where ABCFO$_{it}$ is the abnormal operating cash flow (proxy for revenue manipulation) of bank i in year $t$; ABDISCX$_{it}$ is the abnormal discretionary expenses (proxy for discretionary expenses manipulation) of bank i in year $t$; BIG4$_{it}$ is the big four auditor type (proxy for audit quality) of bank i in year $t$, measured by 1 if a bank is audited by one of the big four firms, and 0 for otherwise; JAUD$_{it}$ is the joint audit services in bank i in year $t$, measured by 1 if a bank employed 2 or more audit firm in a year, and 0 for otherwise; BIND$_{it}$ is the board of directors' independence of bank i in year $t$, measure as a proportion of external/non-executive/independence directors in the board of a bank; BSIZ$_{it}$ board of directors size of bank I in year $t$, measured as the total number of directors sitting on the board of a bank; ACOM$_{it}$ is the audit committee attributes of bank I in year $t$, measure by a total score of 3, 1 for size, 1 for independence and 1 for financial knowledge.

4. Results and Discussions

4.2 Descriptive Statistics

This section chapter presents and discusses the descriptive statistics of the data collected, as presented in Table 1;
Table 1: Descriptive Statistics

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<th>Max</th>
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<td>13.94</td>
<td>2.6653</td>
<td>7.0000</td>
<td>21.0000</td>
<td>-1.1659</td>
<td>3.4592</td>
<td>150</td>
</tr>
<tr>
<td>ACOM</td>
<td>2.5933</td>
<td>0.4929</td>
<td>2.0000</td>
<td>3.0000</td>
<td>-0.3800</td>
<td>1.1444</td>
<td>150</td>
</tr>
</tbody>
</table>

Source: STATA OUTPUT (Appendix)

Table 1 indicates that the abnormal cash flow from operations (ABCFO) has an average value of 0.0894 with standard deviation of 0.0095, and minimum and maximum values of -0.0068 and 0.0906 respectively. The standard deviation signifies that the data deviate from both sides of the mean value by 0.0095. The coefficient of Skewness -8.9719 indicates that the data is negatively skewed, that is, do not meet the symmetrical distribution criterion. Similarly, the value of kurtosis 83.9851 on the other hand, suggests that the data does not follow the normal curve as requires by the Gaussian distribution assumption. The Table also shows that the sample banks have an average abnormal discretionary expense of 0.0381, with standard deviation of 0.0016, and the minimum and maximum value of 0.0182 and 0.0382 respectively. The standard deviation suggests that the data is dispersed from the mean value by 0.0016. Moreover, the kurtosis value of 148.0022 shows that the data is non-normal, on the other hand, the coefficient of Skewness -12.1243 implies that the data is negatively skewed, and thus, the symmetrical distribution assumption is not been met.

The descriptive statistics indicates that the average aggregate real earnings management (REM) during the period is 0.1275 with standard deviation of 0.0105, and minimum and maximum values of 0.0314 and 0.1289 respectively. The coefficient of Skewness -8.5447 indicates that the data is
negatively skewed, that is, do not meet the symmetrical distribution criterion. Similarly, the value of kurtosis 74.3529 on the other hand, suggests that the data does not follow the normal curve as requires by the Gaussian distribution assumption. Table 1 shows that on average, 92% of the sample banks employed the services of BIG4 audit firms, with standard deviation of 0.2722, and the minimum and maximum value of 0 and 1 respectively. The standard deviation suggests that the data is dispersed from the mean value by 27.22%. Moreover, the coefficient of Skewness -3.0963 implies that the data is negatively skewed, and thus, the symmetrical distribution assumption is not been met, on the other hand, the kurtosis value of 10.5867 support that the data does not follow the normal distribution.

Table 1 also indicates that the 18.67% of the sample banks employed the services of joint audit (JAUD) with standard deviation of 0.3909, and minimum and maximum values of 0 and 1 respectively. The coefficient of Skewness 1.6083 indicates that the data is negatively skewed, and do not meet the symmetrical distribution criterion. Similarly, the value of kurtosis 3.5867 on the other hand, suggests that the data does not follow the normal curve as requires by the Gaussian distribution assumption. Similarly, the results in Table 1 show that the sample banks have 61.54% composition of external/non-executive/independent directors (BIND) in their boards, with standard deviation of 0.0745, and the minimum and maximum value of 0.4286 and 0.8182 respectively. The skewness value of 0.2676 shows that the data does not follow the normal distribution, on the other hand, the coefficient of kurtosis 2.8279 implies that the data is skewed, and thus, the symmetrical distribution assumption is not been met. The Table also shows that the average board size of the sample banks (BSIZ) is 13 members, with standard deviation of 2.6653, and minimum and maximum values of 7 and 21 respectively. The coefficient of Skewness -1.1659 indicates that the data is negatively skewed, and do not meet the symmetrical distribution criterion. Similarly, the value of kurtosis 3.4592 on the other hand, suggests that the data does not follow the normal curve as requires by the Gaussian distribution assumption. Similarly, the results in the Table show that the sample banks score an average of 2 for size, independence and financial knowledge (ACOM), with standard deviation of 0.4929, and the minimum and maximum value of 2 and 3 respectively. The skewness value of -0.3800 shows that the data does not follow the normal distribution, on the other hand, the coefficient of kurtosis 1.1444 implies that the data is skewed, and thus, the symmetrical distribution assumption is not been met.

The analysis of the data suggests that the data did not follow the normal distribution. Therefore, the study adopts Shapiro Wilk test for normal data to find statistical evidence as to whether the data of the variables of the study follow the normal curve or not. The results of the test are presented in table 2 as follows;
### Table 2: Normal Data Test

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>W</th>
<th>V</th>
<th>Z</th>
<th>P-Values</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABCFO</td>
<td>0.0946</td>
<td>105.343</td>
<td>10.558</td>
<td>0.0000</td>
<td>150</td>
</tr>
<tr>
<td>ABDISX</td>
<td>0.0569</td>
<td>109.737</td>
<td>10.651</td>
<td>0.0000</td>
<td>150</td>
</tr>
<tr>
<td>REM</td>
<td>0.0953</td>
<td>105.263</td>
<td>10.556</td>
<td>0.0000</td>
<td>150</td>
</tr>
<tr>
<td>BIG4</td>
<td>0.8668</td>
<td>15.502</td>
<td>6.214</td>
<td>0.0000</td>
<td>150</td>
</tr>
<tr>
<td>JAUD</td>
<td>0.9554</td>
<td>5.188</td>
<td>3.732</td>
<td>0.0000</td>
<td>150</td>
</tr>
<tr>
<td>BIND</td>
<td>0.9818</td>
<td>2.115</td>
<td>1.698</td>
<td>0.0447</td>
<td>150</td>
</tr>
<tr>
<td>BSIZ</td>
<td>0.9911</td>
<td>1.032</td>
<td>0.072</td>
<td>0.4713</td>
<td>150</td>
</tr>
<tr>
<td>ACOM</td>
<td>0.9982</td>
<td>0.214</td>
<td>-3.492</td>
<td>0.9998</td>
<td>150</td>
</tr>
</tbody>
</table>

Source: STATA OUTPUT (Appendix)

Null hypothesis principle is used in the Shapiro-Wilk (W) test for normal data, under the principle; null hypothesis that ‘the data is normally distributed’ is tested. Table 2 indicates that data from the variables of the model are not normally distributed because the P-values are significant at 1% level of significance (p-values of 0.0000), except the BSIZ and ACOM variable, which are not statistical significant at 5% level of significance (p-value of 0.4713 and 0.9998). Therefore, the null hypothesis (that, the data is normally distributed) is rejected for ABCFO, ABDISX, REM, BIG4, JAUD, and BIND, while not rejected for the BSIZ and ACOM. This may lead to some problems in OLS regression and, hence the need for a more generalized regression models.

Similarly, stationarity of the variables is another requirement of regression technique, and to ensure data reliability and to avoid those factors that could bias our results. Hadri Langrange Multiplier (LM) test for unit root is applied to ascertain whether the data of the variables is stationary or not, the results of the tests is presented in table 3.
Table 3: Unit Root Test

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>No. of Panels</th>
<th>No. of Periods</th>
<th>Z-Statistic</th>
<th>P-Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABCFO</td>
<td>15</td>
<td>10</td>
<td>3.7410</td>
<td>0.0001</td>
</tr>
<tr>
<td>ABDISX</td>
<td>15</td>
<td>10</td>
<td>0.9917</td>
<td>0.1607</td>
</tr>
<tr>
<td>REM</td>
<td>15</td>
<td>10</td>
<td>4.2685</td>
<td>0.0000</td>
</tr>
<tr>
<td>BIG4</td>
<td>15</td>
<td>10</td>
<td>7.4675</td>
<td>0.0000</td>
</tr>
<tr>
<td>JAUD</td>
<td>15</td>
<td>10</td>
<td>14.3426</td>
<td>0.0000</td>
</tr>
<tr>
<td>BIND</td>
<td>15</td>
<td>10</td>
<td>10.5893</td>
<td>0.0000</td>
</tr>
<tr>
<td>BSIZ</td>
<td>15</td>
<td>10</td>
<td>9.5146</td>
<td>0.0000</td>
</tr>
<tr>
<td>ACOM</td>
<td>15</td>
<td>10</td>
<td>11.5457</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Source: STATA OUTPUT (Appendix)

The Hadri LM test for panel data has as the null hypothesis that all the panels are (trend) stationery. The results from table 3 show that ABDISX variable has no unit root (that is, is stationery) from the p-values of 0.1607. The table on the other hand indicates that all the other variables have unit root (non-stationery) as shown by the p-values of 0.0000, which implies 1% level of significance, and hence rejecting the null hypothesis that the variable is stationery.

A panel variable is said to be stationery if its mean and variance are constant over time and the value of the covariance between the two time periods depends only on the distance or gap or lag between the two time periods and not the actual time at which the covariance is computed (Gujarati, 2004). According to him, if a time series is non-stationery (has unit root), it is not possible to generalize the result to other time periods, and thus, a non-stationery may have a little practical value.

Therefore, following analysis of the descriptive statistics and normality of the data, the inferential statistics of the data collected from which the hypotheses of the study are tested are presented and interpreted in the following section.
### 4.3 Correlation Results

In this section, the summary of the Pearson correlation Coefficients of the variables of the study are presented in Table 4 as follows;

**Table 4: Correlation Matrix**

<table>
<thead>
<tr>
<th>Var.</th>
<th>ABCFO</th>
<th>ABDISX</th>
<th>REM</th>
<th>BIG4</th>
<th>JAUD</th>
<th>BSIZ</th>
<th>BIND</th>
<th>ACOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABCFO</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABDISX</td>
<td>0.5523*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REM</td>
<td>0.9916*</td>
<td>0.6554*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIG4</td>
<td>-0.0331</td>
<td>-0.0235</td>
<td>-0.0337</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JAUD</td>
<td>0.0547</td>
<td>0.0393</td>
<td>0.0556</td>
<td>0.1413</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSIZ</td>
<td>-0.0009</td>
<td>-0.0007</td>
<td>-0.0009</td>
<td>0.2246*</td>
<td>0.2363*</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIND</td>
<td>0.0661</td>
<td>0.0479</td>
<td>0.0674</td>
<td>-0.0722</td>
<td>0.0063</td>
<td>-0.2321</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ACOM</td>
<td>-0.0923</td>
<td>-0.0666</td>
<td>-0.0939</td>
<td>0.2561*</td>
<td>0.0132</td>
<td>0.3696</td>
<td>-0.1047</td>
<td>1.000</td>
</tr>
</tbody>
</table>

*significant at 1% level

**Source: STATA OUTPUT (Appendix)**

The correlation matrix from Table 4 shows the relationships between the audit quality variables, corporate governance variables and real earnings management in the deposit money banks in Nigeria. The table shows a negative association between BIG4 and REM, but the results is not statistically significant at all levels of significance; the results on the other hand show a positive relationship between JAUD and REM; while the relation between BSIZ and REM is negative and insignificant. Moreover, the association between BIND and REM is positive and statistically insignificant. Lastly, the table shows an insignificant negative relationship between ACOM and REM. Therefore, following the analysis of the relationships among the variables of the study, the regression results as well as the hypotheses testing are presented, analyze and interpreted in the following section.
4.4 Regression Results and Hypotheses Testing

This section presents and analyzes the regression results of the models of the study. The section begins with the analysis of model one as presented in table 4.5.

Audit Quality, Corporate Governance and Revenue Manipulation

The results of model one is used to test this hypothesis as presented in table 5

Table 5: GLS Estimators: Model one

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Coefficients</th>
<th>Z</th>
<th>P-Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIG4</td>
<td>-0.0002</td>
<td>-0.57</td>
<td>0.571</td>
</tr>
<tr>
<td>JAUD</td>
<td>0.0005</td>
<td>3.25</td>
<td>0.001</td>
</tr>
<tr>
<td>BIND</td>
<td>0.0008</td>
<td>5.20</td>
<td>0.000</td>
</tr>
<tr>
<td>BSIZ</td>
<td>0.0048</td>
<td>6.66</td>
<td>0.000</td>
</tr>
<tr>
<td>ACOM</td>
<td>-0.0008</td>
<td>-4.50</td>
<td>0.000</td>
</tr>
<tr>
<td>CONST.</td>
<td>0.0879</td>
<td>128.22</td>
<td>0.000</td>
</tr>
<tr>
<td>WaldChi2</td>
<td>53.83</td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td>Hottest: Chi2</td>
<td>95.26</td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>1.16</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: STATA OUTPUT (Appendix)

Table 5 shows that the model is fit at 99% confidence level, from the WaldChi2 of 53.83 and the P-value of 0.000. However, the results show a presence of Heteroskedasticity in the panel as indicated by the Breuch Pagan/Cook-Weisberg test for Heteroskedasticity Chi2 of 95.26 with p-value of 0.000. This proved that the assumption of constant variance of the error term (Homocedasticity) is not been met, and as a result OLS estimators are not BLUE. The table on the other hand, indicated the absence of the perfect Multicolinearity among the explanatory variables, as shown by the mean VIF of 1.16. The decision criterion for the Variance Inflation Factor is that a value of 10 and above implies the presence of perfect Multicollinearity.
The results from table 5 show that audit quality (BIG4) has a negative effect on the revenue manipulation during the period of the study, from the coefficient of -0.0002 with Z-value of -0.57 and p-value of 0.571, implying that the results is not statistically significant at all levels. JAUD on the other hand has a statistical significant positive effect on the revenue manipulation of deposit money banks in Nigeria during the period, from the coefficient of 0.0005 with z-value of 3.25 and p-value of 0.001, suggesting that the result is significant at 99% confidence level. Similarly, BIND has statistical significant positive effect on the revenue manipulation of deposit money banks in Nigeria during the period, from the coefficient of 0.0008 with z-value of 5.20 and p-value of 0.00, suggesting that the result is significant at 99% confidence level. Moreover, BSIZ has a statistical significant positive effect on the revenue manipulation of deposit money banks in Nigeria during the period, from the coefficient of 0.0048 with z-value of 6.66 and p-value of 0.00, suggesting that the result is significant at 99% confidence level. Lastly, the results show that ACOM has a statistical significant negative effect on the revenue manipulation of deposit money banks in Nigeria during the period, from the coefficient of -0.0008 with z-value of -4.50 and p-value of 0.000, suggesting that the result is significant at 99% confidence level.

However, the based on the analysis of the results, the study reject the null hypothesis one (H01), and infers that audit quality has significant effect on the revenue manipulation in the Nigerian banking industry. The study also infers that corporate governance has significant effect on the revenue manipulation in the industry.

**Audit Quality, Corporate Governance and Discretionary Expenses Manipulation**

The results of model two is used to test this hypothesis as presented in table 6

**Table 6: GLS Estimators: Model Two**

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Coefficients</th>
<th>Z</th>
<th>P-Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIG4</td>
<td>-0.0026</td>
<td>-0.81</td>
<td>0.417</td>
</tr>
<tr>
<td>JAUD</td>
<td>0.0013</td>
<td>0.57</td>
<td>0.567</td>
</tr>
<tr>
<td>BIND</td>
<td>-0.0166</td>
<td>-1.23</td>
<td>0.218</td>
</tr>
<tr>
<td>BSIZ</td>
<td>-0.0086</td>
<td>-2.18</td>
<td>0.030</td>
</tr>
<tr>
<td>ACOM</td>
<td>0.0177</td>
<td>7.78</td>
<td>0.000</td>
</tr>
<tr>
<td>CONST.</td>
<td>0.0187</td>
<td>1.27</td>
<td>0.205</td>
</tr>
</tbody>
</table>
The result in Table 6 shows that the model is fit at 99% confidence level, from the WaldChi2 of 108.26 and the P-value of 0.000. However, the results show a presence of Heteroskedasticity in the panel as indicated by the Breuch Pagan/Cook-Weisberg test for Heteroskedasticity Chi2 of 96.45 with p-value of 0.000. This proved that the assumption of constant variance of the error term (Homocedasticity) is not been met, and as a result OLS estimators are not BLUE.

The table show that audit quality (BIG4) has a negative effect on the discretionary expenses manipulation during the period of the study, from the coefficient of -0.0026 with Z-value of -0.81 and p-value of 0.417, implying that the results is not statistically significant at all levels. The table indicates that JAUD has a positive effect on the discretionary expenses manipulation of deposit money banks in Nigeria during the period, from the coefficient of 0.0013 with z-value of 0.57 and p-value of 0.567, suggesting that the result is not statistically significant at all levels. Similarly, BIND has negative effect on the discretionary expenses manipulation of deposit money banks in Nigeria during the period, from the coefficient of -0.0166 with z-value of -1.23 and p-value of 0.218, suggesting that the result is not statistically significant at all levels. Moreover, BSIZ has a statistical significant negative effect on the discretionary expenses manipulation of deposit money banks in Nigeria during the period, from the coefficient of -0.0086 with z-value of -2.18 and p-value of 0.030, suggesting that the result is significant at 95% confidence level. Lastly, the results show that ACOM has a statistical significant positive effect on the discretionary expenses manipulation of deposit money banks in Nigeria during the period, from the coefficient of 0.0187 with z-value of 7.78 and p-value of 0.000, suggesting that the result is significant at 99% confidence level.

However, the based on the analysis of the results, the study failed to reject the null hypothesis two (H02), and infers that audit quality has no significant effect on the discretionary expenses manipulation in the Nigerian banking industry. The study also infers that corporate governance has no significant effect on the discretionary expenses manipulation in the industry.

Audit Quality, Corporate Governance and Aggregate Real Earnings Management

The results of model one is used to test this hypothesis as presented in table 7

<table>
<thead>
<tr>
<th>WaldChi2</th>
<th>Hottest: Chi2</th>
<th>Mean VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>108.26</td>
<td>96.45</td>
<td>1.16</td>
</tr>
</tbody>
</table>

Source: STATA OUTPUT (Appendix)
Table 7: GLS Estimators: Model Three

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Coefficients</th>
<th>Z</th>
<th>P-Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIG4</td>
<td>-0.0001</td>
<td>-0.20</td>
<td>0.840</td>
</tr>
<tr>
<td>JAUD</td>
<td>0.0004</td>
<td>1.97</td>
<td>0.048</td>
</tr>
<tr>
<td>BIND</td>
<td>0.0043</td>
<td>4.78</td>
<td>0.000</td>
</tr>
<tr>
<td>BSIZ</td>
<td>0.0001</td>
<td>3.90</td>
<td>0.000</td>
</tr>
<tr>
<td>ACOM</td>
<td>-0.0006</td>
<td>-2.76</td>
<td>0.006</td>
</tr>
<tr>
<td>CONST.</td>
<td>0.1261</td>
<td>154.59</td>
<td>0.205</td>
</tr>
<tr>
<td>WaldChi2</td>
<td>26.83</td>
<td></td>
<td>0.001</td>
</tr>
<tr>
<td>Hottest: Chi2</td>
<td>95.18</td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>1.16</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: STATA OUTPUT (Appendix)

Table 6 shows that the model is fit at 99% confidence level, from the WaldChi2 of 26.18 and the P-value of 0.001. However, the results show a presence of Heteroskedasticity in the panel as indicated by the Breuch Pagan/Cook-Weisberg test for Heteroskedasticity Chi2 of 95.18 with p-value of 0.000. This proved that the assumption of constant variance of the error term (Homocedasticity) is not been met, and as a result OLS estimators are not BLUE.

The table show that audit quality (BIG4) has a negative effect on the discretionary expenses manipulation during the period of the study, from the coefficient of -0.0001 with Z-value of -0.20 and p-value of 0.840, implying that the results is not statistically significant at all levels. The table indicates that JAUD has a significant positive effect on the aggregate real earnings management (REM) of deposit money banks in Nigeria during the period, from the coefficient of 0.0004 with z-value of 1.97 and p-value of 0.048, suggesting that the result is statistically significant at 5% level. Similarly, BIND has positive effect on the REM of deposit money banks in Nigeria during the period, from the coefficient of 0.0043 with z-value of 4.78 and p-value of 0.00, suggesting that the result is statistically significant at 1% level. Moreover, BSIZ has a statistical significant positive effect on the REM of deposit money banks in Nigeria during the period, from the coefficient of 0.0001 with z-value of 3.90 and p-value of 0.000, suggesting that the result is significant at 99%

http://www.iises.net/proceedings/6th-economics-finance-conference-oecd-headquarters-paris/front-page
confidence level. Lastly, the results show that ACOM has a statistical significant negative effect on the REM of deposit money banks in Nigeria during the period, from the coefficient of -0.0006 with z-value of -2.76 and p-value of 0.006, suggesting that the result is significant at 99% confidence level.

However, the based on the analysis of the results, the study reject the null hypothesis three (H03), and infers that audit quality has significant effect on the aggregate real earnings management in the Nigerian banking industry. The study also infers that corporate governance has significant effect on the aggregate real earnings management in the Nigerian banking industry.

5.1 Conclusion and Recommendations

Based on the analysis conducted on the data collected, the study concludes that, audit quality has significant effect on the revenue manipulation and aggregate real earnings management in the Nigerian banking industry, and an insignificant effect on the discretionary expenses manipulation during the period under review. On the other hand, the study concludes that corporate governance has significant effect on the revenue manipulation and the overall real earnings management in the deposit money banks in Nigeria, and an insignificant effect on the discretionary expenses manipulation during the period.

The findings implied that researchers and regulators should also focus on the manipulation of real activities and operations rather than the accrual based manipulations when investigating issues of earnings management, in the deposit money banks in Nigeria. The study recommends that regulators and policy makers in the Nigerian banking industry should consider real and accrual earnings management when making policy to mitigate unethical practices, which usually causes default and failures in the industry. Moreover, researchers should undertake more studies on real earnings management in Nigeria.

References


GUNNY, K. (2005). What Are the Consequences of Real Earnings Management?


