INFLUENCE OF AUDIT FIRM ATTRIBUTES ON EARNINGS MANAGEMENT AND AUDIT QUALITY OF LISTED NIGERIA MANUFACTURING FIRMS

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Abstract. The influence of audit attributes on earnings management and audit quality was examined in this study. A causal research design was employed in this study. The study population comprises all the quoted manufacturing firms in Nigeria, of which 30 were purposively selected as a sample size from the manufacturing sector covering a period of 12 years ranging from 2010–2021. The data utilized for this study were obtained from the annual reports of the selected firms. Descriptive statistics and panel regression analysis were used to analyse the data. Audit attributes were measured with audit opinion, audit switching and audit tenure, whereas the dependent variables were proxy by discretionary accruals and audit fees. The outcome of the analysis discovered that audit opinion, audit switching and audit tenure all have negative and significant relationships with discretionary accrual evidenced by t-statistics (−2.36, −2.06, −3.24) and p-values of (0.018, 0.004, 0.002) correspondingly. Audit opinion also has a positive significant connection with audit fees. Likewise, audit switching and audit tenure have negative and significant relationships with audit fees, and they are all evidenced by t-statistics of (2.01, −2.70, −2.80) and p-values of (0.004, 0.007, 0.005), respectively. The study concludes that audit attributes are important in determining the extent of earnings management and audit report quality. The study recommends that companies should ensure that the auditor is not biased in his opinion because this will affect the quality of the audit report. Audit tenure and audit switching should also be done as when due.

Keywords: Audit fees, audit opinion, audit quality, discretionary accruals, earnings quality.

JEL Classification: M420

INTRODUCTION

Earnings quality is described as the inverse of earnings management (EM) which indicates that increased earnings management results in decreased earnings quality. Earnings management describes an account of manipulation that usually
occurs because of the management ability to deceive investors into reaping some advantages (Sun, 2012). The ability of the audit report to reveal and detect the extent of such manipulations indicates the quality of the firm audit. Audit quality pertains to an auditor’s capacity, prospect, and readiness to identify, report, as well as disclose any errors or frauds occurring within an accounting system (Triani, 2020). It encompasses activities aimed at ensuring the likelihood of achieving the pertinent objective of obtaining reasonable assurance from financial reports that are free from material misstatements. A high-quality audit report indicates that the audit team has exercised sound judgment in evaluating the evidence they have gathered. Adeyemi and Fagbemi (2010) further emphasized in their research that one of the functions of auditing is to mitigate potential losses resulting from dishonest actions (earnings management activities) by managers in financial reporting while also reducing information asymmetry. Ultimately, auditing plays a crucial role in providing assurance to investors.

Nevertheless, auditors are required to demonstrate professionalism in fulfilling their responsibilities. The demand for external auditors arises from agency glitches that stem from the control and separation of ownership. When auditors fail to detect instances of fraud or employ inadequate audit procedures, it often results in low-quality audits (Laili, 2021). Additionally, low-quality audits diminish investors' trust. The widespread occurrence of fraud, earnings management activities, and financial crimes has led to a decrease in the level of confidence and reliance on companies' financial statements and overall financial reporting. In their respective studies, Syamsu et al. (2023) and Abdillah et al. (2019) highlight the influence of audit traits on audit quality. These audit characteristics encompass various factors, including education, experience, professional qualifications, auditors' independence, audit tenure, switching of audit firms, audit fees, timeliness of audit reports, audit opinions, joint audits, and rotation of audit firms. Each component of audit characteristics has the potential to influence the quality of an audit. In a study by Dond et al. (2002), it was noted that potential factors influencing the quality of audit can be categorized into two groups: demand-related elements (firm characteristics) and supply-related elements (audit traits), based on circumstantial evidence. The factors associated with firm characteristics that have the potential to influence audit quality include firm size, board composition, profitability, ownership structure, and capital structure, among others. On the other hand, the factors related to audit characteristics that can affect the quality of an audit include the auditor's independence, audit opinion, size and expertise in the audit industry, auditors' reputation, audit tenure, and auditor rotation.

Moreover, in industrialized nations such as the USA, Spain, and the United Kingdom, the presence of various laws and regulations governing firms makes high-quality financial reporting a necessity. Palalangan et al. (2019) suggest that due to past cases of fraud committed by auditors, which resulted in a loss of public trust in audit firms, significant emphasis is placed on the ability of audit firms to deliver quality audit reports and the factors determining audit quality. In a study conducted on selected firms in Spain, González-Díaz et al. (2015) established that audit quality declines with an extension of audit tenure, particularly after the completion of the auditor's five-year tenure. However, this contrasts with the results
obtained from a study conducted in India, which revealed that longer audit tenure improves the quality of audits among Indian companies (Jadiyappa et al., 2021).

In Nigeria, audit firms have faced penalties for apparent low-quality audit practices since the demise of numerous prominent banks because of corporate scandals (Aryan, 2015). In response to these events, the Financial Reporting Council of Nigeria (FRCN) has implemented various new auditing standards and regulations. They also maintain an official list of registered accountants and auditors, which they regularly update. The primary objective of these measures is to restore public trust in audit firms, which has been eroded by past fraudulent cases. Additionally, the FRCN is empowered to enforce compliance with these standards and has the authority to penalize accountants and audit firms found to be in violation (Okechukwu & Ene, 2023).

According to Arens et al. (2016), the audit quality processes carried out by auditors primarily aim to protect the clients of audit firms. Therefore, adherence to auditing standards and quality control procedures by audit firms is crucial to ensure high-quality audits. Poor audit practices can give rise to various issues, such as falsified audit reports, non-compliance with audit rotation and audit compliance rules, lack of auditor independence, and biased judgments by auditors. In their study, Dabor A. & Dabor E. (2015) found that falsified audit reports were one of the reasons for bank failures in Nigeria. They observed that while the banks were not performing well in reality, the auditors declared healthy audit reports, thus misleading the public. When the auditor liaises with the director to conceal earnings management activities, the audit report quality will be low.

In addition, the quality of an audit is significantly influenced by audit characteristics, and any deficiencies in these characteristics can lead to a reduction in audit quality, most of the causes of the deficiencies occur as a result of the capacity of the auditor to conceal the real state of the firm’s financial report. Several authors have conducted research on the impact of audit characteristics on audit quality and earnings management. Studies by authors such as Ali & Aulia (2015), Augustini et al. (2013), Helmi (2021), Imegi & Oladutire (2018), James & Izein (2014), Krismiaji & Sumayyah (2023), Martani et al. (2021), Okechukwu & Ene (2022), Syamsu et al. (2023), and Tobi et al. (2016) have explored this relationship. While some of these researchers have reported significant results indicating the influence of audit traits on the quality of audit and earnings management, others have found no significant effect. The inconsistency and contradiction in the findings regarding the connection between audit features and audit quality, as well as earnings management, highlight some gaps in research in this area. It is widely acknowledged that any alteration, falsification, or bias in an audit report does not indicate a quality audit and also indicates that earnings management activities have occurred in the financial report (Krismiaji & Sumayyah, 2023). Some studies suggesting no relationship between audit characteristics, audit quality and earnings management may have produced contradictory results due to differences in data analysis methods, sample sizes, and research design techniques. To obtain reliable and robust results, this study will employ both discretionary accruals as a measure of earnings management while audit fees will be used to measure audit quality. More so, by utilizing both discretionary accruals and audit fees as measures of
earnings management and audit quality, this study aims to address the gap in existing research on audit characteristics, audit quality and earnings management. Previous studies on this topic have typically relied on audit quality without considering the effect earnings management has on audit attributes. Discretionary accrual can also be used as a measure of audit quality. This study focused on looking at the influence of audit attributes focusing on the earnings management and audit quality angles. This study focuses on both, with only a limited number of researchers employing both discretionary accruals and audit fees simultaneously. Therefore, the inclusion of both measures in this study will contribute to filling this gap and provide a more comprehensive understanding of the connection between audit characteristics, audit quality and earnings management.

Moreover, In Nigeria, there has been a limited number of reviews exploring the effect of audit traits on earnings management and audit quality, specifically in non-financial firms, as most of the research in this area has predominantly focused on the banking industry. This study intends to contribute to the existing body of knowledge by examining the impact of audit characteristics on the quality of audit or on earnings management in listed non-financial firms in Nigeria focusing specifically on the manufacturing sector. The audit characteristics under investigation include audit opinion, switching, and tenure. The quality of the audit, on the other hand, will be measured using audit fees, whereas earnings management will be proxy by discretionary accruals. The outcomes of this study will have practical implications for audit practitioners, non-financial firms, the government, and researchers alike.

Objectives of the Study

Aligned with the study's context, this research purposes to examine the effect of audit attributes (audit opinion, audit switching and audit tenure) on earnings management and audit quality of listed non-financial firms. The specific objectives are:

i. to examine the influence of audit attributes on discretionary accruals of quoted Nigeria manufacturing firms;
ii. to investigate the connection between audit attributes on audit fees of quoted Nigeria manufacturing firms.

Research Hypotheses

H1: There is no connection between audit attributes and discretionary accrual of quoted Nigeria manufacturing firms.
H2: There is no relationship between audit attributes and audit fees of quoted Nigeria manufacturing firms.
1. LITERATURE REVIEW

1.1. Conceptual Review

**Audit Attributes**

According to Syamsu et al. (2023), auditors with extensive knowledge, professional expertise, and educational background are most likely to ensure high audit quality (AQ). Defond (2002) also supports this notion, as his research indicates that both audit attributes and firm characteristics play a significant role in determining AQ. Audit firm characteristics encompass factors such as auditor independence, audit tenure, joint audit, audit opinion, audit firm size and audit switching or rotation. In this study, audit opinion, audit switching, and audit tenure were employed as proxies for audit attributes. Other researchers, such as Kautsar & Bety (2023) and Okechukwu & Ene (2022), have also utilized audit rotation, opinion and tenure as measures for audit attributes in their studies.

**Audit Opinion**

An audit, typically conducted by an independent external auditor, holds significant importance, and stakeholders should respond effectively to the auditor's opinion (Krismiaji & Sumayyah, 2023). The audit opinion serves as a crucial indicator of audit quality. It is a formal statement provided by the auditor in a written report, expressing their professional judgment regarding the fairness and accuracy of a company's financial statements. Limited research has focused on audit opinion within the field of auditing, but one notable study by Krismiaji and Sumayyah (2023) revealed a positive and noteworthy connection between audit opinion and earnings management (EM). A high-quality audit opinion offers reasonable assurance that the financial reports are free from material misstatements, while a low-quality audit suggests that it was not conducted in agreement with professional auditing principles or that the financial statements contain significant inaccuracies.

**Audit Switching**

Audit switching refers to the practice of appointing an audit firm for a fixed duration, typically around 5 years, after which the firm must relinquish its position. The purpose of audit switching is twofold. Firstly, it aims to reduce the undue influence and control that directors may exert over auditors by threatening to replace them if their demands are not met. Secondly, it seeks to prevent close relationships between auditors and clients, which could potentially lead to accounting misstatements and fraudulent activities. Firth et al. (2012) suggested that companies subjected to mandatory audit partner rotation have the tendency to receive modified audit opinions compared to those without rotation, particularly in developing areas. They find that this effect is limited to specific geographical contexts. Kalanjati et al. (2019) support this perspective, asserting that the number of audit partner rotations is positively connected with AQ and also helps to reduce EM activities. However, Paputungan & Kaluge (2018) present a contrasting view, suggesting that audit switching does not impact audit quality.
Audit Tenure

Audit tenure denotes the length of the period of auditor-client association between an external auditor and a firm. It is a factor that influences audit quality. According to Andriani et al. (2020a), audit quality is typically enhanced with longer audit tenure. A study conducted by Jadiyappa et al. (2021) in India also supports this finding, demonstrating that lengthier audit tenure is linked with a higher level of improvement in audit quality. Okechukwu & Ene (2022), in their study on the consumer goods sector in Nigeria, similarly confirm that audit tenure has a significant and positive connection with AQ. The more familiar the auditor becomes with the company, the greater the improvement in AQ. On the other hand, Abedalqader et al. (2011) and Gonzalez-Diaz et al. (2015) suggest that AQ tends to decline when audit tenure extends beyond a certain period, particularly due to discretionary accruals. The study conducted by Gonzalez-Diaz et al. (2015) on NGOs in Spain reveals that this decline is observed after the initial 5 years of quality improvement.

Audit Quality

Coffie et al. (2018) opined that AQ is crucial to stakeholders and it ensures that the financial statement is credible enough. Deffond & Zhang (2014) opined that there are various measures used by researchers to measure the quality of audits; the measures are classified into output-based audit quality measures (direct measure) and the input-based audit quality measures (indirect measure). The output-based measure uses the discretionary accrual measure, which doubles as a measure of both AQ and EM, while the input-based measure uses audit fees (Rajgopal et al., 2018). Some of the researchers who have reviewed the effect of audit firm characteristics are Detzen & Gold (2021) and Wakil et al. (2020).

Audit Attributes and Earnings Management

The relationship between audit traits and EM is vital because audit quality can influence the likelihood of discretionary accruals occurring. Discretionary accruals refer to estimated amounts recorded in a company's financial statements that result from management's discretionary choices in areas such as accounting estimates, policies, and judgments. High-quality audits help reduce the probability of material misstatements in financial reports (Doyle et al., 2007). Some empirical evidence indicates a negative and noteworthy relationship between audit characteristics and discretionary accruals. Additionally, firms that undergo high-quality audits, as measured by factors such as audit tenure, audit opinion, and audit switching, tend to exhibit subordinate levels of discretionary accruals (DA) compared to those with lower-quality audits (Lobo & Zhou, 2001). Some of the researchers who have utilized discretionary accruals as a proxy for earnings management include Krismiaji & Sumayyah (2023), while Okechukwu & Ene (2022), Hamideh et al. (2013), and Widyaningsih et al. (2019) used it as a measure of AQ.

Audit Attributes and Audit Quality

This study utilized audit fees as a measure of audit quality. Audit fees are the compensation paid to auditors for their services, which involve expressing a
judgement on the financial reports prepared by the management. According to Raigopal et al. (2021), higher audit fees can potentially compromise auditor independence and may also discourage auditors from ending the engagement after the agreed-upon five-year period. The level of audit fees can also impact audit switching and audit opinions. This perspective is supported by the findings of Eshleman & Guo (2013), as well as the studies conducted by Amrulloh & Amalia (2020), and Prabhawanti & Widhiyani (2018), all of which indicate that higher audit fees are related with better and higher-quality audits. Other researchers, such as Abdul-Rahman et al. (2017), and Ibrahim & Ali (2018), have also identified a significant connection between audit characteristics and audit fees (reflecting AQ). Empirical reviews have shown mixed results, with some research showing a positive connection between audit fees and audit tenure, while others observe a negative connection between audit fees and audit switching. This may be ascribed to increased competition among audit firms seeking to attract new clients, leading to lower fees for clients who switch auditors (Gul et al., 2010). Ultimately, higher audit fees can influence the auditors' opinions.

1.2. Theoretical Framework

To gain a more comprehensive and expansive comprehension of the concept of AQ and EM concepts, it is essential to establish a connection between the study and an existing theory. Nonetheless, the underpinning theories are as follows.

Agency Theory

The concept of agency theory proposes that the presence of agency costs, which result from conflicting interests between the principal and the agent, stems from the segregation of control and ownership within a firm (Adenle et al., 2022). This theory was proposed by Stephen Ross and Barry Mitnick in 1973, agency theory offers a context for understanding the dynamics of audits. Jensen and Meckling (1976) opined that audits serve as a means to enhance the trust of financial statement users, particularly shareholders, in the dependability of the financial evidence produced by companies. This is achieved through the mitigation of information asymmetry arising from earnings management practices (Imen & Anis, 2021). Information asymmetry is one of the factors that give rise to agency costs, reflecting the unequal access to information between the principal and the agents, who are typically the managers inside the organization (Olagunju et al., 2021). It is crucial for firms to ensure that conflicts of interest between managers and auditors are minimized, as such conflicts can compromise the objectivity of the auditor and hinder their ability to provide impartial judgments or issue valid audit opinions for the firm.

The Stakeholder Theory

This theory, initially proposed by Edward Freeman in 1984, challenges the notion of shareholder wealth maximization as the primary objective of a firm and instead advocates for stakeholder wealth maximization. To enhance audit quality, the principal is inclined to engage a larger audit firm (Kautsar & Bety, 2023). Stakeholder theory emerged as a response to criticisms and shortcomings of the
shareholder theory, which predominantly prioritized the interests of shareholders (Olorede et al., 2022). The independence of auditors holds great significance within the stakeholder theory, particularly in terms of the reliance placed on audit opinions by stakeholders. The audit opinion plays a vital role in the policymaking procedure. If an auditor lacks independence, the identification of discretionary accruals becomes compromised, leading to misleading audit opinions. Consequently, investors may incur financial losses from their investments, undermining the external auditor's fiduciary responsibility (Okechukwu & Ene, 2022).

1.3. Empirical Review

Audit Attributes and Earnings Management

Krismiaji & Sumayyah (2023) examined the effects of audit traits on audit quality and the interactive effect of the association between audit opinions and EM of Indonesian firms during the period of 2016–2020. A generalized least squares regression model was used to analyze the data. The outcome of the study revealed that the opinions of auditors were positively related to EM. It also showed that audit quality has an interactive negative significant influence on EM and audit opinion.

Also, Jiang et al. (2019) reviewed the influence of Big N auditors and audit quality: New evidence from quasi-experiments in the United States quasi-sector between the years 1974 and 2000. The study utilized the ordinary least squares method of analysis; the outcome of the study revealed discretionary accruals and financial statement discrepancy scores, which will improve the switching of audit firms.

The study of Hamideh et al., (2013) investigated the connection between audit attributes and AQ of 91 quoted Iranian firms ranging in the period of 2007 to 2011. The study employed a panel data approach. From the study, audit tenure, switching, audit size, and audit expertise have noteworthy influence on discretionary accrual.

Audit Attributes and Audit Quality

Salman & Setyaningrum (2023) reviewed the influence of audit attributes on the AQ of 267 listed Indonesian firms from 2016 to 2020. Logic regression analysis was used to analyse the data gathered for this study. The outcome of the study revealed that audit firm size and audit period have a positive, significant effect on AQ, whereas audit switching does not have any effect on AQ.

Okechukwu & Ene (2022) examined the length to which auditor's independence, audit tenure and audit rotation affect the AQ of quoted consumer goods companies in Nigeria. An ex-post facto research design was used for the study. Also, 8 out of 20 consumer goods firms listed on the Nigerian Stock Exchange were purposively sampled for this study. The period of study ranges from 2012–2021. The outcome of the result obtained from the multiple regression analysis method utilized for this study revealed that audit rotation has a positive and significant effect on AQ, whereas audit tenure indicates the absence of a significant connection with AQ.

Hussein et al. (2020) reviewed the impact of audit team characteristics on AQ in Libya that were professed to have an effect on AQ. A survey approach was used in the study. The survey was conducted on 251 external Chartered firm auditors in
Libya. Multiple regression analysis was used to analyze the data gathered for the purpose of the study. From the study, audit features are positively and significantly associated with AQ.

Babatolu et al. (2016) reviewed the influence of audit attributes on the AQ of 7 purposively selected Nigerian banks. The study utilized the ordinary least square regression method. The findings indicate that a positive significant relationship exists between the audit firm rotation and AQ, while a negative significant connection exists between audit tenure and AQ. Firm size and leverage also have positive and negative strong correlations with AQ correspondingly.

2. METHODOLOGY

This study employed a causal research design to fulfil its research objectives. To gather the required datum, secondary data was collected from the financial statements and published annual reports of selected non-financial firms, as well as from the Nigerian Exchange Group (NGX) Fact-book. The population of the study comprises all the quoted manufacturing on the NGX. A purposive sampling technique was utilised to select 30 non-financial firms as a sample size from the Nigeria manufacturing sector, covering a 12-year period from 2010 to 2021. The 30 manufacturing firms were selected based on the availability of data for the 12-year period. The manufacturing sector was selected because it is one of the most vibrant sectors of the Nigerian economy. The sampling technique utilized was random sampling. In order to achieve the specified objectives, both inferential and descriptive statistics were employed in this research. The inferential statistics included correlation analysis and panel regression analysis.

<table>
<thead>
<tr>
<th>S/n</th>
<th>Sector</th>
<th>Sample</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Consumer goods</td>
<td>10</td>
<td>33.3</td>
</tr>
<tr>
<td>2.</td>
<td>Industrial sector</td>
<td>8</td>
<td>26.7</td>
</tr>
<tr>
<td>3.</td>
<td>Natural resources</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>4.</td>
<td>Conglomerate</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>5.</td>
<td>Healthcare</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td>6.</td>
<td>Agricultural</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

2.1. Measurement of Variables

**Dependent Variables**

Audit fees (input-based audit quality measure) and discretionary accruals (output-based audit quality measure) were used to proxy audit quality. Audit fees are measured as the natural log of the audit fees paid by each firm (Ibrahim & Ali, 2018). Whereas discretionary accrual is measured with derivatives. While measuring discretionary accrual, Kothari et al. (2005) argued for the need to include the first lag of the return on asset (ROA) in the adapted Jones model given as:
\[
\frac{TA_{it}}{A_{t-1}} = \delta_1 \left( \frac{1}{A_{t-1}} \right) + \delta_2 \left( \frac{\Delta REV_{it} - \Delta REC_{it}}{A_{t-1}} \right) + \delta_3 \left( \frac{PPE_{it}}{A_{t-1}} \right) + ROA_{it-1} + \mu_{it}.
\]

(1)

The total accrual is obtained as:
\[
TA_{it} = NI_{it} - CFO_{it},
\]
where
\[
TA_{it} - \text{total accrual of Firm } i \text{ in year } t;
\]
\[
A_{t-1} - \text{the first lag of total asset of Firm } i \text{ in year } t;
\]
\[
\Delta REV_{it} - \text{difference between contemporaneous revenue and previous year revenue for Firm } i;
\]
\[
\Delta REC_{it} - \text{difference between contemporaneous account receivables and previous year account receivables for Firm } i;
\]
\[
PPE_{it} - \text{PPE of Firm } i \text{ at time } t;
\]
\[
\mu_{it} - \text{the residual of the model};
\]
\[
\delta_1, \delta_2, \text{ and } \delta_3 - \text{the parameters of the model};
\]
\[
NI_{it} - \text{net income of Firm } i \text{ at time } t;
\]
\[
CFO_{it} - \text{net cash flow of Firm } i \text{ from operation at time } t;
\]
\[
ROA_{it-1} - \text{immediate past year return on assets}.
\]

**Independent Variables**

The characteristics of the audit were represented by three factors: audit opinion, audit switching, and audit tenure. The audit opinion was evaluated using a binary variable. If a company’s financial statements received a qualified opinion or disclaimer (modified opinion), the variable was allotted a value of 0. Conversely, if the firm accepted an unqualified opinion, the variable was assigned a value of 1 (Krismiaji & Sumayyah, 2023). Audit tenure was determined by the extent of the auditor-client affiliation. If the relationship lasted for three years or less, the variable was assigned a value of 1. Otherwise, it was assigned a value of 0 (Martani et al., 2021). Audit switching was represented by a dummy variable, where a value of 1 indicated that the client firm had changed its audit firm, while a value of 0 indicated no such change. Additionally, two control variables were included: board independence and firm size. Board independence was measured as the percentage of non-executive directors out of the total number of directors (Bakare, 2019), while firm size was estimated as the natural logarithm of total assets (Olagunju et al., 2021).

**2.2. Model Specification**

Model 1 represents the regression equation utilised in this study:

**Model 1: Audit Attributes and Discretionary Accrual**
\[
DAR_{it} = \beta_0 + \beta_1 AUDOP_{it} + \beta_2 AUDSTW_{it} + \beta_3 AUDTEN_{it} + \beta_4 BIND_{it} + \beta_5 FSIZE_{it} + \mu_{it}
\]

(3)
Model 2: Audit Characteristics and Audit Fees

\[
AUDFE_{it} = \beta_0 + \beta_1 AUDOP_{it} + \beta_2 AUDSWT_{it} + \beta_3 AUDTEN_{it} + \beta_4 BIND_{it} + \beta_5 FSIZE_{it} + \mu_{it}
\] (4)

An explanation of the variables is as follows:

- **DAR** – Discretionary Accrual;
- **AUDOP** – Audit Opinion;
- **AUDSWT** – Audit Switching;
- **AUDTEN** – Audit Tenure;
- **BIND** – Board Independence;
- **FSIZE** – Firm Size;
- **AUDFE** – Audit Fees;
- \(\beta_0\) – constant parameter;
- \(\beta_0 - \beta_5\) – Regression coefficient of independent and control variables;
- \(it\) – time coefficient;
- \(\mu\) – error term.

3. RESULTS

Table 2 reveals that the mean, median, stand dev., max and min. values are 0.295, 0.096, 0.726, 3.994, and –2.036, respectively, for discretionary accruals, whereas audit fees have a mean, median, stand. dev., max and min values of –0.036, –0.052, 0.201, 0.735, and –0.809, correspondingly. The dependent variables audit opinion and audit switching has a mean, median stand. dev, max and min values of 0.0306, 0.172, 1, 0 and 0.119, 0, 0.324, 1, 0, respectively. Similarly, audit tenure also has a mean, median, max and min values of 0.758, 1, 1, 0. The board size and firm size mean, median, max and min are 68.153, 70.5, 93.33, 25, and 0.624, 7.348, 11.572, 5.127, correspondingly.

<table>
<thead>
<tr>
<th>STAT</th>
<th>AUDFE</th>
<th>DAR</th>
<th>AUDOP</th>
<th>AUDSW</th>
<th>AUDTEN</th>
<th>BIND</th>
<th>FSIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.295</td>
<td>–0.036</td>
<td>0.0306</td>
<td>0.119</td>
<td>0.758</td>
<td>68.153</td>
<td>0.624</td>
</tr>
<tr>
<td>Median</td>
<td>0.096</td>
<td>–0.052</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>70.5</td>
<td>7.348</td>
</tr>
<tr>
<td>Max</td>
<td>3.994</td>
<td>0.735</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>93.33</td>
<td>11.572</td>
</tr>
<tr>
<td>Min</td>
<td>–2.036</td>
<td>–0.809</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>25</td>
<td>5.127</td>
</tr>
<tr>
<td>Stan. DV</td>
<td>0.726</td>
<td>0.201</td>
<td>0.172</td>
<td>0.324</td>
<td>0.429</td>
<td>13.14</td>
<td>1.435</td>
</tr>
<tr>
<td>Skewness</td>
<td>3.912</td>
<td>0.548</td>
<td>5.455</td>
<td>2.346</td>
<td>–1.206</td>
<td>–0.68</td>
<td>1.095</td>
</tr>
<tr>
<td>N</td>
<td>360</td>
<td>360</td>
<td>360</td>
<td>360</td>
<td>360</td>
<td>360</td>
<td>360</td>
</tr>
</tbody>
</table>

Source: Authors’ Computation, 2023

All the variables in this study displayed positive skewness, revealing that their distribution was skewed to the right except for audit tenure and board independence that has negative skewness. The kurtosis analysis also revealed that all the variables kurtosis values exceed three except audit tenure; this implies that only audit tenure had a platykurtic distribution.
Correlation Analysis

Table 3. Estimated Matrix of Correlations

<table>
<thead>
<tr>
<th>Variables</th>
<th>AUDFE</th>
<th>DAR</th>
<th>AUDOP</th>
<th>AUDS</th>
<th>AUDTEN</th>
<th>BIND</th>
<th>FS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUDFE</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DER</td>
<td>0.023</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUDOP</td>
<td>0.205*</td>
<td>−0.042</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUDS</td>
<td>−0.058</td>
<td>0.0418</td>
<td>0.183*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUDTEN</td>
<td>−0.130</td>
<td>−0.117*</td>
<td>−0.239</td>
<td>−0.512*</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIND</td>
<td>0.191*</td>
<td>0.126*</td>
<td>0.054</td>
<td>0.0561</td>
<td>−0.056</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>FS</td>
<td>−0.664*</td>
<td>0.051</td>
<td>0.050</td>
<td>0.039</td>
<td>0.068</td>
<td>0.039</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Source: Author’s Computation, 2023

The outcome of the correlation analysis discovered that audit fees have a very weak correlation of 0.023 with DAR, audit opinion also has a weak positive correlation of 0.205 with audit fees while it also has a negative correlation with DAR evidence with a co-efficient of −0.042. Audit switching has a weak negative connection with audit fees and a weak positive correlation with discretionary accruals support with coefficients values of −0.058 and 0.0418, respectively. Also, audit tenure has a weak and negative correlation with both audit fees and discretionary accruals with values of −0.130 and −0.117, respectively. In contrary, board independence has a weak and positive connection with both audit fees and discretionary accrual. However, firm size has a moderate correlation of −0.664 and weak association of 0.051 with audit fees and discretionary accruals, respectively.

Diagnostics Tests Analysis

Table 4. Estimated Variance Inflation

<table>
<thead>
<tr>
<th>Estimated variance inflation factor for Objective 1</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUDOP</td>
<td>1.07</td>
<td>0.7124</td>
</tr>
<tr>
<td>AUDSW</td>
<td>1.37</td>
<td>0.732</td>
</tr>
<tr>
<td>AUDTEN</td>
<td>1.40</td>
<td>0.935</td>
</tr>
<tr>
<td>BIND</td>
<td>1.02</td>
<td>0.979</td>
</tr>
<tr>
<td>FS</td>
<td>1.02</td>
<td>0.983</td>
</tr>
<tr>
<td>MEAN VIF</td>
<td>1.18</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s Computation, 2023
The pre-estimation diagnostic test for multi-collinearity shows an estimated value with the highest VIF of 1.40 recorded by audit tenure. Both the VIF and 1/VIF values are below 10 and 1, respectively; this indicates an absence of multi-collinearity amongst the explanatory variables.

**Table 5. Post-Estimation Test Outcomes**

<table>
<thead>
<tr>
<th>Diagnostic test</th>
<th>Type of test</th>
<th>P-value</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heteroscedasticity</td>
<td>Breusch–Pagan</td>
<td>0.5202</td>
<td>Absence of heteroscedasticity</td>
</tr>
<tr>
<td>F-tests</td>
<td>F-tests</td>
<td>0.000</td>
<td>Panel regression is preferred to pooled OLS</td>
</tr>
</tbody>
</table>

Source: *Author’s Computation, 2023*

**Hypotheses testing**

H1: There is no connection between audit characteristics and discretionary accrual of listed non-financial firms

**Table 6. Test of Hypothesis 1**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Std. error</th>
<th>T-statistics</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.107</td>
<td>0.085</td>
<td>−1.25</td>
<td>0.210</td>
</tr>
<tr>
<td>AUDOP</td>
<td>0.148</td>
<td>0.063</td>
<td>−2.36</td>
<td>0.018</td>
</tr>
<tr>
<td>AUDSW</td>
<td>−0.226</td>
<td>0.038</td>
<td>−2.06</td>
<td>0.004</td>
</tr>
<tr>
<td>AUDTEN</td>
<td>0.0021</td>
<td>0.0008</td>
<td>−3.14</td>
<td>0.002</td>
</tr>
<tr>
<td>BIND</td>
<td>0.002</td>
<td>0.0008</td>
<td>2.62</td>
<td>0.009</td>
</tr>
<tr>
<td>FS</td>
<td>0.009</td>
<td>0.007</td>
<td>0.12</td>
<td>0.906</td>
</tr>
<tr>
<td>R-square</td>
<td>0.545</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-statistics</td>
<td>4.08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob &gt; F</td>
<td>0.0013</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: *Author’s Computation, 2023*

The first hypothesis was tested, and the results showed that audit characteristics account for 54.5% of the variation in discretionary accruals (DAR), indicating that other variables not included in the model explain 45.5% of the variation. The model's fitness was evaluated using the F-statistics of 4.08 and a p-value of 0.013. Furthermore, the relationship between audit opinion and audit switching with discretionary accruals was found to be negative and significant. This was supported by the t-statistics and p-values of −2.36, 0.018 and −2.06, 0.004, respectively. By these the null hypothesis is rejected, whereas the alternate hypothesis showing that significant connection exists is accepted.

Additionally, audit tenure was established to have a negative and noteworthy relationship with discretionary accruals, whereas board independence had a positive and significant relationship. The t-statistics and p-values were −3.14 and 0.002 for audit tenure, and 2.62 and 0.009 for board independence, respectively. These findings suggest that the quality of audits tends to decline when the auditor-client
relationship extends beyond a certain period, particularly due to discretionary accruals. Furthermore, the quality of board independence can influence the AQ of the selected Nigerian manufacturing firms. On the other hand, firm size fails to have significant effect on EM, as indicated by the t-statistic of 0.12 and a p-value of 0.906.

H2: There is no relationship between audit attributes and audit fees of listed non-financial firms.

Table 7. Test of Hypothesis 2

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Std. error</th>
<th>T-statistics</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>1.554</td>
<td>0.305</td>
<td>5.10</td>
<td>0.000</td>
</tr>
<tr>
<td>AUDOP</td>
<td>0.196</td>
<td>0.221</td>
<td>2.01</td>
<td>0.004</td>
</tr>
<tr>
<td>AUDSW</td>
<td>−0.359</td>
<td>0.133</td>
<td>−2.70</td>
<td>0.007</td>
</tr>
<tr>
<td>AUDTEN</td>
<td>−0.285</td>
<td>0.102</td>
<td>−2.80</td>
<td>0.005</td>
</tr>
<tr>
<td>BIND</td>
<td>0.0017</td>
<td>0.003</td>
<td>−0.60</td>
<td>0.548</td>
</tr>
<tr>
<td>FS</td>
<td>0.117</td>
<td>0.026</td>
<td>−4.50</td>
<td>0.000</td>
</tr>
<tr>
<td>R-square</td>
<td>0.57</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-statistics</td>
<td>6.64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob &gt; F</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s Computation, 2023.

The testing of H2 resulted in an R-square value of 57%, indicating that 57% of the difference in audit fees is expounded by audit attributes. However, 43% of the variation is attributed to other variables not included in the model. The model's fitness was evaluated using the F-statistic of 6.64 and a p-value of 0.000. Furthermore, the study found that audit opinion has a positive and significant relationship with audit fees, as evidenced by the t-statistics of 2.01 and a p-value of 0.004. On the other hand, audit switching and audit tenure were found to have negative and significant relationships with audit fees. The t-statistics for audit switching and audit tenure were −2.70 and −2.80, with corresponding p-values of 0.007 and 0.005. These results suggest that the hypothesis stating that there is no significant connection between audit attributes and audit fees should be rejected. It is evident that audit opinion, audit switching, and audit tenure have a noteworthy influence on the audit fees of Nigerian manufacturing firms. Moreover, board independence was found to have a t-statistic of −0.60 and a p-value of 0.548, indicating that it does not have a noteworthy impact on audit fees. Conversely, the firm size was found to have a negative and significant influence on audit fees, supported by a t-statistics of −4.50 and a p-value of 0.000.
4. DISCUSSIONS

Relationships between audit attributes (audit opinion, audit switching and audit tenure) and discretionary accruals of quoted Nigerian manufacturing firms.

AQ holds great importance for stakeholders as it ensures that firms have trustworthy financial statements. Discretionary accruals serve as a measure of EM, capturing activities in which auditors and directors manipulate earnings by adjusting transactions in line with principles, standards, and regulations. The outcomes of this study demonstrate a significant connection between audit characteristics, represented by audit opinion, audit switching and audit tenure, and AQ as measured by discretionary accruals. This relationship is supported by t-statistics of $-2.36, -2.06, -3.14$ and corresponding p-values of $0.018, 0.004, 0.002$, respectively. There is a significant negative connection between audit opinion, audit switching, and discretionary accruals. This indicates that when auditors provide higher-quality audit opinions, managers or directors are less able to involve in discretionary activities, resulting in improved audit quality. Similarly, when audit rotation occurs more frequently within a firm, there is a reduced level of overfamiliarity between the auditor and the firm's directors, which decreases the directors' inclination to engage in discretionary activities, thereby enhancing the audit quality. These findings contradict the results of a study conducted by Krismiaji & Sumayyah (2023), who established a positive and momentous relationship between audit opinion and EM.

However, the outcomes of previous studies by Sule & Aronmwan (2013) supported the outcomes of this study, indicating a negative and significant connection between the audit switching and discretionary accrual. The studies conducted by Jiang et al. (2019) and Okechukwu & Ene (2022) present a contrasting view, suggesting that high extent of audit switching has a positive association with discretionary accruals. Similarly, the studies conducted by Paputungan & Kaluge (2018) and Salman & Setyaningrum (2023) did not find a significant relationship between audit switching and discretionary accruals. In addition, a negative and significant relationship exists between the audit tenure and discretionary accruals, indicating that the audit quality tends to decline when the audit tenure exceeds the expected period, particularly due to discretionary accruals. This finding aligns with the studies conducted by Abedalqader et al. (2011), Okpanachi (2019), Babatolu et al. (2016), and Gonzalez-Diaz et al. (2015) who also observed a negative and significant association between the audit tenure and discretionary accruals. However, in contrast, the study conducted by Hamideh et al. (2013) failed to find a significant relationship between auditors' tenure and discretionary accruals. Likewise, the board independence was found to have a significant and positive influence on EM, while the firm size did not have a significant influence on EM.

Relationship between audit attributes (audit opinion, audit switching and audit tenure) and audit fees of quoted Nigerian manufacturing firms.

A good audit report reflects the application of high-quality judgment by the audit team in assessing the obtained evidence. Another crucial element of the
quality of audit report is audit fees. The study discovered that there is a positive and noteworthy connection between the audit opinion and audit fees, supported by t-statistics and a p-value of 2.01 and 0.004, correspondingly. This suggests that higher-quality audits are linked to higher audit fees. Firms that are eager to pay higher audit fees are more likely to involve the services of reputable auditors, for instance the Big 4 audit firms, to conduct their financial statement audits. Raigopal et al. (2021) and Krismiaji & Sumayyah (2023) also discovered a noteworthy relationship between audit fees and audit characteristics. Furthermore, both audit switching and audit tenure were found to have a negative and significant relationship with audit fees, as indicated by the t-statistics and p-values of –2.70, –2.80 and 0.007, 0.005, respectively. This suggests that if the audit fees are set at a moderate and appropriate level, the audit firm will not encounter difficulties in resigning at the end of the agreed-upon five-year period. When audit fees are moderate (or low), the audit firm is more likely to comply with the audit rotation regulations, and such rotation enhances the audit quality by mitigating the risk of close relationships between auditors and clients that could potentially lead to accounting misstatements and fraud.

Also, a shorter tenure of the auditor reduces the likelihood of the auditor being influenced by the directors, thereby enhancing the audit quality. This finding aligns with the results of previous studies conducted by Sule & Aronmwan (2013), Raigopal et al. (2021), and Setyaningrum (2023), all of which stated that a significant connection exists between audit switching, audit fees and audit tenure. In contrast, the studies conducted by Babatolu et al. (2016), Jiang et al. (2019), and Okechukwu & Ene (2022) suggested that audit switching and audit tenure have a positive and noteworthy influence on AQ. Salman & Setyaningrum (2023) fail to find relationship between the audit rotation and AQ. Likewise, the study revealed that board independence does not exert a significant influence on audit fees, while the firm size has a significant influence on audit fees.

CONCLUSION

This study investigated the effects of audit attributes on earnings management and AQ. Discretionary accruals and audit fees were employed as indicators of earnings management and AQ, while audit opinion, audit switching, and audit tenure were utilized to assess audit characteristics. The findings revealed that audit characteristics have significant effects on the earnings management and audit quality of the Nigerian manufacturing firms. Thus, this study concludes that audit opinion, audit tenure, and audit switching are crucial factors influencing the quality of audit reports.

The study provides several recommendations based on its findings. Firstly, it suggests that firms should ensure that auditors maintain impartiality in their opinions to preserve the quality of audit reports. When auditors exhibit bias in their judgment, it can create opportunities for directors to engage in discretionary accrual activities. Additionally, excessively high audit fees may hinder auditors from making accurate judgments regarding the financial statements. Furthermore, this study recommends that audit tenure and audit switching should be carried out
promptly. Auditors should not exceed the specified audit tenure, and appropriate rotations of auditors should be implemented. This is important because an excessive level of familiarity between auditors and directors can influence the auditor’s judgment of the financial statements, subsequently impacting the quality of the audit report, and it can also lead to earnings management activities.

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