Audit Quality and Earnings Management by Listed Firms in Nigeria

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\textbf{Keywords}
Audit quality, Earnings management, Earnings per share, Nigeria, Listed firms.

\textbf{Jel Classification}
M41, M42.

\textbf{Abstract}
\textbf{Purpose:} We herein investigate the effect of quality of audit on management of earnings in Nigerian listed firms by (i) ascertaining the effect of audit quality on discretionary accruals, (ii) determining the effect of audit quality on earnings smoothing, as well as (iii) establishing the effect of audit quality on earnings per share.

\textbf{Methodology:} The study follows an \textit{ex-post facto} research design. It draws data from the annual reports of 10 firms. These consisted of five financial and five non-financial firms, purposively selected for a period of 10 years (2010-2019). Descriptive and inferential analyses were employed in data analyses.

\textbf{Findings:} The findings indicate that audit quality significantly affected earnings smoothing. Moreover, audit quality did not significantly affect discretionary accruals and earnings per share. Furthermore, it is recommended that management of firms should put in place policies for predicting earnings (in profit) to help forecast future earnings, which can be achieved by audit quality.

\textbf{Originality/Value:} This study is meant to raise awareness on the need to improve the financial statement/reporting practices of publicly listed companies with respect to earnings management; discretionary accrual, earnings smoothing and earnings per share. It is hoped that the forwarded recommendations support the competent authorities in addressing the identified existing issues, thus enabling them to enhance the financial reporting practices and render them improved vehicles for development in publicly listed companies.

\textbf{DOI:} 10.32602/jafas.2022.037
Introduction

Adoption of opportunistic management of earnings creates inaccurate accounting profits, not reflecting or representing the reality or true and fair view of the financial performance of the reporting entity. This is a common occurrence that affects businesses as well as other sectors, lowering investors’ trust in financial reporting (Utami 2017). Many companies have experienced accounting scandals in the last decade, mostly due to the way details in annual reports are handled by managers, who had the ability to mislead stakeholders by using a variety of accounting options in financial statement planning (Kurawa, Ahmed 2020). The auditing mechanism’s responsibility in ensuring that reported profits are consistent has been a source of concern, leading to questions about the efficiency of auditors’ position in monitoring and managing managerial opportunistic behaviour. The audit standard delivered reflects the auditor’s credibility as well as the revenue quality of the client (Yasser, Soliman 2018). To this end, it is impossible to overlook the importance of audit quality and its effect on earnings management.

Each company continues to strive to maximize the advantages of audit quality. According to Utami (2017), a variety of techniques are used to achieve audit efficiency. Businesses, on the other hand, face several challenges that can result in poor results, financial difficulties, and eventually bankruptcy, with the company attempting to conceal its owners’ dangerous circumstances. Earnings management is the process of intervening in the processing of external financial statements in order to assist stakeholders (Almadara 2017). Managers have chosen to assess accounting standards to manipulate outcomes in order to meet such goal. Since earnings management is a technique of manipulating financial reporting aimed at communicating with management and the company’s external parties, it can reduce the credibility of decision-making (Utami 2017).

The operational performance quality and quality of audits have resulted in big controversies arising from corporate fraud in reducing earnings control by companies worldwide and especially within Nigeria (Enofe 2010). Investors are suspicious about the reliability, value importance, integrity, utility and veracity of the
audit feature due to recent corporate fraud (Rusmin 2017). There are several reasons for presenting fraudulent financial statements. These include the need for higher returns on assets from shareholders and the desire of the company’s founders to have good faith in or retain the eyes of the corporate world, or to achieve competitiveness (Umar, Rashid, Ado, Lateef 2019).

Nigerian firms are exposed to threats, which have contributed to the failure of many institutions such as Bank PHB, Afri Bank, Intercontinental Bank, Alpha Merchant Bank, Society General Bank Limited and Savannah Bank (Elewa, Rasha 2019). One example of this threat is the weak appointment of board members, which prompted some of the auditors to participate in professional indiscretion and ethical infraction or misconduct (Andreas 2017). The concern is whether organizational collapse is not a result of low audit quality as a consequence of prolonged audit tenure, a limited period of audit rotation, high audit reimbursement, loss of freedom and the failure of the audit feature (Kurawa, Ahmed 2020). Many of the accounting controversies that have been encountered over the past decade involves distortion of the accounting records by means of accruals and the provision of discretionary loan losses and documentation of fake inventories.

Increased audit efficiency may either contribute to or could lead to improved quality of recorded revenues (Clement, Adzor 2017). Compared to poor quality auditors, auditors with high quality appear to recognize dubious accounting procedures and oppose their submission and/or modify the audit report when they are identified (Umar, Rashid, Bala, Lateef 2019). Thus, businesses with lower quality auditors practice earnings management more than organizations with better quality auditors (Oladejo 2020). However, research regarding the effect of audit quality on earnings management by listed firms in Nigerian is limited. Consequently, this research paper attempted to achieve the following objectives:

i. To ascertain the effect of audit quality on discretionary accruals of listed firms in Nigeria;

ii. To determine the effect of audit quality on earnings smoothing of listed firms in Nigeria; and
To establish the effect of audit quality on earnings per share of listed firms in Nigeria.

Literature Review

Definitions of Earnings Management and Audit Quality Variables

Earnings Management

Earnings management, according to (Ronen, Yaari 2011), is a series of management decisions that do not report on management’s known real, short-term profit maximization.

Earnings management, also known as discretionary accruals, is unlikely to be represented by the normal component of accrual (Kaplan, Reishus 1990). As a result, irregular accruals, also known as budgetary accruals, would be the most serious issue in benefit accounting. Dechow, Sloan and Sweeney (1995) compared various ways to separate overall accruals into non-discretionary and discretionary components. This resulted in the estimated regular accruals being subtracted from overall accruals. As a result, the Jones modified model is found to be the most efficient method of calculating discretionary accumulations that reflect primarily earnings power.

Earnings per Share

The earnings per share (EPS) is the portion of a company's earnings that is allocated to each outstanding common stock share. Profitability of a firm is measured in earnings per share (EPS). This is the profit in percentage that a company receives from each remaining share of common stock. The difference between a firm’s net income and preferred stock distribution is calculated and divided by the average number of outstanding shares (Oladejo 2020). Simply convert the total number of shares remaining for the same time into the net income earned in the reporting period to arrive at the figure (usually quarterly or annually). Revenue per share is widely regarded as the major determinant of a firm's share price and a significant factor in calculating the ratio of value for money (Pandey 2010). Profit per share is another important factor in stock prices, which may serve as a financial status metric for predicting a firm’s future success over the year. In the words of Okolie (2014), EPS is a measure of a firm's profitability, since net income is based on company
performance and financial consequences. Earnings per share is defined by the International Accounting Standards Board (IASB) in IAS 33 as the “sum of earnings in the current period or benefit (or loss) attributable to an ordinary share unit” (Talat, Mian 2013).

**Earning Smoothing**

The word "earning smoothing or income smoothing” refers to the manipulation of expenditures and revenue in order to give the false impression that a company's earnings are stable. According to Oladejo (2020), income smoothing is one of the accounting techniques that involves modifying and controlling fluctuations in a business’s earnings. It is a method of reducing a firm’s recorded earnings in successful times and deferring them to loss-making periods in order to represent a 'stable’ income stream over time. Two emotions are required when it comes to earnings management. The first prevails and considers earnings management as fake, while in the second case, stakeholders use their preferences to decide what constitutes management (Okolie 2014). Investors like a smoothed income flow because it supposedly represents stability, strength, and growth within an organization (one of the many explanations for income smoothing). It is a strategy employed by a business manager to minimize the shift in recorded profits by artificial or actual earnings management in order to achieve a target income level (Paradisa, Yustrida 2020).

**Audit Quality**

DeAngelo (1981) defines audit quality as the auditors’ independence and honesty in detecting and disclosing material misstatement. According to Zehri and Shabou (2011), auditors of high quality are more likely than low-quality auditors to identify and discover substantial errors and misstatements in customer accounting practices. Depending on the reliability of audits, various parties define the norm in different ways. Consumers of financial statements, for example, consider high-quality audits to be those that prevent significant inaccuracies in the financial statements. A high-quality audit can be considered by the company and the audit firm as one in which the firm can successfully deal with litigation. According to the Financial Reporting
Council (FRC), there is no universally agreed definition of audit quality that can be used to compare results (FRC 2006). Due to differences in stakeholder perspectives, the International Organization of Securities Commission (IOSO 2009) stated that describing audit performance is difficult. Researchers and regulators have attempted to determine the quality of audits in a hybrid environment as a result of this issue.

**Audit Tenure**

The term "auditor tenure" refers to the time an auditor and a client have worked together (Okolie 2014). Given the established familiarity, a long relationship between the auditor and his customer can challenge unconventionality. As a result, the auditor’s diligence and agreement will suffer. On the other hand, a longer commitment could necessitate less effort in identifying internal control flaws and risk sources (Knechel, Krishnan, Pevzner, Shefchik, Velury 2013). Early years of participation improve as detecting errors is the focus of auditors, then decreases after a while, attaining its lowest point after service of 20 years (Sirois, Marmousez, Simunic 2016). The number of years spent auditing has decreased significantly. Auditors’ terms in the United States have been reduced to five years from seven; the European Commission has suggested that after a period of seven years of engagement, partners should be rotated. Auditors in France are designated for a period of six financial years; and audit engagements in Nigeria are limited to three years (Khlif, Samaha 2016) but seems not to be enforced.

**Audit Fees**

According to Oladejo (2020), researchers have hypothesized that large auditors attract a fee premium because their greater resources reduce clients’ susceptibility to litigation (profound pocket theory); however, others have argued that there is no real difference in audit performance, but rather that large corporations have earned reputation and appreciation for quality. The remuneration of auditors in Nigerian corporate organizations is a critical problem (Paradisa, Yustrida 2020). American Institute of Certified Public Accountants (AICPA 2012), defines audit fees as sums owed to the auditor for audit services rendered to the auditee. International Federation of Accountants’ Code of Ethics for Professional Accountants (IFAC 2010)
stated that when entering into contracts for professional services, professional accountants should quote any fee they deem appropriate in public practice.

**Audit Size**

Small businesses and regulators argued that audit standards should not be set solely based on the size of major public accounting firms (Abu, Mir, Rou, Md 2020). DeAngelo (1981) refuted this charge against small firms, claiming that large audit firms were more flexible and efficient in their work. Also, Francis and Yu (2009) found that large accounting firms are more likely to discover material anomalies in their financial statements. Large audit firms risk losing clients when they are well-known, with low audit standards, and their decision-making lacks independence. As a result of these issues, there is a strong incentive to improve audit performance. Scholars discovered that the size of an organization has a connection with the auditor's performance (Cheug, Liu, Chien 2009). According to Oladejo (2020), audit firms' reputation is crucial for audit partners. In the international context, researchers compared auditors' judgments of CPA international firms as big firms versus auditors' judgments of local and regional firms as small and medium firms (Utami 2017).

**Conceptual Model**

This section describes the pictorial relationship that exists between earnings management (discretionary accrual, earnings smoothing and earnings per share) and the quality of audit (audit tenure, audit size and audit fee).
Theoretical Underpinning

**Agency Theory**

Agency theory was popularized by (Jensen, Meckling 1976). The dilemma of owner versus agent was addressed by agency theory, as widely used in the finance and accounting literature. Specifically, it was adopted to describe the relationship between external auditor output and operation (Talat, Mian 2013). There are problems where the agent and the owner’s interests are misaligned, and knowledge is asymmetric. The most argument is that the agency takes potentially harmful and expensive decisions to benefit shareholders. This type of risk would result in poor financial outcomes. Information symmetry between principals and agents was
addressed to optimize market performance awareness. Independent audits were used to handle information asymmetry. As a result, the greater the information asymmetry, the greater the need for superior audits, and vice versa (Enofe 2010). Corporate governance mechanisms, such as audit consistency, sought to strike a balance between agents' and shareholders' priorities, thus improving corporate performance (Jensen, Meckling 1976). This study was anchored on Agency theory because it exemplifies what motivates an organization's managers and directors to keep their profits under control. The agency theory demonstrates how managers can try to maximize their benefits and objectives at the expense of investors. As a result, managers are compensated based on their effectiveness and results to mitigate such behaviour. They want to maximize their income and will do whatever it takes them to do so, including earnings management and manipulation.

**Empirical Review**

During the Global Financial Crisis (GFC), (Abu, Mir, Ron, Md 2020) looked at how Australian companies managed their earnings and the effectiveness of audit quality and audit committee characteristics in mitigating such conduct. There were 503 firm-year findings in the collection, which spanned from 2006 to 2009. The global financial crisis occurred in the years 2008 and 2009. Discretionary accruals have been used as stand-in benefits of management. The study discovered that during the Great Recession, the companies studied had a slightly higher degree of earnings management than before the crisis (PCP). The study found that audit accuracy, as measured by having earnings management impeded by Big 4 firms during the CFP but not the period of GFC. The independence of the audit committee has a substantial mitigating impact on companies' profit control, although the audit committee's accounting and finance experience has little bearing on earnings management.

The effect of audit quality on earnings management was investigated by (Eriabie, Dabor 2017). The study examined the 18 banks listed on the Stock Exchange in December 2010. Information was gathered from 2005 to 2010. Year-by-year cross-sectional regression analyses were performed. Audit fees and auditor adjustments were used as measures of audit performance, while earnings control was determined
as irregular loan loss provisions. The result shows that a positive relationship exists between audit fees and the auditor adjustment to the provision of irregular loan losses based on the frequency of the findings over the study period. This implies that earnings management is aggravated when audit fees are high and changes in auditor tenure.

The potential impact of audit quality on changes in earnings management among listed Nigerian firms was investigated by (Umar, Rashid, Ado, Lateef 2019). From 2012 to 2017, the study used all publicly traded companies in the Nigerian Stock Exchange (NSE) mainstream as a population. Based on the study’s filtration requirements, sixty-three companies were chosen as samples. The model of the study was evaluated using multiple regression. According to the regression analysis, audit efficiency had a negative relationship with accrual earnings control. As a result, an increase in audit fees will reduce the leverage over the earnings of the selected firms. Therefore, the findings support agency theory while contradicting creative accounting theory’s presumption.

Aliyu, Usman, and Peter (2015) examined the impact of audit quality on deposit money banks’ earnings management in Nigeria. The correlational research design was adopted in a survey of ten (10) deposit money banks using secondary data over eight years (2006-2013). They employed the Ordinary Least Squares (OLS) data analysis regression technique and found a significant impact on the quality of the audit and earnings management. Also, they discovered a significant but negative impact of audit firms’ size and joint audit services on earnings management. Similarly, they found a significant positive impact on the financial dependence of auditors and earnings management.

Oladejo (2020) examined the connection between audit quality and earnings management among Nigerian consumer goods companies. The study used primary data that spanned the years 2008 to 2017. The study chose 15 of the 22 consumer goods companies based on their relative size, financial quality, data availability, and usability. A purposive sampling technique was adopted in the study. The descriptive, correlation and random effect methods were employed for the analyses. They found
that the size of the audit firm, audit legislation, the legal climate, and the form of business all had an inverse relationship with earnings management, while leverage had a positive relationship.

Soyemi, Olufemi, and Adeyemi (2020) investigated the impact of audit quality on limiting the incidence of accrual-based earnings management among Nigeria’s 30 publicly traded non-financial firms from 2008 to 2018. Panel ordinary least square technique was used to approximate the sample’s defined model. Although descriptive statistics revealed that there is no accrual-based earnings exploitation among Nigeria’s listed non-financial companies, the multivariate fixed effects of the ordinary least square revealed that the audit’s quality variables are mutually and statistically important in explaining 49% of changes in earnings management. Furthermore, audit tenure and independence had a positive and significant relationship, while total assets, as the control variable, had a negative and significant effect on earnings management. Surprisingly, the audit firm’s scale seemed positive but statistically insignificant.

Khalid, Noor, and Ishak (2019) sampled 721 firms listed on the Amman Stock Exchange (ASE) from 2011 to 2017 to investigate the impact of AC characteristics, such as scale, competence, meetings, and independence, on REM. The results showed that AC competence, AC freedom, and AC meetings have a negative relationship with the REM level, even though the REM and AC scale have no relationships.

Isa and Musa (2018) evaluated the effect of board diversity and the audit committee on the earnings management of low and high-leveraged Deposit Money Banks listed in Nigeria. For this study, 15 banks listed on the Nigerian Stock Exchange as of 2015 were utilised. The information was gathered from the financial statements for the years 2008 to 2015. Multiple regression analysis was adopted. The results revealed that all variables had a significant impact on the bank’s management of earnings, except women directors and board sizes in low-leveraged banks, while board ownership had a negative impact on earnings management in high-leveraged banks.

Based on a review of the conduct of discretionary accruals in non-listed Portuguese firms, (Ana 2018) investigated whether there is a correlation between the
manipulation of results and audit quality. Based on the Updated Jones model, the empirical model for this analysis was multiple linear regression. The study found a correlation between audit efficiency and earnings manipulation. Compared to non-Big 4 audit firms, the level of earnings management among companies that employed the Big 4 audit firm was significantly lower.

**Research Methodology**

**The Research Tool**

The *ex post facto* research design was used. This is because it includes incidents that have already occurred. A secondary source of data for this analysis was obtained from the financial statements and annual reports sourced from the websites of the companies chosen as samples between 2010 and 2019. Therefore, information was gathered from publicly available financial statements that have been audited by statutory external auditors. The auditors’ audit professional opinion was accurate and honest, and the financial regulators’ acceptance of the audited annual reports and accounts gave the data credibility. The company followed the requirements of CAMA 2020 about independent auditors auditing the accounts.

**The Sample Population**

The population was 161 financial and non-financial institutions on the Nigerian Stock Exchange as of 31st December 2019. The purposive sampling technique was utilised in selecting five (5) financial institutions (five deposit money banks) and five (5) non-financial institutions (five manufacturing firms). This selection was based on firms that have complete data for the study periods, which made the actual sample of this study 100 firm years’ observations.

**Data Analysis**

The study used descriptive statistics and the Multiple Ordinary Least Square regression approach as the data analysis technique. With the aid of E-view 9, multiple regression models were used to evaluate the influence of the independent variable (audit quality) on the dependent variable (earnings management).
Description and Measurement of Variables

The updated Jones model for predicting irregular accruals was used as a predictor of the least square regression in this analysis. The model adopted is mathematically presented as follows:

\[
TCA_{it} = \beta_0 + \beta_1 CFO_{it} + \beta_2 CFO_{it} + \beta_3 CFO_{it} + 1 + \beta_4 \Delta REV_{it} + \beta_5 PPE_{it} + \xi_{it}
\]

Where:

- \( TCA_{it} \) is Total Current Accruals; calculated as the annual change in current assets minus the annual change in current liabilities minus the annual change in cash plus the annual change in current liabilities debt plus the annual change in taxes payable.
- \( TA_{it} \) is Total Assets which is measured as (Annual change in current assets — Annual change in current liabilities — Annual change in cash + Annual change in current liabilities debt — Depreciation and amortization expense)
- \( CFO_{it} \) is cash flow from operations; that is, cash flow from operations is calculated by subtracting total accruals from net income before exceptional products. (Net income before extraordinary items — Total accruals)
- \( \Delta REV_{it} \) is the annual change in revenues.
- \( PPE_{it} \) is property, plant, and equipment, measured as (Gross value of PPE),
- \( \xi_{it} \) is the error term.
- \( TCA_{it} = \Delta CA_{it} - \Delta CL_{it} - \Delta CASH_{it} + \Delta STDEBT_{it} \)
- \( CFO_{it} = NIBE_{it} - TA_{it} \)
- \( NIBE_{it} = \) firm’s net income before extraordinary items in year \( t \)
- \( TA_{it} = (\Delta CA_{it} - \Delta CL_{it} - \Delta CASH_{it} + \Delta STDEBT_{it} - DEP_{it}) \)
- \( \Delta CA_{it} = \) firm’s change in current assets between year \( t-1 \) and year \( t \)
- \( \Delta CL_{it} = \) firm’s change in current liabilities between year \( t-1 \) and year \( t \)
- \( \Delta CASH_{it} = \) firm’s change in cash between year \( t-1 \) and year \( t \)
- \( \Delta STDEBT_{it} = \) firm’s change in current liabilities debt between year \( t-1 \) and year \( t \)
DEPN\textsubscript{it} = firm’s depreciation and amortization expense in year t

\[ \Delta \text{REV}_{it} = \text{firm’s change in revenues between year } t-1 \text{ and year } t \]

PPE\textsubscript{it} = firm’s gross value of PPE in year t

In general, large (small) residual value indicates a lower (higher) accrual and lower (higher) quality of earnings.

**Model Specification**

\[ Y = f(X) \]

\( Y = \) Dependent variable (Earnings management) (EMA)

\( X = \) Independent variable (Audit quality) (AUQ)

\( X \) and \( Y \) are broken down as follows

\[ Y = (y_1, y_2, y_3) \]

\[ X = (x_1, x_2, x_3) \]

Where:

\[ y_1 = \text{Discretionary accrual (DA)} \]

\[ y_2 = \text{Earnings smoothing (ESG)} \]

\[ y_3 = \text{Earnings per share (EPS)} \]

and

\[ x_1 = \text{Audit tenure (AUT)} \]

\[ x_2 = \text{Audit Fees (AUF)} \]

\[ x_3 = \text{Audit size (AUZ)} \]

\[ DA = \alpha_0 + \beta_1 \text{AUT}_{it} + \beta_2 \text{ACF}_{it} + \beta_3 \text{AUZ}_{it} + \mu_{it} \] (Model 1)

\[ ESG = \alpha_0 + \beta_1 \text{AUT}_{it} + \beta_2 \text{ACF}_{it} + \beta_3 \text{AUZ}_{it} + \mu_{it} \] (Model 2)

\[ EPS = \alpha_0 + \beta_1 \text{AUT}_{it} + \beta_2 \text{ACF}_{it} + \beta_3 \text{AUZ}_{it} + \mu_{it} \] (Model 3)

Where:

\( \mu = \) Error term, which captures other explanatory variables not explicitly included in the model.

\( it = \) time coefficient i.e., for the firm \( i \) in year \( t \)

Decision Rule: for \( H_01 - H_04, p < 0.05 \), reject null hypothesis and accept alternate hypothesis.
Research Limitations

The major constraint was the dearth of data. As such, the chosen research approach, choice of variables, and sample size/population, may cause the research results to lack generalizability to other countries. Therefore, researchers are encouraged to test the proposed propositions further.

Findings and Discussion

Table i: Descriptive Statistics

|        | DA      | ESG     | EPS     | AUT     | AUF     | AUZ     |
|--------|---------|---------|---------|---------|---------|---------|
| Mean   | -0.018138 | 0.075502 | 4.837000 | 0.220000 | 4.981891 | 0.980000 |
| Median | -0.007534 | 0.037116 | 1.600000 | 0.000000 | 4.766555 | 1.000000 |
| Maximum | 0.393187 | 0.858781 | 54.26000 | 1.000000 | 5.950365 | 1.000000 |
| Minimum | -0.654008 | -0.020515 | -1.340000 | 0.000000 | 2.494787 | 0.000000 |
| Std. Dev. | 0.168541 | 0.116029 | 8.867402 | 0.416333 | 0.617059 | 0.140705 |
| Observations | 100     | 100     | 100     | 100     | 100     | 100     |

Source: Researchers’ Study (2021)

Interpretation of Descriptive Statistics

Table (i) showed that Discretionary accrual (DA) and Earnings smoothing (ESG) with standard deviation values of 0.17 and 0.12 are highly volatile, measuring from the mean, the dispersion of the range of figures. Minimum values of -0.65 and -0.021 indicated periods when after the adjustment of non-discretionary accruals, the companies reported low earnings data as observed in the data within the time frame. Maximum figures of 0.39 and 0.86 show that the companies with the value yielded a low level of operating cash flows, thus, increasing accrual earnings and the ability to forecast earnings.

Earnings per share (EPS) characteristics revealed that earnings per share of the sampled firms were extremely unpredictable. The standard deviation of 8.87, calculates the figure’s range dispersion from the mean. Also, as shown by the negative sign of these ratios, the minimum value of -1.34 showed that, there were times during the period when the businesses never yielded earnings as a result of
bad outcomes and negative earnings from recorded huge losses. The maximum number of 54.26 indicates that the firms earned the most money in the period covered, showing that they were successful in producing better results, and efficiently used of the firms' capital.

The minimum and maximum values of Audit tenure (AUT) and Audit size (AUZ) were 0 and 1, respectively, indicating that sampled businesses used an auditing firm for three years for the maximum value of 1 and failed to use an auditing firm for more than three years for the minimum value of 0. The maximum value of 1 suggests that the sampled businesses used a Big Four accounting firm to audit their annual reports and accounts while the minimum value of 0 indicates that they did not. When we look at Audit fees (AUF), which have a minimum of 2.49 and a maximum of 5.95, we can see that the minimum value is due to the use of Big Four auditing firms for auditing and other auditing firms for audit decisions and audit opinions. Audit fees have evolved with auditing companies, receiving fees based on the Big4’s competition mostly used by deposit money banks, as well as the rise in overall asset base and resources of banks over time, resulting in more auditing services being needed and better decisions being taken based on improvements in accounting policies and standards.

Table ii: Analysis of Regression result for Model One: Fixed effect

| Variable | Coefficient | Std Error | t-Stat. | Prob. |
|----------|-------------|-----------|---------|-------|
| C        | -0.672271   | 0.269535  | -2.494190 | 0.0145 |
| AUT      | 0.002591    | 0.041397  | 0.062599 | 0.9502 |
| AUF      | 0.133452    | 0.050959  | 2.618798 | 0.0104 |
| AUZ      | -0.011511   | 0.123473  | -0.093223 | 0.9259 |

R-squared 0.160059
Adjusted R-squared 0.044206
F-Statistics 1.381563
Prob(F-Stat) 0.190172

Diagnostic Tests
Hausman Test \( \text{chi}^2(4) = 11.8 \) (0.0081)

Dependent Variable: DA; Obs.: 100  
*significant at 5%

Source: Researchers’ Study (2021)
Interpretation of Diagnostic Test for Model One

The appropriateness of the fixed effect or random effect for the model, was ascertained by conducting the Hausman test. The result of the test showed a probability value of 0.0081, which is less than a 5% level of significance. Hence, the rejection of the null hypothesis of the Hausman specification test. Thus, the model was estimated using the fixed effect estimation technique.

Interpretation of Regression analyses for Model One

The regression analysis results in Table (ii) revealed that the constant has a negative beta coefficient (-0.672271). The coefficients of audit quality measures (AUT and AUF) are positive while AUZ is negative. This is evident by the sign and magnitude of the coefficients, (β₁ = 0.002591>0, β₂ = 0.133452>0 and β₃ = -0.011511<0). By implication, an increase in audit tenure by 1% will lead to a 0.002591 increase in discretionary accruals, audit fees increase by 1% would make discretionary accruals increase by 0.133452, and audit size increase by 1% would lead to discretionary accruals decrease by 0.011511. AUT and AUF have positive effects on DA while AUZ has a negative effect on DA. However, AUT has a t-statistics of 0.062599 with an insignificant p-value of 0.9502, which is higher than 0.05; AUF has a t-statistics of 2.618798 with a significant p-value of 0.0104 (below 0.05); and AUZ has a t-statistics of -0.093223 with an insignificant p-value of 0.9259, which is above 0.05.

The adjusted R² (coefficient of determination) is 0.044206. Within the context of the model, this implies that audit quality accounts for 4% variations in discretionary accruals while the remaining 96% is explained by other factors outside the model, which can affect discretionary accruals. In addition, at a 5% level of significance, the F-statistics is 1.381563 while the p-value is 0.190172, greater than the level of significance of 0.05 adopted for this study. As such, the null hypothesis was not rejected. Therefore, audit quality does not significantly affect discretionary accruals of Nigerian listed firms.
Table iii: Analysis of the Regression result for Model Two: Random effect

| Variable | Coefficient | Std Error | t-Stat. | Prob. |
|----------|-------------|-----------|---------|-------|
| C        | 0.196591    | 0.142711  | 1.377547| 0.1715|
| AUT      | -0.026037   | 0.026035  | -1.000082| 0.3198|
| AUF      | -0.030039   | 0.024060  | -1.248540| 0.2149|
| AUZ      | 0.034993    | 0.077867  | 0.449395| 0.6542|

R-squared    | 0.150302
Adjusted R-squared | 0.114526
F-Statistics  | 4.201120
Prob(F-Stat)  | 0.003553

**Diagnostic Tests**

| Test            | Probability   |
|-----------------|---------------|
| Hausman Test    | chi2(3) = 2.34 (0.5047) |

Dependent Variable: ESG; Obs.: 100 *significant at 5%

*Source: Researchers’ Study (2021)*

**Interpretation of Diagnostic Test for Model Two**

Hausman test results in Table iii revealed a 0.5047 probability value, which is above the 5% significance level. Thus, we do not reject the Hausman specification test’s null hypothesis. Therefore, the random effect estimation technique was employed for model two.

**Interpretation of Regression analyses for Model Two**

The regression analysis result in Table (iii) revealed that the constant has a positive beta coefficient of 0.196591. The coefficients of audit quality measures (AUT and AUF) are negative while AUZ is positive. This is evident by the sign and magnitude of the coefficients ($\beta_1 = -0.026037<0$, $\beta_2 = -0.030039<0$ and $\beta_3 = 0.034993>0$). By implication, an increase in audit tenure by 1% will lead to a 0.026037 reduction in earnings smoothing, an increase in audit fees by 1% will make earnings smoothing reduce by 0.030039, and audits’ size increase by 1% will lead to earnings smoothing increase by 0.034993. AUT and AUF have negative effects on ESG while AUZ has a positive effect on ESG. However, AUT has a t-statistics of -1.000082 with an insignificant $p$-value above 0.05 (0.3198), AUF has a t-statistics of -1.248540 with an
insignificant \( p\)-value above 0.05 (0.2149) and AUZ has a \( t\)-statistics of 0.449395 with an insignificant \( p\)-value of 0.6542, which is above 0.05.

The adjusted \( R^2 \) (coefficient of determination) is -0.114526. Within the context of the model, this implies that audit quality accounts for 11% variations in earnings smoothing while the remaining 89% is explained by other factors outside the model, which can affect earnings smoothing. In addition, at a 5% level of significance, the \( F\)-statistics is 4.201120 while the \( p\)-value is 0.003553, which is below the 0.05 significance level. In essence, the null hypothesis was rejected. Based on the foregoing, therefore, audit quality significantly affects the earnings smoothing of Nigerian listed firms.

### Table iv: Analysis of Regression result (Model Three): Random effect

| Variable | Coefficient | Std Error | \( t\)-Stat. | Prob. |
|----------|-------------|-----------|--------------|-------|
| C        | -2.246170   | 7.785246  | -0.288516    | 0.7736|
| AUT      | 0.045192    | 1.129752  | 0.040001     | 0.9682|
| AUF      | 1.208973    | 1.352077  | 0.894160     | 0.3735|
| AUZ      | 1.071689    | 3.371897  | 0.317830     | 0.7513|

| R-squared | 0.010507 |
| Adjusted R-squared | -0.020414 |
| F-Statistics | 0.339804 |
| Prob(F-Stat) | 0.796584 |

**Diagnostic Tests**

| Hausman Test | \( \text{chi}^2(4) = 1.27 \) (0.7363) |

**Dependent Variable:** EPS; **Obs.:** 100

*significant at 5%

**Source:** Researcher’s Study (2021)

**Interpretation of Diagnostic Test for Model Three**

Hausman test results in Table iv revealed a 0.7363 probability value, which is below the 5% significance level, indicating that the Hausman specification test’s null hypothesis is not to be dismissed. As a result, a random effect estimation technique was used to estimate the model.
**Interpretation of Regression analyses for Model Three**

From the regression analysis result in Table (iv), the constant revealed a negative beta coefficient of -2.246170. The coefficients of audit quality measures are positive, which are evident by the signs and magnitudes of the coefficients ($\beta_1 = 0.045192 > 0$, $\beta_2 = 1.208973 > 0$ and $\beta_3 = 1.071689 > 0$). By implication, an increase in audit tenure by 1% would lead to a 0.045192 increase in earnings per share, audit fees increase by 1% would lead to 1.208973 earnings per share increase, and audit size increase by 1% would lead to a 1.071689 increase in earnings per share. AUT, AUF and AUZ have positive effects on EPS. However, AUT has a t-statistics of 0.040001 with an insignificant p-value of 0.9682, which is above 0.05; AUF has a t-statistics of 0.894160 with an insignificant p-value of 0.3735, which is above 0.05; and AUZ has a t-statistics of 0.317830 with an insignificant p-value of 0.7513, which is above 0.05.

The adjusted $R^2$ (coefficient of determination) is -0.020414. Within the context of this model, this implies that audit quality accounts for 2% variations in earnings per share while the remaining 98% is explained by other factors outside the model, which can affect earnings per share. This model has no strong explanatory power. In addition, at a 5% level of significance, the F-statistics is 0.339804 while the p-value is 0.796584, which is above the 0.05 threshold for this study. To this end, the null hypothesis that audit quality does not significantly affect earnings per share of Nigerian listed firms, was not rejected. Hence, audit quality has no significant effect on earnings per share of Nigerian listed firms.

**Discussion**

The findings of this study showed that audit tenure and audit fees have positive but insignificant and significant effects on discretionary accruals while audit size has a negative, insignificant effect on discretionary accruals. These findings are backed up by (Eriabie, Dabor 2017), who reported that audit fees and auditor adjustment were both positively related to the provision of irregular loan losses. This implies that audit fees that are high and auditors' tenure's change would lead to aggravated earnings management. The results, on the other hand, contradict the study conducted in Nigeria by (Umar, Rashid, Ado, Lateef 2019), which found that audit quality is
negatively related to accrual earnings management and that any increase in the audit fee unit, will reduce the control of the income of the selected firms. Also, the findings negated the report of (Abu, Mir, Ron, Md 2020), who reported that audit quality (companies audited by Big 4 auditors) restrict the management of earnings during the CFP, but that audit fee has a negative significant effect on discretionary accruals; audit committee's independence has a substantial mitigating impact on firms' profit control, although the audit committee's accounting and finance experience has little bearing on earnings management. This study backs up (Aliyu, Usman, Peter's 2015) findings, revealing a significant negative impact of audit firm size and joint audit services on the earnings management of Nigeria's deposit money banks. In addition, they discovered a significant positive impact of auditor financial dependence on earnings management of Nigeria's publicly traded deposit money banks.

The results of this study revealed that audit fees and audit tenure have a negative effect on earnings smoothing, while audit size has a positive effect. This means that any rise in audit fees, and a long client-audit relationship, reduce earnings management through earnings smoothing. These support the findings of (Soyemi, Olufemi, Adeyemi 2020), who found that audit tenure and auditor independence had a positive relationship with earnings management. Surprisingly, the audit firm's size seemed positive but statistically insignificant. This finding contradicts the findings of (Oladejo 2020), who found that audit firm size, audit regulations, the legal environment, and the type of company had an inverse relationship with earnings management, while leverage had a positive relationship with earnings management.

Audit fees, audit tenure, and audit size all have a positive and negligible effect on earnings per share. These supported the findings of (Khalid, Noor, Ishak 2019), who found that the audit committee's independence and audit fee were both positively and substantially linked to earnings management. These are also in line with the findings of (Walid, Kasim 2020), who found a significant positive relationship between audit efficiency and liquidity. In addition, these findings are in line with the findings of (Isa, Musa 2018), who found that all variables had a significant impact on banks' management of earnings, except women directors and board sizes in low
leveraged banks, and board ownership had a negative impact on earnings management in high leveraged banks.

**Implications of Findings**

These results have the following significance for management: audit efficiency has no major impact on earnings management (earnings smoothing, earnings per share and discretionary accruals). To control earnings, management would need to strike a balance between audit fees and audit tenure to forecast potential earnings and adjust firm cash flow. As reported by regulators, this also means that management should use Big-Four accounting firms to audit their annual reports for better and professional audit opinions and better cash flow adjustment.

To the regulators, the research would help them to understand that audit size has a positive impact on earnings management. This will also assist them in making voluntary and obligatory statements regarding audit size in the annual report, and improve reporting on them, as required by the auditing standards, to prevent investors from making poor decisions. Therefore, Government and financial regulatory bodies will use the results of this study to develop rules for voluntary and mandatory disclosure auditing, as well as research ways to improve audit efficiency and minimize agency costs through various criteria developed to ensure balanced earnings management.

For investors, the findings of this study will aid their investment decisions in firms and create more awareness of how audit quality has aided in reducing earnings management (creative accounting practices) in a particular company. This will serve as a guide on how and the reason to invest in a specific sector to increase wealth through management operations and faithful representation of the auditor’s opinion.

**Conclusion**

The findings of this study justify the essence of the underpinning theory. Agency theory was adopted because it illustrates exactly what motivates managers and directors of an organization to control their profits. The agency theory demonstrates how managers can try to maximize their benefits and objectives at the expense of investors. As a result, managers are compensated based on their effectiveness and
results to mitigate such behaviour. They want to maximize their income and will do whatever it takes to do so, including earnings management and manipulation. As a result, the Agency’s ideology emphasizes the important economic principle of transparency, which helps to justify the existence of the audit function while also improving the audit process’ performance. Boards of directors, as part of their oversight function, select the CEO, approve the business plan, track control structures, and communicate with external auditors, among other things, to solve the agency issue. Knowledge asymmetry and organisational disputes between corporate managers, outside investors, and intermediaries drive the demand for audits. In conclusion, audit quality (audit fees, audit size and audit tenure) has no significant effect on earnings management of listed Nigerian firms.

**Recommendations**

The study recommended the following:

1. Management of listed firms should ensure that policies are in place for predicting earnings (in profit) to help forecast future earnings, which can be achieved through audit quality.

2. Regulators should create and enforce the usage of Big Four companies in auditing annual reports and accounts of listed firms and put in place a policy on length-client to three years to increase audit quality and independence.

3. Analysts should pay huge attention to earnings management, measuring properties of earnings smoothing, earnings per share, and discretionary accruals because the magnitude and signs largely help in decision-making.

4. Regulators should curb creative accounting practices through audit quality practices by removing loopholes in the use of judgments and managerial discretions in the estimation of assets, income, equity, liabilities and expenses.

**Contributions to Knowledge**

This study contributed to the body of knowledge by bridging a major gap in the literature. It studied the effect of audit quality (using audit size, audit fees and audit tenure) on earnings management (measured by discretionary accrual, earning smoothing and earnings per share) of listed financial and non-financial Nigerian
firms. This will stimulate new policies by the International Accounting Standard Board (IASB), Financial Reporting Council of Nigeria (FRCN), Institute of Chartered Accountants of Nigeria (ICAN), Association of Chartered Certified Accountants (ACCA), Corporate Affairs Commission (CAC) and other regulators. Also, it will enhance the review of existing policies to increase audit quality by enhancing audit effectiveness and ensuring that earnings management, through earnings smoothing, discretionary accruals and earnings per share are disclosed.

The paper has also, given more insight on the pictorial relationship which, exists between earnings management and the quality of audit, as well as the determination of an optimal level of management judgment and discretion to ensure an effective communication between managers and auditors and to encourage audit quality effectiveness.

**Suggestions for Further Study**

Other variables can be taken into account when determining earnings management. Future researchers may explore the effect of audit quality on investment decisions or shareholders’ wealth. This is to detect if the key stakeholders (prospective and existing shareholders) are influenced by the quality of the audit. A comparison of Nigeria’s various industries or Nigeria and other nations can also be considered.

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