International Journal of Academic and Applied Research (IJAAR)
ISSN: 2643-9603
Vol.3 Issue 11, November – 2019, Pages: 52-61

The Influence of Audit Quality on Earnings Management among Listed Oil and Gas Companies in Nigeria

Bashir Babatunde Alao (ACA, CFE, CAMS)[1], Oladejo Lukman Gbolagade (PhD)[2]

[1]Chartered Accountant and Audit Manager, Librod Energy Services Limited (Oil Support), Nigeria.
bashir.alao.ba@gmail.com
[2]Associate Professor, Department of Business Management, Federal University Dutsin-Ma, Katsina, Nigeria
Loladejo@fudutsinma.edu.ng

Abstract: *The primary aim of this study is to evaluate the impact of audit quality on earnings management practices among oil and gas companies listed in the Nigeria Stock Exchange (NSE) for period of 5 years (2014-2018). The focus of the research is on oil and gas companies due to recent allegations of large scale financial misrepresentations associated with the Nigerian oil sector. Similarly, over the past decades, the global markets have witnessed several accounting scandals mainly because of the manipulation of the accounting figures reported in the financial statements. To achieve the objectives of this study, the corporate annual reports of twelve (12) listed oil and gas companies for the period under consideration were used for the study. In testing the research hypotheses, the study adopted the use of both descriptive statistics and Ordinary Least Square (OLS) regression analysis is used to explore the relationship between Audit quality proxies which are Audit firm size, auditor industry specialization and auditor independence and Earnings management in listed companies. The management of earnings is measured using Discretionary Accruals (a modified Jones model) while Eviews 8.1as the tool of data analysis of OLS regression. The results suggest that there is a relationship between audit quality and earnings manipulation; auditors' independence has a significant positive relationship with earnings management, while the rest of the hypotheses indicate that the other variables remain to have an insignificant relationship with earnings management.*

Keywords— Audit Quality, Earnings Management, Listed Oil and Gas Companies.

1. Introduction

The oil and gas industry is one of the vital industries to the Nigeria economy. The sector has been a major source of energy and accounted for 90% of foreign exchange earnings. The industry has distinctive features of been capital intensive, association with high level of risk and uncertainty, and complexity in technical and operational set up (Faure & Wang, 2006). The oil industry in Nigeria is classified into the upstream and the downstream sectors (Gabriel & Ioraver, 2015). The upstream sector is characterized by activities like acquisition of mineral rights in oil and gas, exploration, development, and production of oil and gas (Gabriel & Ioraver, 2015). The downstream sector engages in storage and transportation of oil, refining and hydro processing, marketing and distribution of oil, gas and its derivatives (Gabriel & Ioraver, 2015).

The quality of reportable earnings is very important for the efficient allocation of resources in Nigeria capital markets. As accounting earning is being reportable within the published monetary reports of corporations, it's expected to provide a timely and reliable input to numerous stakeholders-shareholders, potential investors, employees, suppliers, creditors, monetary analysts, stockbrokers, management, and but, the government agencies — helpful in creating prudent, effective and economical selections. Audit is brought about following the divorce between possession and control within the trendy company world. That is, auditors give independence verification of financial statements ready by the management (agents) within the absence of the principal, lend credibility to accounting data and enhance its integrity (Titman &Trueman, 1986). In this regard, they argued that audit minimizes information spatiality and protects the interest of the principals, investors, suppliers, workers and the general public, by providing cheap assurance that monetary statements ready by management area unit free from material misstatements. To achieve this goal audit quality is critical. Many studies wiped out the world of earnings management and audit quality as most of them recognize the audit quality mechanisms as effective factors to restrain excessive opportunistic behavior amongst corporate management.

One of the foremost necessary responsibilities of the managers of a firm is to supply monetary reports and information utilized by current and potential investors, creditors and different potential users in creating investment and financing choices (Gabriel & Ioraver, 2015). These monetary reports contain accounting earnings that completely different stakeholders use to evaluate the profitableness of the firm, predict the long run earnings and its connected risks, and assess the performance of management of the coverage entity typically (Gerayli et al, 2011 as cited in (Gabriel & Ioraver, 2015). Given the importance of accounting earnings, managers generally use their discretion over the choice of accounting selections accorded them by Generally Accepted Accounting Principles (GAAP) to influence the number of reported earnings with the intent of derivation personal advantages at the expense of different stakeholders. (Gabriel & Ioraver, 2015).

However, in the last decades, companies and investors have been exploring investment opportunities, largely due to the globalization of capital markets, international cooperation among countries and increased international trade (Ana, 2018). The impact of globalization on the world economy brought changes in companies, which faced new challenges and constraints since markets are broader, more volatile and competitive (Ana, 2018). Thus, the last decade has witnessed several accounting scandals, mainly because of the manipulation of the accounting figures provided in the financial statements. (Goncharov, 2005 cited in Sarah and Mohammed, 2018). The external auditor, an independent body that issues opinions on accountability documents and on which users rely for decision-making, there is an increased need for independent audits of financial statements that inspire confidence and guarantee the reliability of financial information (Ana, 2018). In response to these needs, there are studies that warn of risk behaviors and their motivations that lead to these deviant attitudes on the part of managers and administrators by causing accounting fraud, with consequences not only for the company itself, but also for potential investors and other stakeholders (AlRassas and Kamardin 2016, Becker et al. 1998, Hsu and Wen 2015, cited in Ana, 2018).

Thus the above problem necessitated this study and set its main objective to investigate the relationship between the manipulation of accounting results and audit quality in the Oil and Gas companies listed at Nigeria Stock Exchange. Therefore the following specific objectives are set out below:

1. To ascertain the effect of audit firm size and its effect on earnings management of listed Oil and Gas companies in Nigeria.
2. To find out the role of industry specialist auditor on earnings management of listed Oil and Gas companies in Nigeria
3. To examine the impact of auditor independence on earnings management of listed Oil and Gas companies in Nigeria

The following null hypotheses have been developed with a view to achieving the research objectives:

H1: There is no significant relationship between audits firm size and earnings management

H2: Auditor industry specialization has no significant role in earnings management

H3: Auditor independence has no significant impact on earnings management

However, this study is limited to twelve (12) listed companies and the sample covers five (5) years data only from the Nigerian stock exchange market. Besides, only three assessable variables audit quality were considered. Similarly, earnings management and auditor quality are unobservable so reliance was placed on proxy measures that are widely used in accounting literature, however, these measures are acceptable in accounting practice and not free of criticism.

2. Review of Related Literature

This section focuses related literature on Audit Quality and its measures, Earnings Management, Audit firm size, Auditor Industry specialization, Auditor's Independence, Evidence of Earnings Management practices in Nigeria and provides conceptual framework for the study.

2.1 Audit Quality

The various changes in accounting, financial reporting and auditing were all designed to provide protection to investors (Ogbodo & Akabuogu, 2018). This is being achieved by imposing a duty of accountability upon the managers of a company (Crowther & Jatana, 2005 cited in Ogbodo & Akabuogu, 2018). More precisely, the role of auditing is to reduce information asymmetry on accounting numbers, and to minimize the residual loss resulting from managers' opportunism in financial reporting (Adeyemi & Fagbemi, 2010 as cited in Ogbodo &Akabuogu, 2018). Wallace (1980) defines audit quality as a measure of the auditor's ability to reduce noise and improve fitness in accounting data. According to DeAngelo (1981) (as cited in Ogbodo& Akabuogu, 2018), audit quality is defined as the competency and independence of auditors in detecting and reporting material misstatement. Zehri and Shabou (2011) (as cited in Ogbodo & Akabuogu, 2018) asserted that high quality auditors are more likely to discover questionable accounting practices by clients and report material irregularities and misstatements compared with low quality auditors. Audit quality in this regard comprises the ability of an auditor to detect a breach (auditor competence) and the willingness to report such a breach (auditor independence). Alleyne, Devonish & Alleyne (2006) assert that lack of independence in audit engagement, increases the perception that they are less objective and therefore less likely to report a discovered misstatement.

2.2 Measures of Audit Quality

The measure of audit quality is complicated and problematic (e.g. Niemi, 2004; Jeong & Rho, 2004 and Lin & Hwang, 2010) but, Bailey & Grambling (2005); Behn, Choi & Kang (2008) and Rusmin (2010) have known many potential measures for audit quality in each educational literature and in apply. These measures is perceived as factors, indicators, behaviors or perceptions that have an immediate and indirect link with audit quality as outlined within the previous section. Bailey & Grambling (2005) and Rusmin (2010) discuss potential measures of audit quality supported the audit method that's adhered to in finishing an audit engagement. These measures are related to the audit procedures, the documentation of audit proof and compliance with auditing standards. They classify them as input and output based mostly measures. Bailey & Grambling (2005), recommend that the inputs of audit processes are relevant to the standard system of an audit firm. These include: however audit corporations place a shot into promoting and accenting fascinating qualities (e.g. independence, objectivity); control (e.g. An audit firm's internal review); human resources (e.g. expertness, competency and independence of staff); and audit methodologies (e.g. audit policies and procedures).

Moreover, in respect of human resources, Bailey & Grambling (2005) recommend that the talents and competencies of auditors ought to be viewed in a very broader context which fits on the far side technical accounting and auditing skills. They argue that the amount of skilled skepticism of auditors could have an effect on their ability to act severally once corporal punishment auditing work (Shehu, 2014). Thus, the attribute of "independence" is fascinating for each auditor and audit team member once it involves achieving a better audit quality. In short, Bailey & Grambling (2005) opine that if audit quality is outlined on the idea of inputs, those inputs may well be loosely represented because the 'right' folks applying the 'right' tools and procedures within the 'right' structure culture which incorporates applicable internal watching.

Audit quality proxies: audit firm size, auditor independence and business specialist auditor, utilized in this study show that the amount of quality in finishing up auditing by audit corporations verify the extent managers manipulate earnings, as exposed by previous researches. The subsequent studies: Chen, Moroney & Houghton (2005); Zhou & Elder (2003); Heninger (2001); Gul, Lyn & Tsui (2001); Bartov, Gul&Tsui (2001); Bradshaw, Richardson & Sloan (2001); Gaver& Paterson (2001); examined the link between audit quality and therefore the level of discretionary accruals conferred by managers. They prove that: quality auditors constrain earnings management and/or shoppers hiring huge auditors themselves constrain earnings management no matter audit quality.

2.3 Earnings Management

According to Healy and Wahlen (1999), earnings management takes place when managers use judgment in financial reporting and in structuring transactions to modify financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers. Thus, this definition points to management as the faction responsible for making those decisions that fall under the general management of earnings. But there are two weak points in this definition: it does not establish a distinct limit between earnings management and normal activities, the result of which is earnings; not all earnings management is deceptive. Ronen and Yaari (2011cited in Ana, 2018) define earnings management as a set of managerial decisions that result in not reporting the true short-term, value-maximizing earnings as known to management. In their opinion, earnings management can be: Beneficial - it signals long-term value; Pernicious - it conceals short- or long-term value and Neutral - it reveals the short-term true performance. The managed earnings follow as the consequence of taking production/investment actions earlier than earnings are realized. Ronen and Yaari (2008cited in Ana, 2018) also organize the different definitions of earnings management in three groups: white, gray or black. White earnings management – Beneficial - enhances the transparency of reports; Black earnings management – Pernicious - involves complete misrepresentation and fraud; Gray earnings management – Gray - includes manipulation of reports in the boundaries of compliance with bright-line standards, which could be either opportunistic or efficiency enhancing.

2.4 Earnings Management Measurement

Researchers usually use accruals as measures of earnings management, measured by the absolute value of discretionary accruals. In accordance with Becker et al (1998), the absolute value of discretionary accruals measures the level of opportunistic earnings management activities and extreme reporting decision exercises by the managers. It is not easy to recognize, identify and measure the earnings management (Dechow and Skinner 2000cited in Ana, 2018).Earnings management is typically studied using discretionary accruals (Ahmed et al. 2013).The total accruals are identified in order to estimate the discretionary accruals. There are two methods in computing the total accrual; the first is the traditional balance sheet approach (e.g. Healy (1985); Dechow, Sloan & Sweeney (1995), and the second is the cash flow approach (e.g. Becker et al (1998); Subramaniam (1996), Zhou & Elder (2003).

2.5 Audit firm size

The variation in audit quality provided by Big Firms and Non-Big audit firms has received considerable attention in prior research Most auditing studies categorize audit firms as a big 4/5/6/8 firm or a non-big firm (Sarah and Mohammed, 2018). A big audit firm is perceived as prestigious and reputable that consequently provides high audit quality. The Big 4 auditors can sustain a high audit quality level due to the fact that they have a greater number of clients, thus revenues are derived from several clients so their revenue streams will not be affected by a single client, which makes them more independent. Lee et al. (1993) in Sarah and Mohammed, (2018) also stated that if the audit firm and the client are small-sized firms, then there is a high probability that the income of the audit firm relies mainly on the audit fee charged from certain clients, confirming that non big four are more dependent on their clients than big four. The Big four have greater opportunities to deploy significant resources to auditing. According to Lawrence et al. (2011) in Sarah and Mohammed, 2018 the largest audit firms are considered to have more resources -financial and operational- and therefore they can provide better services. Also, DeAngelo (1981) and Lawrence (2011) in Sarah and Mohammed, 2018 referred to the greater competencies that large audit firms possess because of their large investments in audit technology and staff training.

2.6 Auditor Industry specialization

It is assumed that auditor industry specialists are more competent in discovering opportunistic behaviour by management and will strive to maintain their reputation and this will be reflected on the quality of financial reporting (Havasi&Darabi, 2016). Industry specialist auditors are audit firms that have significant knowledge and expertise in a particular sector due to the continuous work in certain field (Gul et al., 2009 and Sun and Liu, 2011 citedin Sarah and Mohammed, 2018). Cahan et al. (2008) in Sarah and Mohammed, 2018 expected that the attractiveness of specialization will be directly related to the amount of industry-specific knowledge requirements needed to complete the audit, and that these requirements are likely to vary widely across industries.

Earlier research studies revealed a positive relationship between auditor industry specialization and audit quality in the same year (e.g., Balsam et al. 2003, Reichelt and Wang 2010, Lowensohn et al. 2007 cited in Daphne, 2013).Audit firm industry specialization is becoming more important in the literature (Cahanet al.2011 cited in Daphne, 2013). Willenborg (2002) cited in Daphne 2013 indicates that audit firms benefit from specialization in 2 ways. First, benefits results due to enhanced audit effectiveness. Second, enhanced audit efficiency lead to benefits.

Kusharyanti (2003) in Sarah and Mohammed, 2018stated that auditing procedures in manufacturing companies and insurance companies are almost the same, but the nature of business, accounting principles, accounting systems, and prevailing tax rules may be different, which necessitates audit firms to have specific knowledge on the characteristics of certain industries that affect auditing. He also acknowledged the specialist auditor’s ability to recognize any audit risk linked to the features of the industry.

The significance of specialization is reflected in the client’s willingness to pay a premium to industry specialists for this reason because it reduces costs associated with higher information asymmetry for the client firm (Balsam et al., 2003; Krishnan, 2003 cited in Sarah and Mohammed, 2018).

In addition, Kwon et al. (2007) in Sarah and Mohammed, 2018extend evaluation of the impact of specialist auditors on earnings quality of firms across countries and they document that audit by industry specialists is especially effective in improving earnings quality in countries with weak legal environment.

2.7 Auditor’s Independence

Bahram Soltani (2007: 196) in Wali, 2015 describes the notion of auditor‘s independence is as follows: auditor independence refers to the auditor‘s ability to maintain an objective and impartial mental attitude throughout the audit. Furthermore Rick Hayes, et.al (2004: 85) in Wali, 2015 defines the independence of the auditor is as follows: ―Independence is described as having a position to take an unbiased viewpoint in the performance of audit tests, analysis of results, and attestation in the audit report. Also, Arens, et.al (2012: 131) explains that: ―Independence requires an attitude of responsibility separate from the client‘s interest. The auditor must maintain an attitude of healthy professional skepticism. Therefore, the independence of the auditor is the auditor's ability to maintain mental attitude objectively and impartially in the interests of the client in conducting the audit, analyzing the results, and attestation in the audit report.

An auditor’s lack of independence increases the possibility of being perceived as not being objective. This means that the auditor will not likely report a discovered breach (Deangelo, 1981). Prior studies assert that high fees paid by a company to its external auditor increase the economic bond between the auditor and the client and thus, the fees may impair the auditor’s independence (Frankel et al, 2002; Li & Lin, 2005). The impaired independence results in poor audit quality and allows for greater earnings management and lower earnings quality (Okolie, 2013).

2.8 Evidence of Earnings Management Practices in Nigeria

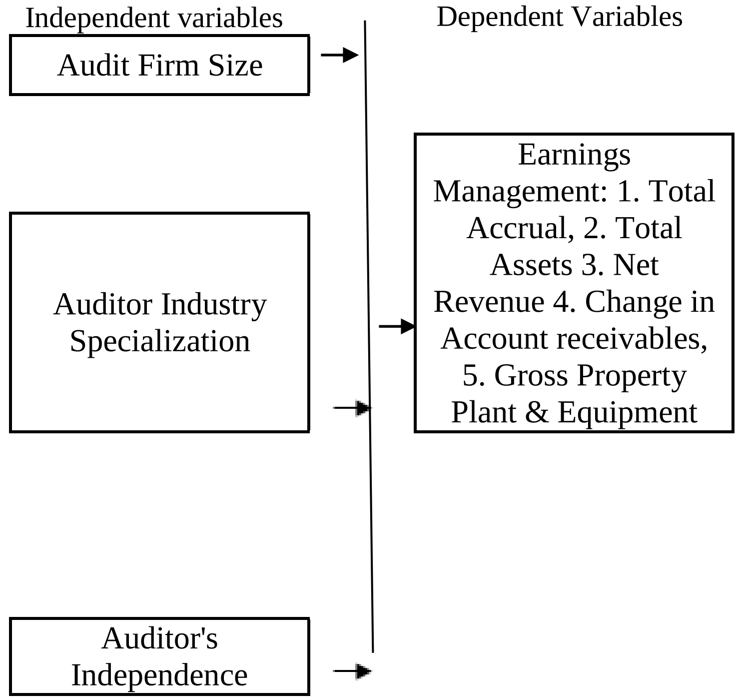
In Nigeria, previous studies closely related to the present study include (Okolie, 2013; Akindayomi, 2012; Osisioma and Enahoro2006 cited in Augustine, 2015). Okolie, (2013) in Augustine, 2015 studied the effect and relationship between audit quality, earnings management and earnings response coefficients of quoted companies in Nigeria, and documented evidences that are consistent with the relationship and effects which audit quality exerts on earnings management from the perspectives of discretionary accruals manipulations and the manipulations of real economic operations of companies listed on the Nigerian Stock Exchange and extended the relationship between audit quality and earnings management to the relationship and effects which audit quality exerts on the earnings response coefficients as well as market prices per share of quoted companies in Nigeria. Based on a sample of 342 companies – year observations from the NSE for the fiscal years, 2006 to 2011, and using four of the commonly applied audit quality measures together, a massive and all-inclusive multivariate analysis was conducted. The result showed that audit quality is significant and negatively related to earnings management measured by discretionary accruals of quoted companies in Nigeria, exerts significant relationship with real earnings management and exerts significant influence on the earnings response coefficient and market price per share of quoted companies in Nigeria.

Akindayomi (2012) in Augustine, 2015 studied "Earnings Management and the Banking Crisis of the 1990s: Evidence from Nigeria". Akindayomi (2012)in Augustine, 2015 found that Nigeria banks show a positive association between earnings before taxes and provisions for loan losses, indicating earnings smoothing, and that healthy banks have smoother earnings than distressed ones while distressed banks deliberately understate loan loss provisions to inflate earnings. Osisioma and Enahoro (2006) in Augustine, 2015 investigated whether financial accounting information users including Accountants, Company Managers, Investors, Investment Analyst, etc. in Nigeria are aware of earnings management in the Nigeria private sector. Using, structured questionnaire primary data, a survey analysis of a sample of 300 practicing accountants was conducted. The study reported that earnings management present a definite effect on information users. Thus, the practice of earnings management is constructively benefits the manipulator of accounts. This further indicates that the genuinely positive aspect of the corporation is presented to the fullest proportion to the public, while the area of weakness is played down in the reports in anticipation of correcting the weakness. The financial status is enhanced to enable the company to be attractive (Augustine, 2015).

Although, there are prior researches on the relationship between audit quality and earnings management in the developed countries, (e.g. Balsam, Krishnan &Yand, 2003; DeFond& Francis, 2005; Bailey &Grambling, 2005 and Behn, Choi & Kang, 2008), just a few studies have been carried out to examine this relationship in the emerging countries, especially, in Nigeria. This and the fact that there is extant literature, associated with earnings management with the deliberate sterilization of monetary statements through the employment of judgment in structuring transactions to either mislead the firm's stakeholders regarding verity economic image of the firm or to realize some written agreement profit that's supported accounting numbers as similarly observed by (Healy &Wahlen, 1999) makes this study imperative.

Therefore, this study argues that audit quality that consist of audit firm size, auditor independence and industry specialist auditor has a greater ability to constrain opportunistic earnings and reduce uncertainty in the reported earnings as given in the conceptual framework below.

2.9 Conceptual Framework



3. Research Methodology

3.1 Research Design

This research work adopted a correlational research design. Correlational research is a type of no experimental research in which the researcher measures two variables and assesses the statistical relationship (i.e., the correlation) between them with little or no effort to control extraneous variables (Paul et al, 2013). It is most appropriate for this study because it helps in determining the impact of audit quality and earnings management on the listed Oil and Gas companies in Nigeria. Hence, the method allows for testing of expected relationships between and among variables and the making of predictions regarding such relationships.

3.2 Population of the Study

The population of the study is made up of Oil and Gas Companies quoted on the Nigerian Stock Exchange as shown on the listed Securities companies of Nigerian Stock Exchange as at 31st October, 2019.The twelve (12) listed companies are as follows; 1. Mobil Plc 2. ANINO International Plc 3. Capital Oil Plc 4. Con Oil Plc 5. Eternal Plc 6. Forte Oil Plc 7. Japaul Oil & Maritime Services Plc 8. MRS Oil Nigeria Plc 9. OANDO Plc 10. RAK Unity Petroleum Company Plc 11. SEPLAT Petroleum Development Company Plc 12. Total Nigeria Plc.
This therefore constitutes a finite population, from which the sampling frame is built. The study is focused on Oil & Gas companies because the oil industry is one of the sectors that has contributed greatly to the development of the Nigerian economy. The study covered a 5-year period, from 2014 to

2018 based on the availability of financial data of the Oil & Gas companies listed in the Nigerian Stock Exchange. This period coincides with the global crash in the price of crude oil and economic recession in Nigeria and provided incentive for public companies to manipulate reported earnings to present impressive performance. The study used secondary data extracted from published annual reports and accounts of the sampled firms submitted and uploaded on the website of Nigeria Stock Exchange for the relevant years. The major tool of data analysis was multiple regression analysis carried out using Eviews 8.1

3.3 Variable Measurement

A. Dependent Variable

The dependent variable for this study is earnings management. Earnings management is not observable; but the commonly used measure is discretionary accruals (Johnston & Rock, 2005) as managers prefer to practice earnings management through managing accruals as this technique is less detectable and external users of finical statement cannot distinguish any misstatement easily (Habbash 2010cited in Sarah and Mohammed, 2018).

While there are many ways to estimate discretionary accruals, the Modified Jones Model has been shown to outperform other discretionary accrual models in detecting earnings management as it results in a smaller amount of errors in computing discretionary accruals when compared to prior models based on the study conducted by Dechow et al. (1995).

This study computes the Non-discretionary accruals using the Modified Jones model by Dechow et al. (1995): In using the modified Jones Model, we first compute total accruals using the cash flow statement approach which has been proved to be better than the balance sheet approach of computing total accruals. The total accruals are computed under the cash flow statement approach as shown below:

NDAt = β1(1/At-1) + β2[(ΔREVt - ΔRECt) / At-1) + β3(PPEt / At-1)

where:

NDAt = Non-discretionary accruals in a year t

ΔREVt = revenues in year t less revenues in year t-1;

ΔRECt = net receivables in year t-1.

PPEt = gross property plant and equipment at the end of year t;

A t-1 = total assets at the end of year t-1;

β1, β2, β3 = firm-specific parameters (estimated using a different model).

First, total accruals should be determined and by referring to previous studies (Shah et al., 2009 and Soliman and Ragab 2014cited in Sarah and Mohammed, 2018), the cash flow statement approach is applied to find out the total accruals.

Total accruals are calculated as follows:

TACt= NIt – CFOt (1)

Where:

TACt: total accruals in year t

NIt: net income in year t

CFOt : cash flows from operating activities in year t

All the variables are scaled by previous year total assets to reduce the heteroscedasticity of the regression.

Second, an OLS regression is used to obtain industry-specific parameters for the model of the Non-Discretionary Accruals (NDA) equation, a regression equation is used to find those parameters and this equation is as follows:

TACit/Ait-1 = β1j[1/Ait-1] + β2j[(ΔREVit/ Ait-1] + β3j[PPEit/ Ait-1] + εit (2)

Where:

TACCit = total accruals for firm i in year t

Ait-1 = total assets for firm i in year t-1

ΔREVit = change in net revenues for firm i in year t

ΔARit = change in accounts receivables for firm i in year t

PPEit = gross property, plant and equipment for firm i in year t

eit = error term (discretionary accruals for firm i in year t)

α1, α2 and α3 = are firm specific parameters.

Finally, after calculating the total accruals using the cash flow statement approach and calculating the non-discretionary accruals using the equation of the modified Jones model 1995, the discretionary accruals can then be calculated using the following equation: (Uwuigbe et al 2015).

DACit = TACit/Ait-1 – NDAit (3)

B. Independent Variables

The independent variables for this research are Audit firm size (AFZ), Auditor industry specialization (SPEC) and Auditor's Independence (AIND). In addition, the control variables considered for this study are Company size and Cash flow from operations. The choice of these variables is because of their potential determinant of earnings management and a better predictability and analysis of the connection existing between the constructs.

3.4 Model Specifications

We apply ordinary linear regression analyses to test the relationship between the dependent variable (DAC) and the identified independent audit variables. The model is specified as follows:

|DAC| = β0 + β1(AFZ) + β2(SPEC) + β3(AIND) + β4(SIZE) + β5(CFO) + ε

Where:

|DAC|:	Absolute value of discretionary accruals
AFZ:	Audit firm size
AIND:	Auditor independence
SPEC:	Auditor industry specialization
SIZE:	Company Size
CFO:	cash flow from operations
ε:	error term.

4. Data Presentation and Analysis

Descriptive Statistics

The table below (table 1) presents the descriptive statistics of all the variables used in the study.

Table-1. Descriptive Statistics of Variable

Variable	DAC	AFZ	SPEC	AID	SIZE	CFO
Mean	-12.000285	0.609375	0.45	4.05	12.94928	2.0576198
Median	-0.1391183	0.75	0.75	3.75	12.89709	0.0520253
Maximum	2.16197625	0.75	0.75	8.25	16.73126	160.84013
Minimum	-937.3875	0	0	0.75	9.232148	-1.409955
Std. Dev.	104.778825	0.29458125	0.3697418	2.15330175	1.105592	17.97972
Skewness	-6.5802773	-1.2009615	-0.306186	0.2234115	0.023165	6.578853
Kurtosis	58.492245	2.67307725	0.8750003	1.4962875	4.730501	58.475903
Observations	60	60	60	60	60	60

Source: Authors' computation 2019 using Eviews 8.1

The following are important descriptive statistics to highlight. The mean and standard deviation of audit firm size (AFZ) are 0.61 and 0.29, respectively. Audit firm size had a mean score of 61% which implies that about 61% of the sampled firms were audited by the Big 4 audit firms during the study period. The mean and standard deviation of auditor independence (AIND) is 4.05 and 2.15. This implies that on the average, the sampled companies retained their auditors for at least 4 years. The median, maximum, and minimum values were 4, 8, and 1 year(s) respectively. Under the industry specialist auditor (SPEC) 45% of the firms are audited by specialist auditors, signifying that 45% of the audit firms that audited the sampled firms during the study period possess relevant knowledge and experience in the oil and gas sector. The mean and standard deviation of total assets is 12.95 and 1.11 million, in natural logarithm form. The first control variable, firm size (SIZE), had a mean value of 12.9493. The median, maximum and minimum values of SIZE were 12.8971, 16.7313 and 9.23215 respectively. The second control variable, cash flow from operations (CFO), had a mean of 2.05762. The median, maximum and minimum value of CFO was 0.05203, 160.8401 and -1.4099 respectively

Table 2-Random Effect Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.	VIF
C	-20.233798	5.87808988	-3.011961	0.000875	
AFZ	-0.4292094	0.555191	-0.676449	0.386662	1.1283

SPEC	-0.3188728	0.30219	-0.923305	0.25795	1.02237
AIND	-0.4791684	0.25854238	-1.621678	0.050575	0.97434
SIZE	7.3588095	2.09650788	3.0712789	0.0007	1.09344
CFO	0.219359	0.09573375	2.0049225	0.0217	0.99672
R-squared	0.17317563				
Adjusted R-squared	0.125755				
S.E. of regression	1.21058263				
F-statistic	3.19541688				
Prob(F-statistic)	0.00457713				
Durbin-Watson stat	1.70431538				

Source: authors' computation 2019 using Eviews 8.1

The adjusted R square of the model as shown in table 2.0 amounts to (0.125755) which means that 12.58% variation in the dependent variable (earnings management) is explained by the independent variables (Audit Quality). This value is somehow low but this is due to the existence of many other factors that might affect earnings management like those of corporate governance.

5. Tests of Hypotheses and Discussion of findings

5.1 Audit firm size and earnings management

The first hypothesis of this research study state that there is no significant impact of audit firm size on earnings management. Therefore, of the audit firm size, the table 2.0 above presents the result of the co-efficient to be -0.4292094and t-value of -0.676449with a significant value of (0.386662). This signifies that auditor size is negatively significant and strongly influencing the discretionary accruals of the Nigerian oil and gas industry. The implication of this is that the higher the number of the big auditors, the lower the discretionary accruals, hence lower earnings management. This argument is consistent with the model in Titman and Trueman (1986), in which earnings management was decreasing with higher quality of the information provided by the firms, in which the quality of the auditor plays a vital role. The study concludes that audit firm size has no significant impact on earnings management of listed oil and gas companies in Nigeria during the study period.
Therefore, audit firm size affects the level of earnings management in the listed oil and gas industry in Nigeria, which is in line with the prior expectation that, audit firm size reduces earnings management, via discretionary accruals. The result therefore, provides an evidence to reject the first hypothesis of the study that audit firm size does not have any significant impact on earnings management.

5.2 Industry specialist auditor and earnings management

The second hypothesis states that, industry specialist auditor has no significant impact on earnings management. Therefore, of the industry specialist auditor, the above table reveals a negative (-0.319) but insignificant (p-value=0.2580) relationship between auditor industry specialization (SPEC) and discretionary accruals (DA) of oil marketing companies listed on the NSE. This implies that, industry specialist auditor has no significance on earning management, which implies that higher quality in auditor being an industry specialist does not have any significant impact on discretionary accruals of firms in the sector. Thus corroborates the findings of Jaggi et al. (2012) in Sarah and Mohammed, 2018 who confirmed that the negative association between industry specialist auditors and earnings quality in countries with weak investor protection.
Therefore, being industry specialist auditor does not affect the discretionary accruals of the Nigerian oil and gas industry, which is in line with the second hypothesis, industry specialist auditor does not reduce earnings management. The result therefore, provides an evidence to accept the second hypothesis of the study that, industry specialist auditor does not have significant impact on earnings management.

5.3 Auditor independence and earnings management

The third hypothesis states that, auditor independence has no significant impact on earnings management. The result on the table also presents the co-efficient value of (-0.479) and t-value of (-1.622) with a significant value of (0.0506).This signifies that auditor independence is negatively significant and strongly influencing the discretionary accruals of the Nigerian oil and gas industry. Therefore, the auditor independence is the only significant independent variable to the dependent variable (Discretionary accruals) which leads to accepting the third hypothesis, which means that the longer the relationship between the auditor and the client the higher the discretionary accruals reported demonstrating a lower audit quality and subsequently an increase in earnings management.

5.4 Conclusion

Earnings management is of great concern to corporate stakeholders (Lin & Hwang, 2010). Despite the popularity of the topic, empirical evidence on the effect of audit quality on earnings management is rather inconsistent. This study basically examined the effects audit quality (audit firm size, auditor industry specialization and auditor's independence) on earnings management of listed oil and gas companies in Nigeria for the period 2014-2018. The study came up with the following findings that are of salient importance to scholars investigating issues relating audit quality and earnings management in the Nigerian context. According to the results of our empirical research, we found that the two audit proxies; Audit firm size and Auditor industry specialization fail to support the argument that auditor can play a role in constraining earnings management practice in the oil and gas companies in Nigeria. The first test of hypothesis of this study provides evidence that firms that employ the services of big audit firms engage less in earnings management. Also, the study revealed the failure of Industry specialist auditor to affect the level of discretionary accruals in the oil and gas companies in Nigeria.
The third hypothesis revealed that auditor's independence proxy (in relation to auditor tenure) had a significant effect on earnings management, as the retention period increases the amount of discretionary accruals reported by auditors tend to increase. Previous studies such as (Lys & Watts, 1994, Carcello and Neal, 2000) revealed that tenure increases the level of closeness between auditors and clients, threatening auditor's independence leading to excessive familiarity because of long audit tenure. Furthermore, it is argued that audit team shows less skepticism among long tenure leading to an increase in earnings management.

5.5 Recommendations

Based on the findings of the study, the researcher recommends the followings:

1. There should be a standard issuing mandatory audit firm rotation (i.e. Maximum of 3 years) to enhance auditors' independence. The current practice of a maximum of nine (9) consecutive years for tenure of external auditors is likely to constrain earnings management practices of listed oil and gas companies in Nigeria.
2. Auditors should have the expertise knowledge of the industry they are to audit to make better auditing decisions and professional judgments. By so doing, the quality of audit works will be increased since the auditors are specialists in the industry sector.
3. The Nigeria Stock Exchange should ensure that companies listed employ the services of audit firms whose character and integrity is beyond question and have solid reputation.

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