

Audit Fees and the Financial Reporting Quality of Listed Non-Financial Services Firms in Nigeria: Moderating Role of Audit Committee's Independence

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Abstract

This study examines the moderating role of audit committee's independence on the effect of audit fees and the financial reporting quality of listed non-financial services firms in Nigeria. Audit Committee's Independence was measured by the ratio of independent director in the audit committee to total audit committee members. Audit fees was measured by logarithms of audit fee while financial reporting quality was measured by discretionary accruals. The study employed 30 non-financial services firms listed on the Nigerian Exchange Group over a period of 11 years from 2011 to 2021. The data was handpicked from the annual financial reports of the sampled companies. Descriptive statistics and multiple regression analysis techniques were used for data analysis. Findings revealed that audit fee does not have a direct effect on financial reporting quality of listed non-financial services firms in Nigeria. However, the effect of audit fees on financial reporting quality is statistically significant when moderated by audit committee's independence. Based on the findings, the study recommended that more independent directors should be included in the audit committee of listed non-financial services firms in Nigeria. Regulators, shareholders, boards of directors, chief executive officers would benefit from the findings of this study especially in policy and decision-making purposes.

Keywords: Audit Committee Independence, Audit Fee, Financial Reporting Quality, Listed Non-Financial Services Firms.

Introduction

This study provides a comprehensive analysis of the effect of audit fee on the Financial Reporting Quality (FRQ) of listed non-financial services firms in Nigeria. Audit fee is becoming increasingly common as potential indicator of accounting and auditing quality, although there is little evidence to support the use of audit fee as a proxy for quality. According to DeFond and Zhang (2014) and Rajgopal et al. (2021), high audit fee symbolizes greater audit effort imply high FRQ and vice versa. It has also been argued that abnormally high audit fee reflects the degree of economic ties between auditors and clients, and that high fee is associated with lower FRQ (Ridzky & Fitriany, 2022). As a result, the literature on audit fee and FRQ is becoming more and more interesting.

Similarly, understanding the importance of FRQ has received great attention by academic researchers and professional recently (Al-Dmour et al., 2018; Pourabdollahian & Kordlouie, 2019). It is important to provide high-quality financial information as this will positively

influence capital providers and other stakeholders in making investment, credit and resource allocation decisions thereby improving the overall efficiency of the market. Thus, any research aims at understanding the factors that influence FRQ is a welcome development. This study is motivated on the premise that audit quality guarantees FRQ, as greater quality auditing provides better assurance of higher FRQ. This is because fee is assumed to accelerate an effort which is associated to greater coverage and thus, leading to higher FRQ (Bala et al., 2018).

This study examines the influence of audit fees on the FRQ of listed non-financial services companies in Nigeria. This is driven by the recent rise and dominance of Big 4 auditors in the auditor market in Nigeria. These Big 4 auditors receive much higher remuneration than the non-Big 4 auditors. To achieve this objective the study hypothesized in the null form that:

H₀₁: Audit fee has no significant effect on the FRQ of listed non-financial services firms in Nigeria.

The Nigerian Corporate Governance Code emphasized the importance of the audit committee independence to improve the quality of financial reporting. Therefore, this study also examines the joint effects of audit committee independence and audit fees on FRQ. Specifically, the study examines whether audit committee's independence interacts with audit fees to improve FRQ in the form of abnormal discretionary accruals of non-financial services firms listed in Nigeria.

The relationship between audit fees and audit committee's independence has the potential to significantly complement each other in preventing financial misrepresentation by managers. In this vein, this study also hypothesizes in the null form that:

H₀₂: Audit fee and FRQ of listed non-financial services companies in Nigeria nexus is not significantly moderated by audit committee independence.

This study makes two primary contributions. First, we provide insight into the ability of audit committees to constrain earnings management. These results speak to benefits and limitations of audit committee's independence and audit fees on the FRQ. Notably, the novel results of the combination of audit committee's independence and audit fees are important for improving FRQ. Second, this study extends the literature on audit quality in Nigeria by resolving the lingering question: Does audit fee drive FRQ? It also complements the extant audit literature by providing recent evidence from a developing economy.

The study was based on non-financial services firms where firms have ample opportunities to manage earnings because of less stringent regulatory attention. The sector by nature requires heavy investment in property, plant, and equipment whose recognition in the financial statements and accounts involves managerial discretions particularly concerning depreciation. The study also involves a most recent period of eleven (11) years from 2011 to 2021. The paper is divided into five sections. The first section presents the introduction, the second provides the literature and the development of the hypotheses, the third describes

the methodology and specification of the model, followed by the results and discussion and finally conclusion and recommendations.

Literature Review and Theoretical Framework

This section thoroughly reviews the literature on the moderating role of audit committee's independence on the relationship between audit fees and the FRQ of listed non-financial services firms in Nigeria. The section begins with a clear conceptual framework detailing and Operationalization and link between the three variables (audit fees, audit committee independence and FRQ). The section also presents succinctly the theories that underpin the study and concluded with a review of empirical studies. This study involves three main concepts which include audit fees as independent variable, audit committee independence as the moderating variable and FRQ as the dependent variable. The conceptual framework is as depicted in Figure 1.

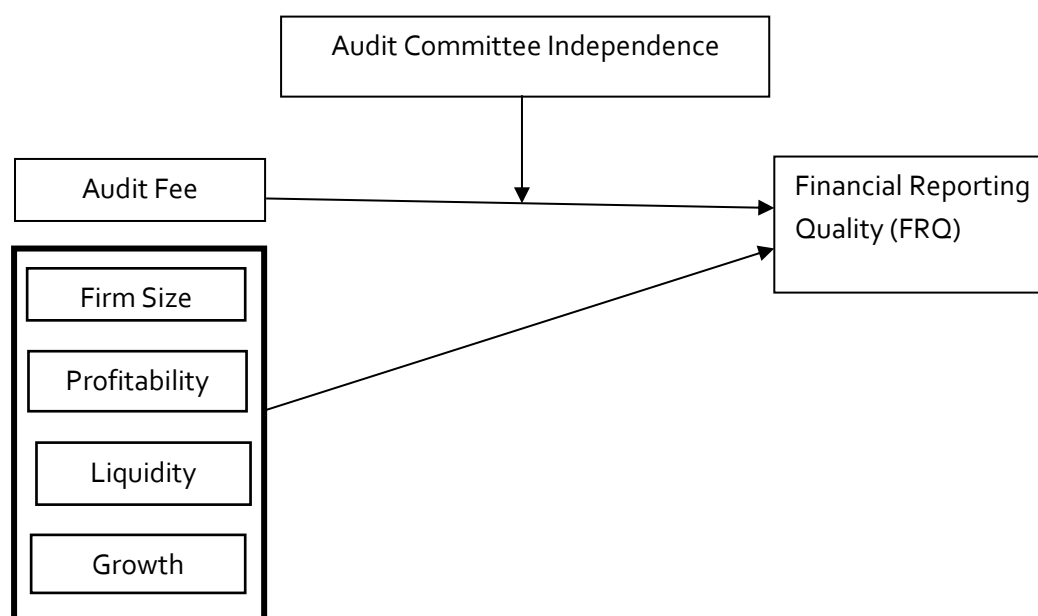


Figure 1: Conceptual Framework of the Study

Source: Researcher's Compilation (2022)

According to agency theory, the need for auditors stems from the need to monitor whether agents are acting in the best interests of the owners. In other words, protecting the interests of shareholders and ensuring that they receive high-quality financial statements rests on the shoulders of managers who are monitored by an independent external auditor (Institute of Chartered Accountants in England & Wales, 2005). According to Mohammed et al. (2018) the quality of information disclosed by companies depends on the quality of the audit. In providing its services, the audit firm is entitled to fees paid by the client as compensation for their efforts. Fees typically involve the auditor's efforts, depending on the size and risks of the client. Thus, the apriori expectation is that audit fees will be inversely related to FRQ.

Various definitions are put forward in accounting literature of audit fees. It could mean the amount of fees that auditors receive for their professional services based on factors such as the complexity of the service, level of expertise, and many others (Suryanto, 2014). An audit fee also refers to the amount of the fee paid to an external auditor which depends on the risk involved in the audit assignment, the complexity of the job, and the level of expertise required to perform the task as well as cost structure of the company involved and other professional considerations (Abdul-Rahman et al., 2017).

Others consider audit fees to be the remuneration for services provided by the external auditor. Remuneration for services related to time taken and the value of services rendered to a client or company (Morris & Dunne, 2008). In this paper audit fee is defined as the amount charged by the auditor for an audit assignment performed for the audited client in a particular year and this excludes remuneration for non-audit services rendered to the client.

As the amount of audit fee is not fixed, audit fee varies depending on factors like assignment risk, the complexity of service, the level of expertise required, the cost structure of client's firm, and other professional considerations, terms and conditions. Members of Public Accounting Firm are not allowed to have clients by offering a fee that could spoil the image of the auditing profession. So, all the considerations must be concluded to provide certainty to public accounting members and clients that audit fee will reflect the responsibility and risk of public accounting.

DeAngelo (1981) stated that the amount of audit fee depends on the market-assessed joint probability that a given auditor will both (a) discover a breach in the client's accounting system, and (b) report the breach thus; audit fees can proxy audit quality. However, there is this feeling that when auditors negotiate with management about fees payable in connection with their work, there is a possibility that there will be a reciprocal concession to reduce the quality of the audited reports thus, the sign in the relationship between audit fees and FRQ can either be positive or negative (Svanberg et al., 2019).

Financial Reporting Quality (FRQ) is the extent to which the financial statement provides true and fair information about the underlying performance and financial position. According to Jonas & Blanchet (2000), FRQ means 'full and transparent financial information that is not designed to confuse or mislead users'. Kwanbo and Tanko (2018) defined FRQ as the financial information created without taking advantage of accounting rules and principles to present them as reliable information. FRQ is also considered to be constituted by four dimensions which are relevance, timeliness, neutrality and representational faithfulness ((Bimo et al., 2019). The authors stated that this consideration has its focal emphasis on the four measures of financial reporting quality. From the above, it can be inferred that for a financial statement to be considered to have high-quality attributes, it must possess the four measures of financial reporting quality which are predictive and feedback value, timelines, neutrality and representational faithfulness.

Martínez-Ferrero et al. (2013) viewed that the information in financial report should be highly-qualitative if it is faithfulness conveyed in the financial reporting process. This

definition mainly focused on the financial aspect of corporate information; thus, they further expanded and modified the definition. They redefined reporting quality as the faithfulness of information conveyed in both financial and non-financial reporting process. Financial statements of firms at the end of a financial year should have some element of truth in it. This is termed "quality".

It is therefore imperative that the financial reports of firms should have high quality so as to increase the confidence of users.

FRQ refers to financial and non-financial information useful for decision making (Herath & Albarqi, 2017). Furthermore, FRQ is not only about the financial information, but also other disclosures, and other non-financial information useful for decision making included in the report (Kythreotis, 2014). The most vital goal of financial reporting is to provide its users valuable information for decision making. FRQ is defined as the financial disclosure statements that disclose the financial status in the annual report and strengthen the investors' confidence in making credible decision about their organization (Samuel et al., 2017). FRQ can also be defined as a report presented based on the company's condition, which decreases due to the funder's ability to understand accounting (Irwandi & Pamungkas, 2020).

A more holistic approach of looking at FRQ is through the International Accounting Standard Board's definition which looks at FRQ in terms of five qualitative characteristics - faithful representation, relevance, understandability, comparability, verifiability, and timeliness of the financial statements' information. This translates into multifaceted methods of measuring FRQ such accrual quality, earnings management, conservatism, and value relevance. Earnings management, the most widely used FRQ metric in accounting literature, was used in this study to measure FRQ.

An audit committee independence is a committee of the board of directors that is tasked with overseeing the financial reporting process, choosing the independent auditor, and receiving both internal and external audit reports. Audit committee also means an operating committee of the board of directors which is in charge of monitoring reporting process (Syofyan et al., 2021).

Numerous studies examine the efficacy of the audit committee's independent function in regulating the caliber of financial reporting of companies. There is also ongoing discussion regarding which sort of expertise—non-accounting or accounting—has a better association with FRQ. Some research (Dhaliwal et al., 2010; Krishnan & Visvanathan, 2008) advocated for a more constrained definition of a financial expert, while others (Davidson et al., 2004; Kusnadi et al., 2014) argued for the benefits of a broader definition. Studies also opined that having accounting and non-accounting specialists on an audit committee can be advantageous in terms of improving FRQ (Carcello et al., 2008; Nelson & Devi, 2013).

To respond to investor requests for clear, relevant and complete information, an audit committee independence is essential. The audit committee serves as a control tool for top management and provides better voluntary disclosure to enable an accurate assessment of the actions and decisions of top management and to match the interests of management

and investors (Allegrini et al., 2013). According to the report of Blue Ribbon (1999), and Smith Report (2003), the audit committee plays an important role in monitoring the performance of the board of directors by improving the quality of information disclosed and maintaining the protection of the shareholders through the disclosure of price-sensitive information. Therefore, the audit committee independence is expected to moderate the effect of the audit fee on the FRQ.

Several theories have been used to explain the effect of audit fee on FRQ as well as the moderating effect of audit committee independence on the effect of audit fee on FRQ. The theories that underpin this study are Auditors' Theory of Inspired Confidence and Agency Theory. Accordingly, the theory of inspired confidence states that the auditor, as a confidential agent, derives his broad function in society from the need for expert and independent examination as well as the need for an expert and independent judgment supported by the examinations. Thus, accountants and auditors are expected to know and realize that the public continues to expect a low rate of audit failures. This requires that the auditors must plan and perform their audit in a manner that will minimize the risk of undetected material misstatements. The accountant is under a duty to conduct his work in a manner that does not betray the confidence which he commands (Limperg Institute, 1985).

The theory assumed that audit provides assurance to the owners of (investors) that financial reports presented by the management is of high quality and is devoid of errors and misstatements. However, since information provided by the management may be biased, and outside parties have no direct means of monitoring, an audit is required to assure the reliability of this information. To guarantee the quality of financial reports needed the owners (investors) must adequately remunerate the auditor in form of audit fees. Considering objectives of the study which is to examine the impact of audit fee on FRQ of listed non-financial firms in Nigeria, the auditors inspired confidence theory link the variables of this research because it seeks to explain and predict that high audit fee will result to high quality audit and consequently high FRQ.

The agency theory defines the principal-agent relationship. The principal here are shareholders while agents refer to the managers. These parties have divergent interests, thus, giving rise to agency costs (Shehata, 2014). Disclosures by way of financial reporting and regulation help to mitigate the agency problem as it requires that management of corporations' report both mandatory and voluntary information for the benefit of shareholders and other interest parties. By and large, since managers have first-hand information about operations of a business, they are duty bound by the agency theory to report as appropriate to the owners of the businesses.

Agency theory was developed in 1976 by Jensen and Mackling and explains agency relationship between two parties: investors and managers. The agent (manager) undertakes to perform certain duties for the principal (investors) and the principal undertakes to reward the agent. According to the agency theory, a firm consists of a nexus of contracts between the owners of economic resources (the principals) and managers (the

agents) who are charged with using and controlling those resources. The theory posits that agents have more information than principals and that this information asymmetry adversely affects the principals' ability to monitor whether or not their interests are being properly served by agents.

Further, the theory recognizes that any incomplete information about the relationship, interests or work performance of the agent described could result to adverse selection or a moral hazard problem. Moral hazard and adverse selection impact on the output of the agent in two ways; not possessing the requisite knowledge about what should be done and not doing exactly what the agent is appointed to do. The agency theory therefore works on the assumption that principals and agents act rationally and use contracting to maximize their wealth (Jensen & Meckling, 1976).

This theory is applicable to this study simply because audit committee is one of many mechanisms used in business to address the agency problem by reducing agency costs that affects the overall performance of the relationship as well as the benefits of the principal (Abdel-Khalik, 1993). Audit committee independence enhances the provision of additional information to the principal (shareholder) about the behavior of the agent (management) reduces information asymmetry and lowers investor risk and low revenue. This may be because the parties may have different goals, and the managers may not act on behalf of the best interests of the shareholders (Jensen & Meckling, 1976). Gerayli et al. (2011) confirmed that this agency problem leads to the demand for external auditing.

Thus, audit committee supports the agency theory which endorses that high percentage of financial experts in the board is a vital instrument for board monitoring because it leads to a healthier financial reporting quality (Pfeffer & Salancik, 2003). This result supports agency theory in which independent directors would minimize information asymmetry (Hashim & Abdulrahman, 2011) and reduce agency problem (Islam et al., 2010). The formation of audit committee's independence is anticipated on agency theory which suggested that a companies' demand for an audit committee's independence is related with the magnitude of its agency problem. Agency problem arises as an outcome of separation between ownership and control. Habitually shareholders are circulated in Nigeria and cannot hold the professional managers accountable (Samuel, 2012).

If so, effective audit committee's independence over financial reporting should provide reasonable assurance regarding the reliability of financial reporting and preparation of financial statements for external purposes. This exercise provides reasonable assurance, both to management and shareholders, about the financial status of the company. Therefore, we theorize that audit committee can explain the influence of audit quality on financial reporting.

Furthermore, the impact of audit fee on the FRQ of deposit money banks in Nigeria was studied by Agbaje et al. (2021). Data are taken from the audited annual reports of ten (10) chosen deposit money institutions during a six-year period (2013 to 2018). The findings of this study indicate that audit fees have no effect on FRQ. If a moderating variable, such as

the audit committee, was included and all Nigerian-listed non-financial companies were utilized as the study area, the results would be different.

In 2020, Ogungbade et al. studied the impact of audit quality attributes on the FRQ of deposit money banks listed on the NGX. Eleven banks were used as a sample size from 2009 - 2018 and multiple regression for data analysis. They found that FRQ is significantly influenced by audit fees. The study also considered the timeliness of financial reports based on the period between the end of the accounting year and the date an external auditor signed the report. According to the study, encouraging high audit fees will improve FRQ. The current study will explore non-financial companies and introduce the audit committee as a moderating variable.

Omoregie and Dibia's (2020) study looked at the influence of audit firm characteristics and audit quality in Nigeria. In total, fifteen (15) banks were used in the study over a five-year period (2014-2018). Multi-panel regression analysis was used with the aid of E-view 8.0 econometric software package for data analysis. The study found a significant and positive relationship between audit quality and audit fee. Given these results, the study suggests that when examining the factors that influence FRQs in Nigeria, audit fees be given more consideration. The results of the study would be different if a moderator variable was included.

Ado et al. (2020) investigated the influence of audit quality on the financial performance of listed companies Nigeria. They employ 84 companies listed on NGX with 756 observations over the period of nine years from 2010 to 2018. The study employs multiple regression to analyzed the data. The results reveal that audit fee has positively but insignificant effect on ROA. This implies that if there is decrease in the amount paid to auditors for audit services, then financial performance will increase marginally.

Egbunike and Asuzu (2020) examined whether audit fee affects how long it takes to prepare the audit report. 13 industrial firms were chosen for the study as a sample size. Methods for data analysis included panel regression and descriptive statistics. The findings demonstrate that audit fees have a negative but minimal impact on audit report lag. The impact of audit firm characteristics on the FRQ of listed manufacturing firms in Nigeria from 2011 to 2015 was also investigated by Emmanuel and Emem (2020). Data was gathered from the sixteen companies that make up the sample size. The data were analyzed using multiple regression analysis. The results demonstrated that audit fees significantly affect the FRQ of Nigerian manufacturing companies that are publicly traded.

Kolawole (2019) studied the factors that affect the FRQ of DMBs in Nigeria. The data is gathered from the banks audited financial statements from 2009–2017. To test the hypotheses, generalized least squares panel (GLS) regression was used. The results revealed that the FRQ of DMBs in Nigeria was significantly influenced by audit fee. Similarly, Bala et al. (2018) examined the relationship between audit fees and FRQ of listed firms in Nigeria. They used 88 listed companies in Nigeria for the period of 2012 to 2016. A multiple regression was employed in the analysis. The study revealed that higher audit fees

are associated to lower level of discretionary accruals and thus imply higher FRQ. The result also supports the resource dependence theory.

Mustapha et al. (2019) investigated the possible effect of audit quality attributes towards the change of earnings management level among the Nigerian listed firms. The study used all the public listed firms in the main flow of the Nigerian Exchange Group (NGX) as a population from the year 2012 until 2017. Sixty-three selected companies were selected as a sample based on the filtration criteria of the study. The financial data was obtained from the Thompson Reuters DataStream, and the corporate governance data was from the annual reports and accounts of the companies. Audit quality attributes and accrual model was used to test the relationship between the study variable. The study applied multiple regression to test the model. It was revealed from the regression that audit quality is negatively significant with accrual earnings management. This finding is indicating that any increases in the unit of audit fees will decrease the earnings management of the selected firms. Thus, the finding is supporting agency theory and it is contrary to the assumption of creative accounting theory. The result of this study will assist the relevant authorities in decision making and policy setting towards the best practices of the Nigerian listed firms.

Ikpanatan and Daferighe (2019) investigated the performance of audit quality on FRQ. The output of Pearson Product-Moment Correlation and Linear multiple regression of the data extracted from annual reports of 10 deposit money banks in Nigeria for 14 years could not establish statistically significant effects. The study reveals the insignificant effect of Audit fees and Auditor tenure on the financial report but exerts a significant relationship with discretionary accruals. The result might have been different if a moderating variable like an audit committee were included in the study and if the study was carried out on a different domain such as banks like this current one.

Ilechukwu (2017) examined the effect of audit fee on the audit quality of firms in the Nigerian consumer goods industry. Data were extracted from annual reports of sampled firms from 2011 to 2016. Audit fee and audit tenure were the independent and dependent variables respectively. The core explanatory variables employed were the audit fee and audit tenure. Firm size, leverage and profitability were controlled for in the pooled data ordinary least squares regression model. Findings revealed that audit fee has a positive but insignificant effect on the audit quality of consumer goods sector of quoted firms in Nigeria. The data of the study did not go beyond 2016, as such, some economic events and transformation in the country of study might have addressed the findings. This study extends its study period to 2020.

Onaolapo et al. (2017) examined how audit quality is affected by audit fees in listed cement producing companies in Nigeria using data from annual reports from 2010 to 2015. Audit fees, leverage ratio, client size and audit tenure were independent variables while audit quality formed the dependent variable. For analysis, Ordinary Least Squares regression was employed. Findings from the study show that audit fee and other independent variables like audit tenure have a joint significant effect on audit quality. They recommended that policies that could improve audit quality should be adopted by government in Nigeria. The

data of the study did not go beyond 2015, as such, some economic events and transformation in the country of study might have addressed the findings. This study extends the study period to 2020. Also, using all the entire non-financial firm in Nigeria might change the study findings.

Oladipupo and Monye-Emina (2016) examined the effect of abnormal audit fees on audit quality in the Nigerian audit market. The study employed the probit binary regression technique on analyses of 350 firm observations extracted from listed Nigerian companies. Results showed that both positive and negative abnormal audit fees had positive but insignificant impact on audit quality. This shows that abnormal audit fee does not matter to audit quality. The study falls short of revealing the technique used in determining the sampled respondents

Modugu et al. (2012) studied the relationship between company characteristics and audit delay in twenty sampled companies on the Nigerian Exchange Group using 2009 to 2011 financial data. The study sought to determine average audit lag in Nigeria and the effects of company characteristics in predicting that lag. The company characteristics studied were: audit fees, company size and multi-nationality of firm. Measure the extent of audit lag in Nigeria and to establish the impact of selected corporate attributes on audit delay in Nigeria. Audit lag for studied companies had a minimum value of 30 days and a maximum of 276 days. Averagely, Nigerian listed companies take approximately two months after year end to present audited accounts. Ordinary Least Square (OLS) regression results showed audit fee is one of the major determinants of audit delay in Nigeria. It was recommended that regulatory authorities have mechanisms in place to probe abnormal audit delay. Adding audit tenure and audit committee among the independent variables and extending the period of study to 2020 might have given us a different finding.

Similarly, Ashbaugh et al. (2003) examined the relationship between discretionary accruals and audit fee ratio and total fees in a sample of US firms after controlling for firm performance they find that there is no statistically significant association between discretionary accruals and total audit fees. They also document a positive correlation between the absolute value firm's discretionary current accruals and fee ratio. In their second test, they indicate no association between fee ratio and the likelihood of firms reporting small earnings increases and a negative association between total fees and the likelihood of firms reporting small earnings increases.

Methodology

The sample comprised of 30 listed non-financial services firms and covered a period of 11 years (2011-2021). This sample was based on (i) the company must have the financial reports on their website or on NGX website of office throughout the study period (ii) the company must have been listed on the NGX and remain listed throughout the study period and (iii) must be non-financial firms and must be classified as either: agricultural, breweries, automobile and Tyres, building materials, chemicals and paints, health care, food and beverages, and conglomerates.

To address the research objectives and hypotheses, two models were adapted from Matta and Beamish (2008); Peng and Yang (2014). The first model (Model 1) shows the direct effect of audit fee on FRQ of listed non-financial services firms in Nigeria. The study specified the model as:

$$FRQ_{i,t} = \beta_0 + \beta_1 AUF_{i,t} + \beta_2 FSZ_{i,t} + \beta_3 Prof_{i,t} + \beta_4 Liq_{i,t} + \beta_5 Growth_{i,t} + e_{i,t} \dots \dots (1)$$

The model in Equation 2 shows the moderating effect of audit committee on the effect of audit fee on FRQ of the non-financial firms listed on the NGX. Model 2 is used to test the second study hypotheses and is represented as follows:

$$FRQ_{i,t} = \beta_0 + \beta_1 AUF_{i,t} + \beta_2 AC_{i,t} + \beta_3 (AUF_{i,t} * ACI_{i,t}) + \beta_4 FSZ_{i,t} + \beta_5 Prof_{i,t} + \beta_6 Liq_{i,t} + \beta_7 Growth_{i,t} + e_{i,t} \dots \dots \dots (2)$$

Whereas:

FRQ = Financial Reporting Quality

AUF = Audit Fees

ACI = Audit Committee's Independence as a Moderator variable

FSZ = Firm Size

Prof = Profitability

Liq = Liquidity

Growth = Growth

β_0 = Constant

β_1 to β_4 = Coefficients

i = cross-section script

t = time series script

e = error term

To measure FRQ, this study adopted the modified Jones (1995) Model where discretionary accrual was used to proxy FRQ. The following three steps are involved in calculating Discretionary Accruals:

Step 1: Calculating total accruals

There are two approaches for mathematically calculating total accruals as described in several studies. The first method is called balance sheet approach which is sparingly used in accounting due to non-articulation concern while the second method is called cash-flow approach which is a preferred and easy to calculate in approach in accounting and was be used in this study. The aggregate total accruals cash flow approach was adopted in this study because it is the primary approach to measuring opportunistic earnings management. Under this approach, total accruals (TACC) are calculated as earnings before interest and taxes (EBIT) minus the operating cash flows from continuing operations (CFO):

$$TACC = EBIT - OCF \dots \dots \dots (i)$$

Where:

TACC is Total Accruals of a of company i in year t .

NI is the Net Income and is the profit after tax of company i in year t .

CFO is the cash flow from operating activities of company i in year t .

Step 2: Calculation of non-discretionary accruals

This study estimate non-discretionary accruals as follows:

$$TACC_{it}/A_{it-1} = \alpha_t(1/A_{it-1}) + \beta_{1i}[(\Delta REV - \Delta REC)/A_{it-1}] + \beta_{2i}[(PPE_{it})/A_{it-1}] + \varepsilon_{it} \quad (ii)$$

Where:

TACC = Total Accruals (NI – OCF)

ΔREV = Change in Revenue

ΔREC = Change in Receivable

PPE = Property, Plant and Equipment

A_{it-1} = Year-end assets for company i in year $t-1$

ε_{it} = error term/residual

Consistent with previous research, all variables have been scaled by lagged total assets to reduce Heteroskedasticity. ε_{it} is included as an error term. The error term, ε_{it} , is the estimate of the discretionary accruals. Thus, non-discretionary accrual is:

$$NDACC_{it}/A_{it-1} = \alpha_t(1/A_{it-1}) + \beta_{1i}[(\Delta REV - \Delta REC)/A_{it-1}] + \beta_{2i}[(PPE_{it})/A_{it-1}] \dots (iii)$$

Step 3: Calculation of discretionary accruals

To Calculate Discretionary Accruals (Abnormal Accrual) this study used the difference between total accruals and non- discretionary accruals indicated in model (iv).

$$FRQ = DACC_{i,t} = TACC_{i,t} - NDACC_{i,t} \dots (iv)$$

The variables, their acronyms, measurement and sources are shown in Table 1.

Table 1: Variables Measurement and Sources

Variables	Acronyms	Type of Variable	Measurement	Source
Financial Reporting Quality	FRQ	Dependent Variable	The discretionary accruals.	Modified Jones (1995)
Audit Fees	AUF	Independent Variable	Natural logarithms of audit fees.	Farouk and Hassan(2014)

Audit Committee's Independence	ACI	Moderating Variable	Proportion of independent audit committee members to total audit committee.	Smith Report, (2003)
Firm Size	FSZ	Control Variable	Measured as natural logarithm of the Firms total assets	(Al-Sraheen, 2014)
Profitability	Prof	Control Variable	Ratio of Operating Profit to total assets	(Jihadi et al., 2021; Nurwulandari, 2021)
Liquidity	Liq	Control Variable	Ratio of current assets to current liabilities	(Diyanto, 2020; Jihadi et al., 2021)
Growth	Growth	Control Variables	Percentage growth in total assets	(Gabriel Anton & Carp, 2020)

Source: Researcher's compilation (2022)

The study used secondary source of data which was collected from the annual reports of the sampled companies. Thus, only secondary data was utilized in this study. The strength of using only secondary data is data the study can be replicated at any time. Descriptive statistics and multiple linear regression were employed for the analysis of the data. The descriptive statistics measure the central tendency and dispersions in the data using means, minimum, maximum, and standard deviation. Multiple regressions were used to analyze the effect of the independent and moderating variables on the dependent variable. Thus, multiple regression analysis measures both the cause and effects in the study and hence utilize for testing the formulated hypotheses.

To improve the validity and reliability of the inferential statistical result which is based on multiple regressions, the following robustness tests were conducted. It is a pre-estimation assumption test which must be met to ensure that the result of multiple regressions is valid. This test was carried out using Shapiro-Wilk test. A significant value of Shapiro-Wilk test shows lack of normality of the error term and vice versa. To ensure that the independent variables are not highly correlated, Pearson correlation, and Variance Inflation (VIF) were performed. This pre-estimation test was to ensure that multicollinearity does not exist in the data variables used in the study. Pearson correlation coefficients above ± 0.7 indicate multicollinearity, while VIF below 10.0 is a sign that there is no significant multicollinearity problem. Another regression assumption that was tested in this study was Heteroskedasticity. It is a post estimation assumption test to ensure that errors (residuals) are not serially correlated. It was tested using White test. The significant value of the White

test depicts Heteroskedasticity problem and vice versa. To correct the problem if it exists, the regression was performed using a robust standard error option.

The data set employed in this study have both cross-sections and time-series dimensions thus, Hausman specification test was carried out to test the panel effect. Hausman test was used to decide between the random effects and fixed effects model. Where the Hausman effect is significant, a fixed effect model would be favored but if the Hausman specification test is insignificant, the random effect model will be selected as a most appropriate model for the data. Finally, the Lagrangian Multiplier test VIF was conducted to decide between the pooled ordinary least squares and random effect models.

Results and Discussions

This section discusses the results from analysis of descriptive statistics and multiple regression analysis. The discussion begins with descriptive statistics where measures of centrality and dispersion were discussed. Next, regression assumptions were checked and reported, and finally, regression analysis results were presented. Table 2 presents the descriptive statistics for the three measures of the FRQ, audit committee and audit fees, and other relevant control variables. The sample is made up of 30 listed non-financial firms in Nigeria. The 30 samples of listed non-financial firms from 2011 to 2021 gave rise to a combined observation of 330.

Table 2: *Descriptive Statistics*

Variable	Obs	Mean	Std. Dev.	Min	Max
FRQ	330	.134	.403	0	6.824
AUF	330	4.085	.567	2.426	5.285
ACI	330	.417	.148	0	.833
Fsiz	330	7.243	.85	5.342	8.762
Prof	330	.083	.377	-.517	4.871
Liq	330	1.728	1.651	.003	9.977
Growth	330	.172	.566	-.767	5.901

Source: *Researcher's Compilation Using Stata 14.2 Output*

Table 2 reports descriptive statistics of FRQ. On average, the firms employed in the study have a 0.134 FRQ. It indicates that the sample non-financial firms in Nigeria engage in earnings management, thus, the quality of their financial reporting is dampened. This is evidenced by the widespread distribution of FRQ from a minimum of 0 to a maximum of 6.824. Furthermore, the wide gap between mean FRQ and standard deviation of FRQ suggests the presence of outliers in the FRQ of listed non-financial firms in Nigeria. Audit fees has a mean of 4.085 (N12,161.860) indicating that the sampled companies pay external auditors N12,161,860 as audit fees. The minimum of audit fees is 2.426 and the maximum is 5.285.

Audit committee's independence which was measured as the ratio of independent directors to total audit committee is 0.417 suggesting that over 40% of the audit committee's independence of non-financial firms in Nigeria is constituted by independent members. Over 50% of the audit committee members of listed non-financial firms is made up of non-independent directors. In respect of the control variables, the firm's size has a mean of 7.243 with a 0.85 standard deviation. The minimum size of listed non-financial firms in Nigeria is 5.342 and a maximum of 8.762. The mean size shows that on non-financial firms listed in Nigeria worth about 7.243 (N17,498,466,890).

Moreover, the result show that profitability measured by Return on Assets is 0.083, which is explained that non-financial companies listed in Nigeria have made return on assets of 8.3% with 0.377 standard deviations. The minimum and maximum values of ROA are -0.517 and 4.871 respectively. Liquidity measured by current ratio is about 1.728 (SD =1.651) and the values ranges from 0.003 and 9.997 respectively. Finally, the results depicted that the growth of non-financial firms in Nigeria is about 17.2% over the study period. The study begins with the estimation of FRQ which is the dependent variable of the study. The regression coefficients for the regressions used to estimate "normal" levels. To estimate these models, the entire sample of 330 firm-years was employed. The table reports the coefficients, *t*-statistics, and *p*-values.

In this study, the regression assumptions were tested to ensure that the results are robust. First, to ensure that there was no multicollinearity, a Pearson correlation coefficient was calculated to examine the relationship between the predictions. The Pearson correlation coefficient presented in Table 3 shows a high positive correlation between audit fees and firm's size depicting that larger companies base on the total assets worth pays higher audit fees than smaller firms.

Table 3: Matrix of Correlations

Variables	(1)	(2)	(3)	(4)	(5)
(1) AUF	1.000				
(2) Fsiz	0.822	1.000			
(3) Prof	0.136	-0.013	1.000		
(4) Liq	0.079	0.056	0.067	1.000	
(5) Growth	0.017	0.061	-0.023	0.014	1.000

Source: Researcher's Compilation Using Stata 14.2 Output

The result of pair wise correlation reveals multicollinearity problem as some variables have Pearson correlation of more than 0.7 which is suggested as a rule of thumb (Field, 2013). Therefore, further multicollinearity check was conducted using VIF. The VIF which is a more stringent test of multicollinearity indicates absence of collinearity problem since mean VIF is less than 5 and no individual VIF value is more than 10. The VIF values range from 1.01 to 3.39. Next, the assumption that the error term (residuals) was constant (homoscedasticity)

was investigated using Breusch-Pagan hettest . The result indicates that the $\chi^2 = 5273.83, p < 0.001$, this shows that the assumption of homoscedasticity of the residuals is violated. Furthermore, the normality of the residual's assumption was tested using the Shapiro-Wilk normality test. Evidence indicated that Shapiro-Wilk $= 11.127, p < 0.001$. The significant value of Shapiro-Wilk value indicates that residuals are not normally distributed. Finally, the Cook's distance values were calculated to ensure that no influential cases were biasing the model. Few cases of outlier were identified and corrected to avoid biasing the results.

Regression results are presented and accordingly discussed here. This study employed panel data, thus, to determine an appropriate model estimator method between fixed and random effect models, a Hausman test was carried out. The results of the Hausman test turns out insignificant ($\chi^2 = 2.26, p = 0.8126$) implying that Random Effect Model (REM) is the more efficient estimator. The Breusch-Pagan Lagrangian Multiplier (LM) test was further conducted to decide between a random effects regression and a Pooled Ordinary Least Squares (OLS) regression. On the Basis of LM test the study concluded that pooled OLS is most appropriate than Random Effect model ($\chi^2 = 0.55, p = 0.2295$), therefore, OLS was used for the analysis. The results from analysis using OLS is presented in Table 4.

Table 4: Linear regression Analysis of Model 1

FRQ	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
AUF	-.034	.048	-0.70	.482	-.129	.061	
Fsiz	-.038	.032	-1.19	.237	-.101	.025	
Prof	.787	.041	18.99	.000	.706	.869	***
Liq	-.014	.009	-1.47	.142	-.032	.005	
Growth	-.004	.027	-0.13	.896	-.056	.049	
Constant	.507	.13	3.90	.000	.251	.763	***
R-squared		0.547	Number of obs			330	
F-test		78.273	Prob> F			0.000	

*** $p < .01$, ** $p < .05$, * $p < .1$

Source: Researcher's Compilation Using Stata 14.2 Output

The F -statistics reported in Table 4 depicts that the regression model fitted well to the research data ($F = 78.273, p < 0.001$). R-squared (R^2) from the regression reported in Table 4 is 0.547 meaning that the model explained the variability in FRQ of listed non-financial firms in Nigeria from 2011 to 2021 by 54.7%. The analysis from Table 4 shows that only profitability had significantly predicted value of share prices ($\beta_3 = 0.787, t = 18.99, p < 0.001$). The main variable of interest which is AUF (audit fees) has no significant effect on FRQ ($\beta_1 = -0.034, t = -0.70, p = .482$). Although the coefficient is negative depicting that all things being equal an increase in audit fee leads to a decrease in FRQ the change is not statistically

significant. Based on the result, H_{01} which proposed that audit fee does not have a significant effect on FRQ of listed non-financial firms in Nigeria was retained (accepted).

The finding of this study is in line with several prior studies like Oladipupo and Monye-Emina (2016), Ilechukwu (2017) and Ogungbade et al. (2020) whose findings also indicate that audit fees have a significant effect on FRQ of listed non-financial firms in Nigeria. This finding is however contrary to Onaolapo et al. (2017) and Bala et al. (2018) and Agbaje et al. (2021) who found that audit fees have a significant influence on FRQ of non-financial firms listed in Nigeria.

To investigate the moderating role of audit committee's independence on the effect of audit fees on FRQ of listed non-financial firms in Nigeria, the result of Model 2 was used. The main variable of interest in model 2 is the interaction between AUF and ACI. The results of the analysis of model 2 is reported in Table 5.

Table 5: Linear regression of Model 2

FRQ	Coef.	St.Err.	t-value	p-value	[95% Conf Interval]	Sig	
AUF	-.044	.042	-1.04	.299	-.126	.039	
ACI	4.976	1.433	3.47	.001	2.156	7.796	***
AUF*ACI	-.809	.358	-2.26	.024	-1.512	-.105	**
Fsiz	-.017	.028	-0.63	.529	-.072	.037	
Prof	.576	.046	12.59	0	.486	.666	***
Liq	-.005	.008	-0.66	.511	-.021	.01	
Growth	.013	.023	0.58	.562	-.032	.059	
Constant	.402	.115	3.49	.001	.175	.629	***
R-squared		0.667	Number of obs		330		
F-test		92.264	Prob> F		0.000		

*** $p < .01$, ** $p < .05$, * $p < .1$

Source: Researcher's Compilation Using Stata 14.2 Output

As reported in Table 5, $R^2 = 0.667$ meaning that model 2 explains the variations in FRQ by about 66.7%. The main variable of interest is the interaction between AUF and AC. Results revealed that audit committee's independence significantly moderates the influence of audit fees on FRQ of listed non-financial firms in Nigeria. Without moderation audit fees does not have a significant effect on FRQ of listed non-financial firms in Nigeria *ceteris paribus*, however, when the effect of audit fees on FRQ was moderated by audit committee's independence it became statistically significant ($\beta = -.809$, $t = -2.26$, $p = .024$). Based on this result, H_{02} was rejected leading to a conclusion that audit committee's independence significantly moderates the effect of audit fees on FRQ of listed non-financial companies in Nigeria.

Conclusion and Recommendations

This study examined the moderating role of audit committee's independence on the relationship between audit fees and the FRQ of listed non-financial services firms in Nigeria. Specifically, it is concluded that audit fee has no significant effect on the FRQ of listed non-financial services firms in Nigeria from the direct relationship perspective. Secondly, it is also concluded that audit committee's independence significantly moderates the relationship between audit fees and the FRQ of listed non-financial services firms in Nigeria. However, it is concluded that the effect of audit fees on FRQ is statistically significant when moderated by audit committee's independence.

Recommendations

- i. Based on the findings, the study recommended that more independent directors should be included on the audit committee's independence of listed non-financial companies in Nigeria to improve FRQ of listed non-financial companies in Nigeria;
- ii. Indeed, it was recommended that policymakers such as FRC and Securities and Exchange Commission should enforce the code of corporate governance 2018 which stipulates that the audit committee should be independent. If this is done, as the results of analysis depicts, it will lead to a significant increase in the FRQ of listed non-financial services firms in Nigeria.
- iii. This study contributes to previous literature by extending the nexus between audit fees and the FRQ to capture the moderating role of audit committee's independence. This is important in the demonstration of how audit committee's independence enhanced FRQ of the listed non-financial services firms in Nigeria.

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