Audit Quality and Earnings Management of Listed Manufacturing Firms in Nigeria

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Abstract
This study investigates whether there is any relationship between audit committee characteristics and financial restatement. Using secondary data over the period from 2009 to 2020 of 12 non-financial firms, the results of the Panel Estimated Generalized Least Squares (EGLS Period SUR) reveal that audit firm size, audit tenure, audit fees, audit firm age and joint audit are negatively and statistically significant with earnings management while audit independence has a positive and significant impact of earnings management. The overall results shows that audit quality significantly influenced earnings management and that help in reducing managers tendencies to reduce the practices of managing earnings for whatever the reasons. The study concludes with some recommendations for better performance reporting.

Keywords: Audit Quality, Earnings Management, Quoted, Non-Financial Firms, EGLS.

1.0   Introduction

Financial statements are expected to be a veritable source of relevant information to parties which rely extensively on it for informed business decisions. It is, therefore, of great importance that such reports provide accurate accounting numbers for both actual and potential investors. Since the main objective of investors is to maximize their wealth, the decision reached by these investors, like accurately predicting future cash flows, will definitely be strongly influenced by the quality of financial reporting. Inaccurate financial reporting, according to Umaru (2014), leads investors to make wrong business judgment for as much as over-reliance on accounting numbers provide incentives for managers to manipulate earnings to their own advantage or to meet the expectations of investors. The concept used to describe managers' manipulation of earnings is called earnings management. Earnings management, which is a global phenomenon, usually occurs when managers are under pressure to achieve or surpass a predetermined earnings benchmarks or targets expected by management or investors. Some see earnings management as bad and that influence their definitions.

However, a more balanced definition is that given by Healy and Whalen (1999) which says that 'earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter 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'. That is, earnings management involves the deceptive behaviour of managers to intentionally alter financial statements through the use of judgment in transaction structuring to either deceive the firm's stakeholders about the true economic picture of the firm or to achieve some contractual benefit based on reported accounting numbers.

Thus, it is earnings management when managers indulge in practices such as: "smoothing out" or maintaining a growth trend in order to hit the targets; meeting analysts' expectations or avoiding losses, (Healy & Wahlen, 1999). Such situations have so far resulted in the collapse of notable companies around the world even after auditors have certified a clean bill of financial health. Just as Egbadju and Kunemoemi(2019) noted that there have been unprecedented corporate fraud and corruption from the early 2000s till date as witnessed and defined by the ethical wrongdoing **of** Enron (2001); WorldCom (2002); Tyco (2002); HealthSouth (2003); Freddie Mac (2003); Parmalat (2003); American International Group (AIG) (2005); Lehman Brothers (2008); Bernie Madoff (2008); Satyam (2009); Olympus (2011); Tesco (2014), to mention but a few. Tugman and Leka (2022), in the same vein, posited that recent scandals and corporate failures across countries which include the collapses of South African Airways and Transnet, Eskom which are two state-owned South Africa's entities as well as in the United Kingdom of London Capital & Finance and Carillion, Patisserie Valerie attest to corporate governance failures. According to Asegdew(2016), auditors who are expected to be impartial umpires with respect to independent judgment and objectivity in the discharge of their oversight function are now placed under scrutiny when a company which showed no sign of any failure suddenly file for bankruptcy.

There have been substantial numbers of studies on audit quality for about four decades now. This is due to the great impacts it has on the credibility and reliability on the financial statements and enhancement of investors' protection and confidence. Audit quality is the ability of an auditor to both discover an error and material misstatement in the financial reports and the willingness to report them (DeAngelo, 1981). Audit quality is the process embarked upon by an auditor to carry out an audit assignment in line with the International Auditing Standards and Guidelines, complete adherence to basic audit processes, total compliance with quality control regulations and total refusal compromise with respect to reporting anomalies (Oyebamiji, 2020). DeFond et al.(2002) noted the quality of audit are affected by audit fee as well as by non-audit services because additional procedures which results in higher quality attract much more higher audit fees. Audit firm size is unarguably the most widely used proxy (Lennox, 1999), because it is easier to achieve higher audit quality by the larger audit firm than by smaller firms (Francis, 2004). Hussein and Hanefah (2013) noted that the bigger audit firms produce higher audit quality due to the facts that they are more professionally competent, more technically capable, more exposed to litigation costs, more independent, etc. Again, Craswell et al.(1995) in their views observed that a higher audit quality is the result of audit expertise derived from industry knowledge and technical abilities, and all these enhances the reputation of the audit firm.

In Nigeria, corporate misbehavior such as the ones involving Savannah Bank, Wema Bank, AfriBank Plc, Oceanic Bank Plc, African International Bank, Intercontinental Bank Plc, Spring Bank, Bank PHB as well as African Petroleum and Cadbury Nigeria Plc are but few cases made public. According to Charles and Ine-Tonbarapa (2023), earnings management in Nigerian listed companies is common and appears to be mostly supported by audit firms for as much as the Nigerian regulators' rely on accounting data to oversee listed businesses. For instance, before

enabling listed businesses to issue more shares to current owners (rights issues), the Nigeria Securities Regulatory Commission (NSRC) mandates that they have a specific return on equity (ROE) (Uwalomwa et al., 2016 as cited in Charles & Ine-Tonbarapa, 2023). Unlike mature stock markets in developed countries, some Nigerian listed companies are in financial distress and should be bankrupt by developed country standards, yet they are still listed in Nigeria (Charles & Ine-Tonbarapa, 2023). They went on to assert that due to firm earnings management supported by audit firms, Nigeria's audit quality lags behind many advanced jurisdictions and this has hampered efficient equity market growth as Nigerian market has far fewer analysts than developed market standards. For as much as auditing reassures trust and investors' confidence in financial reports by reducing uncertainty, it is of great importance to ascertain how effective auditing is in detecting sharp practices aimed at manipulating financial transactions and reports. Thus, several studies have been conducted both in developed and developing economies to investigate the relationship that exists between the quality of audit and earnings management. Apart from auditor's size, audit fee, auditor's independence, industry expertise, auditor's tenure, non-audit service, joint audit and auditor reputation are some of the indirect measures studies have used to proxy audit quality.

Following this introduction, the rest of the paper is divided into five sections with the literature review in section two, methodology in section three, discuss of results in section four and the fifth section concludes with recommendations.

2.0   Literature Review
2.1   Theoretical   Framework
2.1.1 The   Theory   of   Lending   Credibility
The theory is based on the fundamental belief of the general public that any financial statement attested to by an auditor is credible and can be relied upon in making investment decisions. The problem of information asymmetry (where one party in a transaction has more information than the other party) in an agency relationship is either minimized or completely barred by the audited financial reports. For as much as the public perceive that the audit functions give additional creditability to financial statements, it enhances stakeholders' faith or trust in managers' stewardship of the capital entrusted with them (Bangara & Chesoli, 2019). This public trust in the technical ability and the willingness of the auditor to provide accurate information will results in the provision of more investible capital that will boost the value of the firm on the long run. Thus, audit quality improves the quality and reliability of accounting numbers by user who are deemed to benefit tremendously from the increased credibility and these benefits also improve the quality of investment decisions (Hayes et al., 1999). However, where there are cases of restatement of financial reports due to undetected fraudulent earnings managements, the end result may be fall in firm value and eventual corporate failure.

2.2   Empirical Literature

Hassan (2023) analyzed the relationship between audit quality and real earnings management in Pakistan. A panel data on 150 UK based and195 Pakistani-based non-financial companies spanning the period 2010 to 2019 was used in the study. Results of the pooled OLS showed that the Big4 was positively significant with discretionary accrual (DACC) which is a proxy for earnings management. Charles and Ine-Tonbarapa (2023) studied if audit quality had any impact earnings management in Nigeria. Data on eight Deposit Money banks (DMBs) listed on the

Nigerian stock exchange were collected from the respective bank's annual reports over the certain periods. The result of the OLS regression showed that audit fees positively and significantly impacted DACC.

Awuye (2022) carried out an empirical assessment if there is any relationship between audit quality and real earnings management in France. Secondarily sourced panel data obtained from the Factset database spanning the period from 2009 to 2016 for 1532 firm-year observations. Results of the pooled OLS showed that the Big4 was negatively significant with discretionary accrual (DACC) which is a proxy for earnings management. Chituru et al.(2022) studied the relationship, if any, that existed between audit quality and earnings management in Nigeria. An annual secondary panel data of selected 10 companies over the period from 2010 to 2019 was used. The OLS regression result revealed that all the variables of interest (audit tenure, audit firm size and audit fees) did not impact DACC for the period under study. Okereke (2022) examined the impact which audit quality has had on earnings management in Nigeria. Secondarily sourced data from the annual reports of 13 listed consumer-goods firms from 2012 to 2018 were analyzed with the OLS regression method. The results indicated that joint audit relationship with DACC was positively significant. Thi (2022) studied how earnings management can be influenced by audit quality in Vietnam. A sample of 189 listed companies on the Hochiminh Stock Exchange was selected covering the period 2009 to 2017. The results of the multiple regression showed that while the Big4 and audit industry specialization (AIS) significantly influenced DACC positively; audit tenure significantly affected it negatively. This means that neither the Big4 nor AIS was able to mitigate the impact of earnings management for the periods under review.

Lopes (2020) investigated whether audit quality had any effect on earnings management of listed firms in Portugal. Secondary data collected from SABI database on 14723 companies listed firms' annual accounts were tested spanning the period from 2013 to 2015. Results of the OLS revealed that the Big4 had a negative relationship with DACC meaning it significantly lower earnings management. Oyebamiji (2020) empirically tested the extent to which audit quality impacted earnings management of listed firms in Nigeria. A panel data on 15 firms from the listed consumer goods industry over the period 2008 to 2017 was used and analyzed with the OLS regression method. The results revealed that audit firm size (Big4) and audit regulations (ARG) had a negatively significant relationship with DACC

AdhityaAgri and FitoMela (2019) attempted to ascertain the extent to which audit quality impacted earnings management in Indonesia. A sampled data of 615 firm-year observations of listed firms in Indonesian Stock Exchange between 2013 and 2017 was used. Result showed that the Big4 relationship with DACC was negatively significant.

Eriabie and Dabor (2017), in a research study, sought to verify if at all the quality of audit work mitigate the practices of earnings management in Nigeria. Using the data of 18 from 2005 to 2010, the logistic regression results found out that the Big4 was negatively related with DACC meaning engaging the Big4 reduces opportunistic earnings management by managers. Pakianathan (2017) researched on the audit quality characteristics that mitigate earnings management in Sri Lanka. Data collected for the study on 141 non-financial firms which covered the period 1981-2014 were analyzed with the OLS method. The results showed that neither the Big4 nor audit independence statistically mitigate earnings management practices for the period under review. Ajekwe and

Ibiamke (2017) explored the relationship, if any, that determine how audit quality helps to discourage managers desires to manage earnings in Nigeria. Data obtained from the annual reports and the Nigerian stock exchange fact books of 48 firms for the period 2009 to 2014 was used. The results showed that the Big4 had a negatively insignificant relationship with DACC.

Ashtiani et al. (2016) carried out a study to determine of the extent to which audit quality improved earnings management in Iran. A panel data of certain listed firms over some years was used. The OLS results indicated that while the relationship between the Big4 and DACC was negative, that between auditor's industry specialization and DACC was positive.

3.0 Methodology

3.1 Research Design

The study uses the ex-post facto research design, otherwise called the descriptive or correlational research design, to investigate the relationship if any between audit quality and earnings management of 20 listed manufacturing firms in Nigeria. The population of this research comprises all the manufacturing firms listed on the floor of the Nigerian Exchange Group (NXG) . Secondarily sourced data obtained from 12 companies' annual reports over the period 2009 to 2020, making a total number of 144 observations, is used in this study.

3.2 Measurement and Definitions of Variables.

Table1

S/N	Variables Names	Definitions	Types	Measurements	Authorities
1	DACC	Discretionary Accruals	Dependent	Earnings management	Awuye (2022); Ine-Tonbarapa (2023)
2	AFS	Audit Firm Size	Independent	A dummy variable,1, if company was audited by one of the Big4, otherwise it is, 0,	Awuye (2022); Lopes (2020); Oyebamiji (2020)
3	ATEN	Auditor's Tenure	Independent	Number of years the auditors audited the company	Chituru et al.(2022).
4	AIND	Auditor's Independence	Independent	Logarithms of the audit fees paid by the company	Pakianathan (2017)
5	AFEES	Audit Fees	Independent	Fees paid by the company for the audit services	Ine-Tonbarapa (2023) and Chituru et al.(2022).
6	AF_AGE	Audit Firm Age	Independent	Number of years since the audit firm started providing audit services.	Not previously used
7	JAUD	Joint Audit	Independent	A dummy variable,1, if company was audited by two or more audit firms in a year,, otherwise it is, 0,	Okereke (2022).

| 8 | FSIZE | Firm Size | Control | Logarithms of the total assets of the company. | - |
| 9 | LEV | Leverage | Control | Total debts divided by total assets of the company. | - |

Source: Researcher's Compilations from previous study (2023).

While earnings management, proxied by discretionary accruals (DACC) is the dependent variable, the independent variables are Auditor's status (Big4), Audit tenure (ATEN), Audit Independence (AIND), Audit fees (AFEES), Audit firm's age (AF_AGE), Firm size(FSIZE), Joint audit (JAUD) and Leverage (Lev)

3.2.1 Derivation of the Dependent Variable.

Earning management is measured from the perspective of discretionary accrual. Beginning with Healy,1985 and DeAngelo,1986, according to Lee and Vetter(2015), earnings management models have passed through major changes since Jones,1991; Dechow et al. 1995; Kang and Sivaramakrishnan, 1995); Dechow and Dichev 2002; Kothari et al, 2005; to mention but a few. In this study, we use the Jones,1991 as well as the Dechow, Sloan and Sweeney,1995, otherwise known as the Modified Jones Model.

The following steps are taken to taken in order to calculate the discretionary accruals which is our proxy for financial reporting quality both for the Jones Model (1991) and the Modified Jones Model (1995)

Step1: Calculate the total accruals as follows:

$$TACC_{it}/TA_{t-1} = (\Delta CA_{it} - \Delta Cash_{it} - \Delta CL_{it} + \Delta DCL_{it} - DEP_t)/TA_{t-1} \ldots \ldots \text{Eq1}$$

where: $TACC_{it}$ = Total accruals for firm i in year t
ΔCA_{it} = Change in current assets for firm i in year t
$\Delta Cash_{it}$ = Change in cash and cash equivalent for firm i in year t
ΔCL_{it} = Change in current liabilities for firm i in year t

ΔDCL_{it} = Change in short term debt included in current liabilities for firm i in year t
DEP_{it} = Depreciation and amortization for firm i in year t
TA_{it-1} = Total assets for firm i in year t-1, that is, lag of one year.

Step2: Estimate the Jones model in equation2a and the Modified Jones model in euqtion2b as the case may be using the Ordinary Least Squares (OLS) regression technique.

$$TACC_{it}/TA_{t-1} = \alpha_1 1/TA_{it-1} + \alpha_2 \Delta Rev_{it}/TA_{it-1} + \alpha_3 PPE_{it}/TA_{it-1} + \varepsilon_{it} \ldots \ldots \text{Eq2a}$$

$$TACC_{it}/TA_{t-1} = \alpha_1 1/TA_{it-1} + \alpha_2 (\Delta Rev_{it} - \Delta Rec_{it})/TA_{it-1} + \alpha_3 PPE_{it}/TA_{it-1} + \varepsilon_{it} \ldots \ldots \text{Eq2b}$$

where: $TACC_{it}/TA_{t-1}$ = Total accruals for firm i in year t scaled/divided by total assets for firm i in year t-1

ΔRev_{it}= Change in revenues for firm i in year t

ΔRec_{it}= Change in receivables for firm i in year t.

α_1, α_2 and α_3= Parameters or coefficients to be estimated to derive $\hat{a}_1$ $\hat{a}_2$ $\hat{a}_3$, the estimated parameters

ε_{it} = Residuals or error terms for firm i in year t

Step3. Thereafter, we shall calculate the non-discretionary accruals(NDACC) by replacing α_1, α_2 and α_3 with $\hat{a}_1$ $\hat{a}_2$ $\hat{a}_3$ in equations 2a and 2b above without, ε_{it}, the error terms as:

$NDACC_{it}/TA_{t-1} = \hat{a}_1 1/ TA_{it-1}+ \hat{a}_2\Delta Rev_{it} / TA_{it-1}+ \hat{a}_3 PPE_{it}/ TA_{it-1}$ for Jones model.
$NDACC_{it}/TA_{t-1} = \hat{a}_1 1/ TA_{it-1}+ \hat{a}_2(\Delta Rev_{it}-\Delta Rec_{it})/ TA_{it-1}+ \hat{a}_3 PPE_{it}/ TA_{it-1}$ for Modified Jones model.
where: $NDACC_{it}/TA_{t-1}$ = Non-discretionary accruals for firm i in year t scaled/divided by total assets for firm i in year t-1

Step4:Finally, we shall calculate the discretionary accruals as total accruals less non-discretionary accruals.
$DACC_{it}/TA_{t-1}= TACC_{it}/TA_{t-1} - NDACC_{it}/TA_{t-1}$ ……….Eq3

This discretionary accruals(DACC), as a proxy for Earnings Management, is also used as a proxy for Financial Reporting Quality(FRQ) as well as a proxy for Audit Quality(AQ) in the literature.

3.6 Model Specification

The functional equation of the earnings management (DACC) model to test the eight hypotheses is stated as:

DACC = f (AFS, ATEN, AIND, AFEES, AF_AGE, FSIZE, JAUD, LEV)   (1)

The functional testable model will be derived as:

DACC = βo + β_1 AFS+ β_2ATEN + β_3AIND + β_4AFEES + β_5AF_AGE + β_6FSIZE + β_7JAUD + β_8LEV + ε_1 2

Where the definitions are as stated in Table1 above.

β1, β2, β3, β4, β5, β6, β7, β8, = Beta coefficient of the independent variables AFS, ATEN, AIND, AFEES, AF_AGE, FSIZE, JAUD and LEV respectively.

From this study, we expect β1, β2, β3, β4, β5 and β7 to be less than zero while β6 and β8 to be greater than zero..

ε_1 = Error term

Since we are using panel data, the model will be specified in the form:

$DACC_{it} = \beta o + \beta_1 AFS_{it} + \beta_2 ATEN_{it} + \beta_3 AIND_{it} + \beta_4 AFEES_{it} + \beta_5 AF\_AGE_{it} + \beta_6 FSIZE_{it} + \beta_7 JAUD_{it} + \beta_8 LEV_{it} + \varepsilon_{1it}$ (3)

4.0 Method of Data Analysis
Data collected are to be analyzed using EViews 10+ in the following order: correlational test, unit root test, estimation of the models and performance of some diagnostics tests.

4.1 Bivariate Data Analysis (Correlation Analysis)
The correlation analyses among the variables are meant to first determine the association between each pair of the dependent and independent variables as well as among the explanatory variables. The degree of association may be weak (0.00 to 0.5), moderate (0.51 to 0.8) or high (0.81 and above). A very high association among the regressors poses a problem of multicollinearity.

Table 2. Covariance
Analysis: Ordinary
Date: 08/19/23 Time: 15:26
Sample: 2010 2020
Included observations: 143
Balanced sample (listwise missing value deletion)

Covariance Correlation	DACC	BIG4	ATEN	AIND	AFEES	AF_AGE	JAUD	FSIZE	LEV
DACC	1.06E-11 1.000000								
BIG4	-2.00E-08 -0.016193	0.144261 1.000000							
ATEN	-2.50E-07	0.253118	6.433371						

	-0.030266	0.262741	1.000000						
AIND	-0.000193	2163.688	-4411.485	2.77E+08					
	-0.003567	0.341992	-0.104415	1.000000					
AFEES	-0.000193	2163.688	-4411.485	2.77E+08	2.77E+08				
	-0.003567	0.341992	-0.104415	1.000000	1.000000				
AF_AGE	-2.24E-06	0.474889	2.662428	13249.06	13249.06	285.8118			
	-0.040730	0.073957	0.062090	0.047048	0.047048	1.000000			
JAUD	1.06E-09	-0.017311	-0.045479	109.8301	109.8301	0.181182	0.020539		
	0.002268	0.318030	-0.125113	0.046008	0.046008	0.074780	1.000000		
FSIZE	-1.334721	5430637.	76778125	1.57E+12	1.57E+12	31425227	874865.7	1.23E+16	
	-0.003709	0.129158	-0.273440	0.851239	0.851239	0.016791	0.055144	1.000000	
LEV	9.78E-08	0.080198	-0.668701	-3341.121	-3341.121	-0.135019	0.008529	-18259912	2.986343
	0.017413	0.122185	-0.152561	-0.116070	-0.116070	-0.004622	0.034440	-0.095449	1.000000

Source: Researcher's Computations (2023) Using EViews10 Software.

From Table 2 above, apart from FSIZE which has a positive high association with AFEES and AIND at 0.851239, all the other associations are weak and this attest to the fact that there is no problem of multicollinearity among the variables.

4.2   Unit Root Test.
Once the EViews workfile has been structured in panel data form, we can go ahead and perform a panel data unit root test.

Table 3

Variables	Hadri Unit Root Test	Summary Unit Root	Decision
DACC	0.0000	0.0000	I(0) stationary
AFS	0.0000	0.0000	I(0) stationary
ATEN	0.0000	0.0000	I(0) stationary
AIND	0.0001	0.0000	I(0) stationary
AFEES	0.0002	0.0000	I(0) stationary
AF_AGE	0.0000	0.0010	I(0) stationary
FSIZE	0.0000	0.0012	I(0) stationary
JAUD	0.0000	0.0001	I(0) stationary
LEV	0.0020	0.0022	I(0) stationary

Source: Researcher's Computations (2023) Using EViews10 Software.

The results of the Hadri unit root and that of Summary p-values of their test statistics are as shown in Table3. For Hadri, all the variables of interest are I(0), that is, stationary at levels. With respect to Summary unit root test, all the variables of interest also are I(0), that is, stationary at levels. A variable with unit roots means that the variables is not stationary. When variables are not stationary, it means that they can drift apart on the long run and the regression results obtained can be spurious or nonsensical. Thus we can use the OLS method of estimation.

4.3 Model Estimation and Discussion of the Regression Results.

Table 4. Dependent Variable: DACC
Method: Panel EGLS (Period SUR)
Date: 08/18/23   Time: 18:02
Sample: 2009 2020
Periods included: 12
Cross-sections included: 12
Total panel (unbalanced) observations: 143
Linear estimation after one-step weighting matrix

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BIG4	-1.23E-07	2.87E-08	-4.283274	0.0000
ATEN	-4.52E-08	2.67E-09	-16.95077	0.0000
LOG(AIND)	1.30E-07	1.97E-08	6.616750	0.0000
AFEES	-9.17E-12	8.90E-13	-10.30344	0.0000
AF_AGE	-7.99E-09	4.20E-10	-19.01922	0.0000
LOG(FSIZE)	4.16E-08	6.01E-09	6.924532	0.0000
JAUD	-3.31E-07	2.89E-08	-11.44887	0.0000
LEV	4.00E-08	4.89E-09	8.181168	0.0000
C	1.941129	2.08E-07	9351384.	0.0000

Weighted Statistics			
R-squared	0.944487	Mean dependent var	4954389.
Adjusted R-squared	0.941173	S.D. dependent var	13038400
S.E. of regression	0.924012	Sum squared resid	114.4090
F-statistic	284.9825	Durbin-Watson stat	2.039949
Prob(F-statistic)	0.000000		

Unweighted Statistics			
R-squared	0.003831	Mean dependent var	1.941130
Sum squared resid	1.51E-09	Durbin-Watson stat	1.656176

Source: Researcher's Computations (2023) Using EViews10 Software.

Table 3 above show the regression estimation results of the relationship between audit quality and earnings management in Nigeria based on Equation 3.

For the DACC model, both the R^2 (0.9444487) and the Adj R^2 = (0.941173) indicated that about 94% of systematic variations in discretionary accruals is accounted for by the Big4, ATEN, AIND, AFEES, AFAGE, FSIZE and LEV. The remaining 6% can be explained by other factors not captured by our model. The F-statistic (284.9825) and a Prob(F-stat.) of 0.000000 confirm that there is a joint statistical significant of a linear relationship between the variables (dependent and independent). Looking at the independent variables (Big4, ATEN, AIND, AFEES, AFAGE and JAUD) as well as the control variables (FSIZE and LEV) reveal that all the variables are statistically significant (positive or negative) with DACC at the 1% level.

The BIG4 relationship with DACC is negatively significant with a coefficient of -1.23E-07, a t-Statistic of -4.283274 and a p-value of 0.0000. This suggests that the more companies make use of the Big4 auditors, the more managers are likely not to engage managing earnings. The sign or direction as well as the size or magnitude are aligned with our expectations. We, therefore, reject the null hypothesis of no significant relationship between the Big4 and DACC and accept the

alternative which states that there is a significant relationship between the Big4 and DACC. This result is in ine with those of Awuye (2022); Lopes (2020); Oyebamiji (2020) ; AdhityaAgri and FitoMela (2019; Eriabie and Dabor (2017) and Ajekwe and Ibiamke (2017) but contradicts those of Hassan (2023) and Chituru et al.(2022).

ATEN relationship with DACC is negatively significant with a coefficient of -4.52E-08, a t-Statistic of -16.95077 and a p-value of 0.0000. This suggests that the longer the years an auditors stay in a company, the more managers are likely not to be engaging managing earnings. The sign or direction as well as the size or magnitude are aligned with our expectations. We, therefore, reject the null hypothesis of no significant relationship between ATEN and DACC and accept the alternative which states that there is a significant relationship between ATEN and DACC. This result is not in line with any previous study but contradicts those of Chituru et al.(2022).

AIND relationship with DACC is positively significant with a coefficient of 1.30E-07, a t-Statistic of 6.616750 and a p-value of 0.0000. This suggests that the more independent the audit firm is, the more managers will have the tendencies to engage in management of earnings. The sign or direction is not in line with our expectations but the size or a magnitude is in line with our expectations. We, therefore, reject the null hypothesis of no significant relationship and accept the alternative hypothesis that there is a significant relationship between AIND and DACC. This result is not in line with any previous study but contradicts that of Pakianathan (2017)

AFEES relationship with DACC is negatively significant with a coefficient of -9.17E-12, a t-Statistic of -10.30344 and a p-value of 0.0000. This suggests that the bigger the audit fees, the more likely managers are hindered from engaging in management of earnings. The sign or direction as well as the size or magnitude are aligned with our expectations. We, therefore, reject the null hypothesis of no significant relationship between AFEES and DACC and accept the alternative which states that there is a significant relationship between the AFEES and DACC. This result is not in line with any previous study but contradicts those of Charles and Ine-Tonbarapa (2023) and Chituru et al.(2022).

AFAGE relationship with DACC is negatively significant with a coefficient of -7.99E-09, a t-Statistic of -19.01922 and a p-value of 0.0000. This suggests that the older the audit firm, the more likely managers are hindered from engaging in management of earnings. The sign or direction as well as the size or magnitude are aligned with our expectations. We, therefore, reject the null hypothesis of no significant relationship between AFAGE and DACC and accept the alternative which states that there is a significant relationship between the AFAGE and DACC. No previous study used this variable to measure audit quality.

JAUD relationship with DACC is negatively significant with a coefficient of -3.31E-07, a t-Statistic of -11.44887 and a p-value of 0.0000. This suggests that the more audit firms jointly carry out an audit, the more managers are likely not to engage managing earnings. The sign or direction as well as the size or magnitude are aligned with our expectations. We, therefore, reject the null hypothesis of no significant relationship between the JAUD and DACC and accept the alternative which states that there is a significant relationship between the JAUD and DACC. This result is not in line with any previous study but contradicts that of Okereke (2022).

For the control variables (FSIZE and LEV), they are both positively significant with DACC. This means that the bigger the firms and the higher the debts level the more they are likely to engaged in earnings management.

4.4a Residual Diagnostic Tests of No Cross Sectional Dependence

An increasing number of literatures on panel-data conclude that panel-data models are likely to substantially exhibit cross-sectional dependence in the errors. This may be due to the presence of common shocks and some other unobserved components that may eventually become part of the error term. According to De Hoyos and Sarafidis (2006), the past few decades have witnessed an ever-growing economic and financial integration among countries and this signifies strong interdependencies among cross-sectional units. Thus, there is the tendency for individuals to respond in a similar manner to common "shocks", or some common unobserved factors due to neighborhood effects, herd behavior, social norms and genuinely interdependent preferences (De Hoyos & Sarafidis, 2006). Rodríguez-Caballero (2016) also noted that if cross-sectional dependence exists in a panel data model, it can complicate statistical inference and any estimators that do not take such into account could be inconsistent even if the number of cross section dimension N is large with a finite time dimension T.

The above necessitate us to test for cross-sectional dependence as such testing is very important in fitting panel-data models. The results of the cross sectional dependence tests in Table 5 below show that the test statistics-Breusch-Pagan LM and Pesaran CD-accept the null hypotheses of no cross sectional dependence in the residuals since the results of their test-Statistic are greater than 5% respectively except Pesaran scaled LM which is less than 5%. We, therefore, conclude that there is no cross-dependence in the residuals.

Table 5. Residual Cross-Section Dependence Test
Null hypothesis: No cross-section dependence (correlation) in weighted
    residuals
Equation: Untitled
Periods included: 12
Cross-sections included: 12
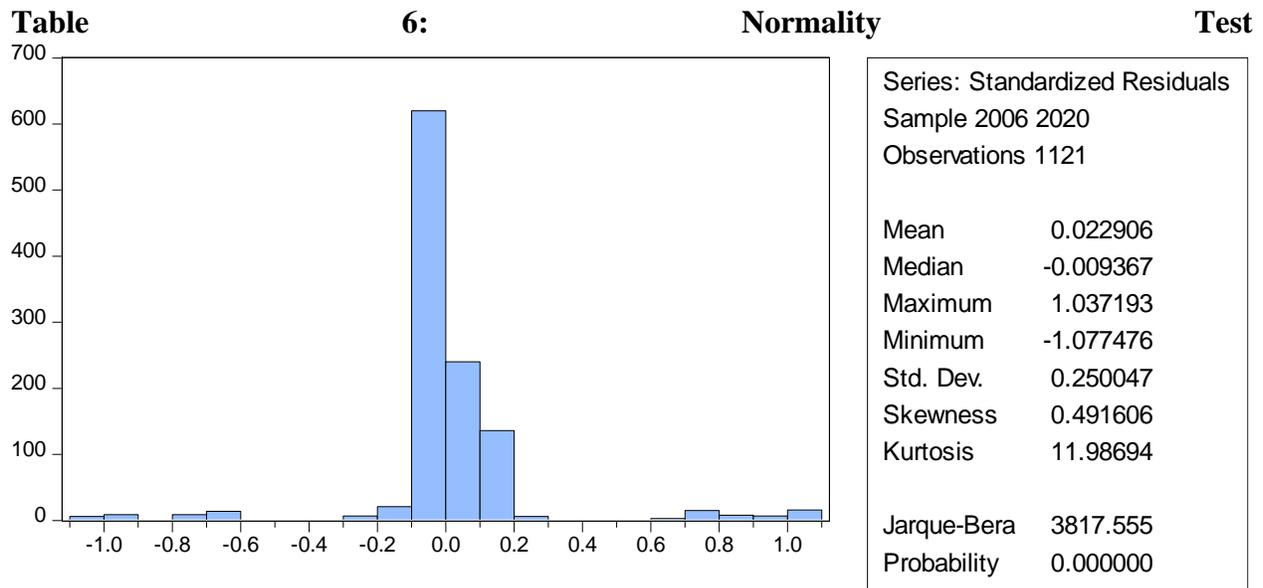Total panel (unbalanced) observations: 143
Note: non-zero cross-section means detected in data
Test employs centered correlations computed from pairwise samples

Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	29.38916	66	1.0000
Pesaran scaled LM	-3.186564		0.0014
Pesaran CD	-0.030344		0.9758

Source: Researcher's Computations (2023) Using EViews10 Software.

4.4b   Diagnostics Tests of Normality

Table   6:   Normality   Test

Series: Standardized Residuals	
Sample 2006 2020	
Observations 1121	
Mean	0.022906
Median	-0.009367
Maximum	1.037193
Minimum	-1.077476
Std. Dev.	0.250047
Skewness	0.491606
Kurtosis	11.98694
Jarque-Bera	3817.555
Probability	0.000000

Source: Researcher's Computations (2023) Using EViews10 Software.

The purpose of the normality test is to determine if the distribution of data within a group of data or variables is regularly distributed or not. Data that has been collected in a normal distribution or taken from a normal population can be identified using the normality test. In data analysis, normalcy assumptions are used by descriptive statistics, correlation, regression, ANOVA, t tests, etc. This normality assumption should be upheld despite the sample size because choosing the incorrect data set representation will result in an incorrect interpretation (Mishra et al., 2019). Again, it is essential to check for non-normal errors in regression models since the assumption of normality is crucial for the validation of inference techniques, forecasting, and model specification tests, both conceptually and methodologically (Alejo et al., 2015). However, Ghasemi and Zahediasl (2012) noted that, in accordance with the central limit theorem (CLT), violating the normality assumption shouldn't be a significant problem once the sample size is 100 and above. From the value of Jarque-Bera statistic and its probability value in Table 6 above, the data used in analyzing the regression model are not normally distributed since the p-value is less/lower than 0.05, that is, 5%. This is not a problem because the number of observation is large at 143.

5.0 Conclusion and Recommendations.

This study investigates whether there is any relationship between audit quality and earnings management in Nigeria. Using secondary data over the period from 2009 to 2020 of 12 non-financial firms, the results of the EGLS (Period SUR) reveal that audit firm size, audit tenure, audit fees, audit firm age and joint audit are negatively and statistically significant with earnings

management. This means that they are key factors in mitigating managers urge to engage in the management of earnings. Audit independence however has a positive and significant impact of earnings management which means the more independent the auditors are the more managers manage earnings..

Based on the results above, the study recommends that:

➢ Management should continue to make use of the Big4 since they are able to deter managers from manipulating earnings.
➢ Management should continue to keep to the current tenure period.
➢ Management should continue to make use of the two or more audit firms because it serves as deterrent to managers tendencies to manipulate earnings.
➢ Management should continue paying the current audit fees as much as possible.
➢ Management should continue to make use of the older audit firms since their presence are able to deter managers from manipulating earnings.

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