DETERMINANTS OF AUDIT QUALITY AMONG LISTED FIRMS IN NIGERIA: EVIDENCE FROM NON-FINANCIAL FIRMS

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CITATION: Izomoh, O.S., Ekwueme, C.M. & Ndubuisi, C.J. (2024). Determinants of audit quality among listed firms in Nigeria: evidence from non-financial firms, *Journal of Global Accounting*, 10(4), 18 - 37.

Key words: Agency cost, Audit quality, Audit firm size, Auditor fee, Auditor independence.

ABSTRACT

This study examined the determinants of audit quality of listed non-financial firms in Nigeria. To achieve this objective, research questions and hypotheses were designed in line with five specific objectives. Relevant concepts were reviewed along with the review of empirical literature. The research design is ex post facto and relevant statistical tools were employed to analyze the data and the hypotheses were tested using probit regression technique. Based on the result from the analytical procedure of this study, it was observed that in testing the relationship between audit fee and audit quality of listed non-financial firms in Nigeria, the computed chi2 is 281.29 and a p-value of 0.0000 which shows a significant positive relationship between audit fee and audit quality of listed non-financial firms in Nigeria hence the null hypothesis was rejected. Additionally, in testing the relationship between firm size and audit quality, the computed p-value stood at 0.0000 hence, the study rejects the null hypothesis that the size of the firm does not have significant influence on audit quality of listed non-financial firms in Nigeria. The relationship between agency cost and audit quality recorded insignificant relationship having a p-value of 0.3768 this is why the null hypothesis that there is no significant relationship between agency cost and audit quality of the listed non-financial firms in Nigeria was accepted. In testing the null hypothesis, that there is no relationship between audit independence and audit quality of listed non-financial firms in Nigeria the p-value stood at 0.0000 which implies significant relationship between audit independence and audit quality of listed non-financial firms in Nigeria. Lastly, in testing the relationship between firm sector and audit quality the p-value stood at 0.0008. Therefore, the study rejects the null hypothesis that there is no significant relationship between firm sector and audit quality of listed non-financial firms in Nigeria. This study concludes that audit quality is significantly influenced by variables like audit fee, firm size, audit independence and firm sector. Conversely, agency cost exhibited an insignificant though positive relationship with audit quality; thus, helping to moderate threats to auditors independence and quality of service. The study recommends among others that the activities of audit firms should be put under close supervision, especially in the area of auditor remuneration, because this tends to influence the quality of audit



1. INTRODUCTION

In organisations, the quality of audit remains fundamental to the survival and long term strategic plans. A high audit quality is the product of the procedures established by auditors to ensure that financial reports communicate relevant and reliable information to the generality of users of accounting reports and other stakeholders (Nwanyanwu, 2017). These practices and procedures vary from one organization to the other depending on the firm size, nature of activities and applicable legislations. Audit quality has been the major focus of the International Auditing and Assurance Standards Board (IAASB), the global auditing standards' setter. The IAASB's framework for audit quality issued in 2014 emphasized on the important role of auditors and their firms as well as other stakeholders in maintaining high level of audit quality. Previous studies sentence different opinions regarding what constitutes an appropriate definition of audit quality (Almasria, 2017; Aliu, Okpanachi & Mohammed, 2018). Despite the above, Musa (2024) view audit quality as the extent to which an audit detects and reports material misstatements and reduce information irregularities and asymmetry between management and stakeholders. In line with this definition, and consistent with the view of Meisyarah and Mappanyukki (2024), saw audit quality as a function of market-evaluated joint probability that auditors will not only discover breach(es) in the client's accounting/reporting systems but will report such breaches. Audit quality can therefore be seen as a systematic examination of a quality system carried out by external auditors. It is an important part of organizations' quality management system and is a key element in the quality system standard of the International Standard Organization (ISO).

Achieving a high standard in audit quality will demand a rigorous audit, with appropriate degrees of professional skepticism conducted in compliance with applicable standards. This according to prior researchers will build trust and confidence in the audit profession. Notwithstanding the aforesaid, it is generally agreed that the purpose of every audit is to enhance the degree of confidence which intended users will have on the financial statements of organizations. Such confidence can be achieved where external auditors are able to gather sufficient and appropriate audit evidence in order to express their respective opinions as to whether or not; the financial statements of their clients are prepared in all material aspects, and in accordance with the applicable financial reporting framework.

Consequent on the aforesaid, in a bid to avoiding capital market consequences occasioned by unreliable financial reporting, companies with good reputations for credible financial reporting would likely change their auditors when the quality of audit is suspected or questionable. Noteworthy however, is the fact that the prevalence of fraud, excessive earnings management, and financial crimes at global and local scenes such as Cadbury Plc have an alarming dent on the accountancy profession. These anomalies have negative multiplier effects on the capital markets and business environments generally. The Nigerian business environment for instance has been perceived in some quarters as not too conducive to investors both local and foreign. Adjudged reasons for this assertion include the inability of financial reports to meet the needs of user-groups. The level of confidence on financial statements is gradually plummeting due to the perceived inability of these statements to provide adequate and reliable information needed for decision making as occasioned by notable cases of financial scandals and impropriety like Cadbury Plc, Oceanic Bank Plc, and Intercontinental Bank Plc among others. The aftermaths of majority of such known financial scandals and the costs associated with such frauds have remained enormous and have affected businesses and investors generally. This has further raised questions on the credibility of auditing and audit quality generally. In light of the cost of frauds to businesses and investors in Nigeria, it has become crucial to develop strategies that will either detect, reduce, prevent or eliminate business frauds and financial impropriety, by taking a superficial look at the risk factors associated with businesses, financial reporting and audit practices in Nigeria, and giving due attention to what determines audit quality in Nigeria (Bako, 2024). It is on this note that this study sets out to examine the determinants of audit quality in Nigeria, by focusing on listed firms outside the financial service sector on the floor of the Nigerian Exchange Group (NEG). Auditors are required by all standards to remain independent of management in the dispatch of their usual assignment in every audit engagement. Despite this expectation, reported cases of financial scandals within and outside Nigeria has given rise to debates on the credibility of auditors and the quality of audit and auditing generally. Stakeholders and practitioners have argued that the Nigerian business environment is no longer conducive for investment due to the perceived inability of financial reports to convey reliable information that meets the expectation of a variety of users (Amahalu & Ezechukwu, 2017).

Prior to the prevalence of accounting scandals at both global and local scenes, investors relied heavily on the reports of auditors such that audited accounts were considered adequate and useful for decision making so long as an unqualified report has been issued by the auditors of such financial statements. Investors therefore placed high level of confidence and trust on financial statements that were audited, as compared to unaudited financial reports. The increased confidence of users of financial information of firms was able to entice the inflow

of capital which had long run effect on creating growth and development in the business environment (Almomani 2018, Ayora & Ogeto 2022) Notably, the outbreak of audit failure in the world, and Nigeria in particular has brought great disappointments/dissatisfaction and concerns to users of financial reports. Several questions relating to the level of credibility in auditing process and practices have been raised. These questions have further spurred research enquiry aimed at ascertaining the causes of audit failure and its effect on businesses and on reporting quality. Interestingly, most prior studies on audit quality within and outside Nigeria had focused mainly on banks; whereas; by scope, they concentrated more on how audit tenure/audit rotation and corporate governance measures affects audit quality with little or no attention to other possible determinants of audit quality (Amahalu & Ezechukwu, 2017; Turel, Tas, Genç, & Ozden, 2017; Salehi, Moradi & Paiydarmanes, 2017; Imegi & Oladutire, 2018). To the best of the researcher's knowledge, there seem to be scanty empirical evidence especially in developing economies like Nigeria on the link between audit quality and auditors' fees, firm's sector, agency costs as well as firm size and the level of external auditor's independence. This has created some level of empirical gap which this current study is designed to fill. In light of the above, this current study examines by means of appropriate statistical tools, the determinants of audit quality by obtaining empirical evidence from nonfinancial firms listed in the Nigerian Exchange Limited over a 10-year period scope

1.1 Objectives

The main aim of this study is to examine the determinants of audit quality among non-financial firms listed in the Nigerian Exchange Group (NEG). The specific objectives are:

- 1. to examine the effect of auditors' fees on audit quality of listed non-financial firms on the Nigerian Exchange.
- 2. to determine the link between firm size and audit quality of listed non-financial firms on the Nigerian Exchange.
- 3. to ascertain the bearing of agency cost on audit quality of listed non-financial firms on the Nigerian Exchange.
- 4. to ascertain how auditors' independence have effect on audit quality of listed non-financial firms on the Nigerian Exchange, and
- 5. to determine the influence of the firm's sector on audit quality on non-financial firms listed on the Nigerian Exchange.

1.2 Hypotheses

Given the above specific objectives and the research questions earlier posed, the following null hypotheses were formulated and then tested at 5 per cent (0.05) level of significance:

H_{O1}: There is no significant relationship between audit fees and audit quality of listed non-financial firms in Nigeria.

H_{O2}: There is no significant relationship between firm size and audit quality of listed non-financial firms in Nigeria.

H_{O3}: There is no significant relationship between agency cost and audit quality of listed non-financial firms in Nigeria.

 H_{O4} : There is no significant relationship between audit independence and audit quality of listed non-financial firms in Nigeria.

H_{O5}: There is no significant relationship between firm's sector and audit quality of listed non-financial firms in Nigeria.

2. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Audit Quality

Generally, there was no universally accepted definition for audit quality that indicates the quality of audit report. In a simpler form, audit refers to an examination conducted independently about expression of opinion on a firm financial statement by an external auditor, in carrying out audit exercise and in agreement with relevant statutory obligation (Onaolapo, Ajulo & Onifade, 2017). Audit quality is a systematic process of examining a system quality that has been conducted by an external auditor or an audit firm. Typically, quality of audit is usually completed at a particular time interval ensuring that the organization has clearly defined system of internal control that will monitor the procedures that will be linked to an effective result. This will help in determining whether an organization follow a well-defined quality system and/or procedure. Notably, good audit quality is useful for the safeguarding of assets and the utilization of shareholders' wealth in an organization. High quality audit is simply the production of financial information without misstatements, omissions, errors or biases. This is one way of giving users of financial statements reasonable assurance on the firm financial statements. The quality of audit as it is, is much argued but less understood and despite this argument, it is difficult to define and measure the quality of audit. Ikhsan, Mikrad, Rosari, Pambudi, Lubis, Fadillah (2024) in their study described the quality of audit as the fairness in assessing the united assumption that an auditor in their



examination of client financial statement is able to detect material misstatement and give his reports on the examined statements. But in a case where auditors are not independent, they will fail to detect material irregularities.

Tjan, Muslim, Alimin, Noch and Sonjaya (2024) averred that the quality of audit though not clearly defined, have impacted largely on the probability of detecting successfully, the discrepancies between firm's report and its true quality. In all this, it is understood that the common relation to this statement is the ability of the auditors to satisfy their obligation to disclose material misstatements through the carrying out of their audit process. In this light, Kyriakou (2024) observed that auditors should have the capability to detect errors and must be ready to report such errors. In the view of Bako (2024), audit quality can be measured in line with the level of accuracy of information provided by an auditor to investors. This is why issues bordering on the quality of audit have been taken seriously by the Institute of Chartered Accountants of England and Wales (ICAEW), having reiterated that the quality of every audit ought to be a joint work which should be reinforced at every level by an audit firm. According to Marais (2024) audit quality can best be defined by looking at a situation where an external auditor carries out his professional examination with high degree of objectivity and independence on client financial statement and also his ability to cope with undue pressure from them. In consonance with the views of Marais (2024), Zaafaranie, Wati, Angga and Rosnidah (2024) defines audit quality as the degree in which an auditor lessens the noise by improving fitness in accounting date. Similarly, Liu (2017) and Tessema, Ahmed and Zahirul-Hassan (2024) refers to audit quality as the probability assumed that an auditor will not release an unqualified report for any statement that contain fraud and errors in respective of how the situation may be.

Audit quality as defined by Yuvaraj, Muhammad, Abdullah, Ranjani, Rahul and Hasnah (2024) refers to the accuracy of information reporting on financial statements by external auditors. Impliedly, audit quality refers to the ability of an external auditor to discover a breach and their willingness to make reports on such breaches. Based on the aforesaid, audit quality thus refers to how sound an auditor notices and report any misstatement on financial statements, as well as the ability to detect fraud or any material misstatement. It is an indication of the auditors' level of competence. This means that the failure of audit will occur when an auditor refused to disclose a material misstatement like fraud and errors which will subsequently mislead users of financial statements on the true or fair view of firms (Sarapaivanich, Ekasingh, Sampet & Patterson, 2024). Different variables like audit



independence, auditor remunerations, audit tenure, and cost of asset, firm size, and audit opinion amongst others have been used to measure audit quality. Studies have shown that firm size has a significant relationship with auditors' fees (Al Shbail, Jaradat, Al-Hawamleh, Hamdan & Musleh Alsartawi, 2024). Also, research findings have indicated that companies' industry has significant impact on auditors' fees, and hence the quality of audit. In a study by Jiang, Naiker, Wang and Zhang (2024) it was observed that the "Big Eight" audit firms collected about 34% of the total audit fees of about 1400 sampled companies. The literature outcome shows that a client will be more committed to paying higher fees to audit firms that deliver high audit quality. Also, it is inferred from the above study that audit fees determinants generally lies on client level, without bearing in mind the relationship between individual auditor level.

3. MATERIAL AND METHOD

The study adopted the ex post facto research design. The study's population comprise of listed non-financial firms in the Nigerian Exchange Group (NGX). As at 31 December 2023, we have a total of 171 firms listed on the floor of the NGX out of which, 58 firms were listed under the sub-category of financial service firms, thus leaving a total of 113 non-financial firms on the floor of the NGX. Thus, the population of this study shall be the 113 companies listed in the Non-Financial Sector of the NGX. The study adopted the purposive sampling technique in order to arrive at the sample size of this study. In view of this, selection criteria were established such that companies with incomplete data were dropped for us to arrive at a balanced panel while firms that were not active for the 10-year study period spanning from 2014-2023 were also dropped thus, permitting survivor bias. In view of the aforesaid, a total of 72 non- financial firms made up the sample and were selected for this current study. The study adopted the logistic (probit) regression method.

The model of the study is stated thus:

$$\begin{split} &AUDQ_{it} = \beta_0 + \beta_1 AUDFees_{it} + \beta_2 REVG_{it} + \epsilon_t &eqn~1\\ &AUDQ_{it} = \beta_0 + \beta_1 AUDFSize_{it} + \beta_2 REVG_{it} + \epsilon_t &eqn~2\\ &AUDQ_{it} = \beta_0 + \beta_1 AUDInd_{it} + \beta_2 REVG_{it} + \epsilon_t &eqn~3\\ &AUDQ_{it} = \beta_0 + \beta_1 AgCost_{it} + \beta_2 REVG_{it} + \epsilon_t &eqn~4\\ &AUDQ_{it} = \beta_0 + \beta_1 FirmSect_{it} + \beta_2 REVG_{it} + \epsilon_t &eqn~5 \end{split}$$

Where:

AUDQ = Audit quality

AUDFees = Audit fee

AUDFSize = Audit firm size

AUDInd = Audit independence

AgCost = Agency cost FirmSect = Firm sector

 β o = Constant term (intercept);

 β it = Coefficients to be estimated for firm i in period t;

Eit = Error term/unexplained variable(s) for firm i, in period t.

Table 1: Operationalisation of Variables

Variables	Proxy	Measurement/proxy
Audit quality (target	External auditors	1 if (KPMG; PWC; Ernest & Young; &
variable)	auditors	Akintola Williams, (Deloitte & Touche), otherwise 0.
Explanatory Variables		
Audit fees	Auditors' fees	Log of auditors' fees
firm size	Revenue	Log of total revenue
Auditors'	Revenue	Audit fees
independence	turnover	Revenue
Firm's sector	Sector firm	Agriculture 1; Conglomerate 2, Construction & real Estate 3; Consumers Goods 4;
Tilli S Sector	belongs.	HealthCare 5; ICT 6; Industrial Goods 7;
	belongs.	Natural Resources 8, Oil & Gas 9, Services 10.
Agency cost	Equity turnover	Revenue
87		<u>Equity</u>
Revenue Growth		Current year revenue –previous year revenue
		Previous year revenue

4. RESULT AND DISCUSSIONS

4.1 Data Analysis

The results of the descriptive statistics of the variables are presented in Table 4.1 below:

Table 2: Summary of Descriptive Statistics of the Variables of the Study

Variable	Obs.	Mean	Std. Dev.	Min	Max
AUDQ	720	.5166667	.5000695	0	1
AUDF	720	4.10725	.6091844	2.3	5.84
FSIZE	720	7.152754	.8390027	5.03	9.38
AUDIND	720	.0069028	.0551593	0	1.15
AGCOST	720	3.425222	24.03486	-293.22	522.02
FSECT	720	6.111111	2.967396	1	10
REVG	720	16.22599	113.0648	-94.64	2039.42

Table 2 presents the summary of the descriptive statistics of all the variables of concern in this study. Accordingly, items reported are results for the number of observation (Obs), mean, standard deviation (Std. Dev), minimum value (Min) and the maximum (Max). The dependent variable is audit quality measured by (AUDQ) while the independent variables are audit fee (AUDF), firm size (FSIZE), audit independence (AUDIND), agency cost (AGCOST) and firm sector (FSECT). The control variable is revenue growth (REVG). As indicated in the table, we have a total of 720 observations with respect to the data from the published financial records of 72 firms in Nigeria for a period of 10 years. As observed the dependent variable AUDQ, recorded a mean and standard deviation of .5166667 and .5000695 respectively. Observably, the mean value represents the average amount of values recorded for the data on each variable; the standard deviation (Std.Dev.) measures the level of variability of the dataset. Also, AUDQ is seen to record a minimum value of 0 and a maximum value of 1.

With regards to the independent variables, Table 2 further reveals that (AUDF, FSIZE, AUDIND, AGCOST and FSECT), recorded means and standard deviations of 4.10725, 7.152764, .0069028, 3.425222, 6.111111 and .6091844, .8390027, .0551593, 24.03486, 2.967396 respectively. The standard deviation recorded by the independent variables suggests that the auditor's fee, the size of the firm, their level of auditor's independence, the agency cost and the sector of the firm revolved closely around their respective average values. The minimum values recorded for AUDF, FSIZE, AUDIND, AGCOST and FSECT stood at 2.3, 5.03, 0, -293.22, 1 whereas, the maximum values were 5.84, 9.38, 1.15, 522.02 and 10 respectively. Furthermore, the control variable REVG recorded mean and standard deviation of 16.22599 and 113.0648 respectively. REVG also recorded minimum and maximum value of -94.64 and 2039.42.

4.1.2 Correlation Analysis

The results obtained from correlation analysis presents the coefficients for each pair of variables (dependent, independent and control variable) used in assessing the determinants of audit quality. Note that prior researches deploy correlation analysis to explain and analyze the direction of relationship between the dependent and explanatory variables. These coefficients are usually in the form of numbers with designated signs that researchers use to describe the direction of relationship between pairs of variables under a given study.

Table 3: Result of Correlation Analysis

Variable	AUDQ	AUDF	FSIZE	AUDIND	AGCOST	FSECT	REVG
AUDQ	1.0000						
AUDF	0.5723	1.0000					
FSIZE	0.4365	0.8972	1.0000				
AUDIND	-0.1028	-0.1434	-0.0885	1.0000			
AGCOST	0.0482	0.0201	-0.0088	-0.0156	1.0000		
FSECT	-0.1409	-0.2131	-0.2530	0.0202	-0.0250	1.0000	
REVG	-0.0027	-0.0371	0.0053	-0.0374	0.0153	-0.0405	1.0000

Table 3 presents the correlation results for the entire variable set. As indicated above the correlation coefficients between the dependent variable (AUDQ) and independent variables (AUDF, FSIZE, AUDIND, AGCOST and FSECT), were positive except AUDIND and FSECT which recorded a negative correlation with AUDQ. Audit fee (AUDF), Firm size (FSIZE) and Agency cost (AGCOST), indicating potential link with audit quality (AUDQ). This means that a unit increase in AUDF, FSIZE and AGCOST will result to a positive increase in audit quality (AUDQ). Additionally, it could be observed also that the correlation coefficient between pairs of independent variables either indicate negative or positive relationship.

4.1.3 Other Diagnostic Tests

The results for the multicollinearity test for the independent variables were presented. In order to test for multicollinearity, the Variance Inflation Factor (VIF) test was conducted and the result is hereunder presented.

Table 4: Variance Inflator Factor Results for Independent Variables

Variable	FSIZE	AUDF	FSECT	AUDIND	REVG	AGCOST	Mean VIF
VIF	5.34	5.32	1.07	1.03	1.01	1.01	2.46
1/VIF	0.187218	0.187975	0.932869	0.968558	0.986530	0.994527	

From Table 4, the range of VIF for the independent variables did not exceed the standardized VIF level (1.01:5.34<10.00). Overall, the mean VIF obtained is 2.46 which suggests the absence of multicollinearity among the independent variables. This result further confirms the fitness of the specified models in this study.



4.2 Test of Hypotheses

The Table below presents the regression results; the study adopted the standard errors for linear models while analyzing the objective of the study after the diagnosis tests and post estimation checks.

4.2.1 Hypothesis One

H_{O1}: There is no significant relationship between audit fee and audit quality of listed nonfinancial firms in Nigeria

Table 5: Results of Model I and Test of Hypothesis I (AUDF and AUDQ)

Dependent Variable: Audit Quality (AUDQ)

Variables	Symbol	Coefficient	Std. Err	t-Statistics	Sig.
Constant	_CONS	-6.684215	.4855564	-13.77	0.000
Audit Fee	AUDF	1.625752	.115468	14.08	0.000
Revenue Growth	REVG	.0002911	.0005495	0.53	0.596
Number of Obs				720	
LR chi2(2)				281.29	
Prob > chi2				0.0000	
Pseudo R2				0.2820	

The results for the test of hypothesis one of this work is presented in Table 5. As indicated in the table, the results of the probit regression analysis of the entire panel data were presented. A proper look into the result revealed that AUDF obtained a positive coefficient of about 1.625752. This is a suggestion that the explanatory variable (audit fee) have positive relationship with the dependent variable audit quality (AUDQ). Inclusively, AUDF obtained a t-stat. of 14.08 (P>| t | = 0.000), which indicates that individually, audit fee has positive significant impact on audit quality among listed nonfinancial firms in Nigeria. Also, the results revealed that the control variable revenue growth (REVG) recorded positive coefficient and standard error of .0002911 and .0005495 respectively. The control variable REVG obtained a t-stat. of 0.53 (P>| t | = 0.596), which indicates on an individual note REVG has a positive insignificant relationship with audit quality.

From the results presented in Table 5, judging by the result of the probit regression analysis, the Fstat stood at 281.29 with a corresponding p-value of (0.0000) which is lesser than 0.05 and significant at 5% level of significance, the null hypothesis that audit fee has no significant relationship with audit quality of listed non-financial firms in Nigeria is rejected. We therefore

conclude that audit fee has significant relationship on audit quality of listed non-financial firms in Nigeria. The outcome from the test of hypothesis one justifies the arguments of prior studies (Mesbah & Ramadan, 2022; Erasmus & Akani, 2021) which had demonstrated that users of financial statements can put higher trust in financial reports audited by Big 4 audit firms than those reviewed by non-Big 4 audit firms since their presumed higher level of dedicated service and expertise attracts justifiable huge service charges.

4.2.2 Hypothesis Two

H_{O2}: There is no significant relationship between firm size and audit quality of listed non-financial firms in Nigeria

Table 6: Results of Model II and Test of Hypothesis II (FSIZE and AUDQ)

Dependent Variable: Audit Quality (AUDQ)

Variables	Symbol	Coefficient	Std. Err	t-Statistics	Sig.
Constant	_CONS	-5.348283	.4770441	-11.21	0.000
Firm Size	FSIZE	.7527814	.0660974	11.39	0.000
Revenue Growth	REVG	0000485	.0004391	-0.11	0.912
Number of Obs				720	
LR chi2(2)				149.21	
Prob > chi2				0.0000	
Pseudo R2				0.1496	

The results for the test of hypothesis two of this work is presented in Table 6. As indicated in the table, the results of the probit regression analysis of the entire panel data were presented. A proper look into the result revealed that FSIZE obtained a positive coefficient of about .7527814. This is a suggestion that the explanatory variable (firm size) have positive relationship with the dependent variable audit quality (AUDQ). Inclusively, FSIZE obtained a t-stat. of 11.39 (P>|t|=0.000), which indicates that individually, firm size has positive significant impact on audit quality among listed nonfinancial firms in Nigeria. Also, the results revealed that the control variable revenue growth (REVG) recorded negative coefficient and positive standard error of -.0000485 and .0004391 respectively. The control variable REVG obtained a t-stat. of -0.11 (P>|t|=0.912), which indicates on an individual note REVG has a negative insignificant relationship with audit quality.

From the results presented in Table 6, judging by the result of the probit regression analysis, the Fstat stood at 149.21 with a corresponding p-value of (0.0000) which is lesser than 0.05 and significant at 5% level of significance, the null hypothesis that firm size has no significant relationship with audit quality of listed non-financial firms in Nigeria is rejected. We therefore conclude that firm size has significant relationship with audit quality of listed non-financial firms in Nigeria. Arguably, judging from the value of the t-statistics of 11.39 and the LR Chi2(2) of 149.21, it is evident that based on the available data from the sampled firms, it was established that a significant relationship exists between firm size and audit quality. The outcome from the test of hypothesis two justifies the arguments of prior studies (Hussaini & Fadjarenie, 2022; Okereke, Anyanwu & Nwaigburu, 2022; Ayora & Ogeto, 2022) which had demonstrated that the sizes of companies have significant positive effect on the quality of audit.

Notwithstanding the above, we also noticed that when controlled by revenue growth, audit quality among companies was further influenced insignificant terms by firm size.

4.2.3 Hypothesis Three

H_{O3}: There is no significant relationship between agency cost and audit quality of listed non-financial firms in Nigeria

Table 7: Results of Model III and Test of Hypothesis III (AGCOST and AUDQ)

Dependent Variable: Audit Quality (AUDQ)

Variables	Symbol	Coefficient	Std. Err	t-Statistics	Sig.
Constant	_CONS	.0325919	.0477364	0.68	0.495
Agency Cost	AGCOST	.0032271	.0025946	1.24	0.214
Revenue Growth	REVG	0000432	.0004153	-0.10	0.917
Number of Obs				720	
LR chi2(2)				1.95	
Prob > chi2				0.3768	
Pseudo R2				0.0020	

The results for the test of hypothesis three of this work is presented in Table 7. As indicated in the table, the results of the probit regression analysis of the entire panel data were presented. A proper look into the result revealed that AGCOST obtained a positive coefficient of about +0032271. This is a suggestion that the explanatory variable (Agency Cost) have positivee relationship with the dependent variable audit quality (AUDQ). Inclusively, AGCOST

obtained a t-stat. of 1.24 (P>| t | = 0.214), which indicates that individually, agency cost has positive insignificant impact on audit quality among listed nonfinancial firms in Nigeria. Also, the results revealed that the control variable revenue growth (REVG) recorded negative coefficient and positive standard error of -.0000432 and .0004153 respectively. The control variable REVG obtained a t-stat. of -0.10 (P>| t | = 0.917), which indicates on an individual note REVG has a negative insignificant relationship with audit quality.

From the results presented in Table 7, judging by the result of the probit regression analysis, the Fstat stood at 1.95 with a corresponding p-value of (0.3768) which is greater than 0.05 and insignificant at 5% level of significance, the null hypothesis that agency cost has no significant relationship with audit quality of listed non-financial firms in Nigeria is accepted. We therefore conclude that agency cost has insignificant impact on audit quality of listed non-financial firms in Nigeria. Arguably, judging from the value of the t-statistics of 1.24 and the LR Chi2(2) of 1.95, it is evident that based on the available data from the sampled firms, it was established that agency cost does not have significant influence on audit quality. The outcome from the test of hypothesis three does not support prior empirical documentations (Mesbah & Ramadan, 2022; Erasmus & Akani, 2021).

4.2.4 Hypothesis Four

 H_{O4} : There is no significant relationship between audit independence and audit quality of listed non-financial firms in Nigeria

Table 8: Results of Model IV and Test of Hypothesis IV (AUDIND and AUDQ)

Dependent Variable: Audit Quality (AUDQ)

Variables	Symbol	Coefficient	Std. Err	t-Statistics	Sig.
Constant	_CONS	.1225076	.0505534	2.42	0.015
Audit Independence	AUDIND	-31.45089	8.483333	-3.71	0.000
Revenue Growth	REVG	0001511	.0004811	0.31	0.754
Number of Obs				720	
LR chi2(2)				27.19	
Prob > chi2				0.0000	
Pseudo R2				0.0273	

The results for the test of hypothesis four of this work is presented in Table 8. As indicated in the table, the results of the probit regression analysis of the entire panel data were presented. A proper look into the result revealed that AUDIND obtained a negative coefficient of about

-31.45089. This is a suggestion that the explanatory variable (audit independence) have negative relationship with the dependent variable audit quality (AUDQ). Inclusively, AUDIND obtained a t-stat. of -3.71 (P>| t | = 0.000), which indicates that individually, audit independence has negative significant impact on audit quality among listed nonfinancial firms in Nigeria. Also, the results revealed that the control variable revenue growth (REVG) recorded negative coefficient and positive standard error of -.0001511 and .0004811 respectively. The control variable REVG obtained a t-stat. of 0.31 (P>| t | = 0.754), which indicates on an individual note REVG has a negative insignificant relationship with audit quality.

From the results presented in Table 8, judging by the result of the probit regression analysis, the Fstat stood at 27.19 with a corresponding p-value of (0.0000) which is lesser than 0.05 and significant at 5% level of significance, the null hypothesis that audit independence has no significant relationship with audit quality of listed non-financial firms in Nigeria is rejected. We therefore conclude that audit independence has significant impact on audit quality of listed non-financial firms in Nigeria. The implication is that a unit increase in AUDIND will likely result to a decrease in AUDQ.

Notwithstanding the above, we also noticed that by controlling for the relationship between AUDIND and AUDQ using REVG, the value of AUDQ of companies was significantly influenced by AUDIND having recorded a p-value of 0.0000. This finding confirm that of Bakare (2019) the findings of the study revealed that audit independence is negatively related to audit quality.

4.2.5 Hypothesis Five

H_{O5}: There is no significant relationship between firm sector and audit quality of listed non-financial firms in Nigeria

Table 9: Results of Model V and Test of Hypothesis V (FSECT and AUDQ)

Dependent Variable: Audit Quality (AUDQ)

Variables	Symbol	Coefficient	Std. Err	t-Statistics	Sig.
Constant	_CONS	.4099824	.1081703	3.79	0.000
Firm Sector	FSECT	0599672	.0158579	-3.78	0.000
Revenue Growth	REVG	0000949	.0004193	-0.23	0.821
Number of Obs				720	
LR chi2(2)				14.38	



Prob > chi2 0.0008 Pseudo R2 0.0144

The results for the test of hypothesis five of this work is presented in Table 9. As indicated in the table, the results of the probit regression analysis of the entire panel data were presented. A proper look into the result revealed that FSECT obtained a negative coefficient of about -0.599672. This is a suggestion that the explanatory variable (firm sector) have negative relationship with the dependent variable audit quality (AUDQ). Inclusively, FSECT obtained a t-stat. of -3.78 (P > |t| = 0.000), which indicates that individually, firm sector has negative and significant impact on audit quality among listed nonfinancial firms in Nigeria. Also, the results revealed that the control variable revenue growth (REVG) recorded negative coefficient and positive standard error of -.0000949 and .0004193 respectively. The control variable REVG obtained a t-stat. of -0.23 (P > |t| = 0.821), which indicates on an individual note REVG has a negative insignificant relationship with audit quality.

From the results presented in Table 9, judging by the result of the probit regression analysis, the Fstat stood at 14.38 with a corresponding p-value of (0.0008) which is lesser than 0.05 and significant at 5% level of significance, the null hypothesis that firm sector has no significant relationship with audit quality of listed non-financial firms in Nigeria is rejected. We therefore conclude that firm sector has significant impact on audit quality of listed non-financial firms in Nigeria. Arguably, judging from the value of the t-statistics of -3.78 and the LR Chi2(2) of 14.38, it is evident that based on the available data from the sampled firms, it was established that a significant negative relationship exists between firm sector and audit quality. The outcome from the test of hypothesis five justifies the arguments of prior empirical studies (Erasmus & Akani, 2021; Okereke, Anyanwu & Nwaigburu, 2022; Ayora & Ogeto, 2022).

CONCLUSION AND RECOMMENDATIONS

The Ministry of Finance should increase In The study empirically examined determinants of audit quality and the engagement of related factors such as audit fee, firm size, agency cost, audit independence and firm sector. The model was regressed to analyze the existence of significant relationships between the dependent and independent variables. Audit quality was found to be significantly related to audit fee, firm size, audit independence and firm sector. Audit fee shows a statically significant and positive relationship with audit quality. This implies that the quality of a firm in terms of the remuneration they pay to auditors has a



considerable influence on audit quality. Agency cost exhibited an insignificant positive relationship with audit quality. An understanding of the factors that could significantly affect audit quality, and strict adherence to the rules governing those factors, would inadvertently increase the possibility of a quality audit assignment. This would in turn boost the confidence of users of the financial statements; while at the same time enhancing the discovery and reporting of material misstatements in the financial reports. This ultimately leads to an improved role of the auditors, and their possible impact to the business environment is enhanced.

Based on the findings that emanated from this study and the conclusion reached the following recommendations have been made:

- Regulatory agencies should take closer look at the peculiarities of firm sector when developing or reviewing existing regulatory guidelines/policies aimed at promoting sustained quality in operations and audit engagements.
- 2. Efforts should be made by the management of organizations to continuously sustain the independence of external auditors to the extent that management must not interfere in the activities of auditors during their engagement.
- 3. The activities of audit firms should be put under close supervision, especially in the area of auditor remuneration, because this tends to influence the quality of audit.
- 4. Corporate governance measures should be sustained and improved upon to continue to keep agency costs from affecting improved performance and the quality of audit.
- 5. Smaller audit firms should be encouraged to merge or combine to increase their capacity and enhance audit quality.

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