EXTERNAL AUDITOR'S ATTRIBUTES AND FINANCIAL REPORTING QUALITY OF MANUFACTURING COMPANIES IN NIGERIA

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Abstract

This study examined the connection between external auditor characteristics, as one of the important features of good corporate governance and financial reporting quality of quoted manufacturing companies in Nigeria. Specifically, the study focused on audit fees, auditors' industry specialization, auditor tenure and audit firm size as independent variables and financial reporting quality as a dependent variable proxied by discretionary accruals. A descriptive longitudinal research design is adopted. The population included all the 44 quoted manufacturing companies in Nigeria. However, a sample size of 29 was arrived at using Yamane sample size determination formula. The study covered the period 2011 to 2020 and utilized secondary data extracted from the annual accounts of the companies for the period of the study. The study employed the use of multiple regression analysis techniques to analyse the data with the aid of STATA version 16. From the regression results, it was revealed that audit fees, audit firm size and auditor industry specialization have a statistically positive significant effect on financial reporting quality while auditor tenure was found to have no significant influence on the financial reporting quality of quoted manufacturing companies in Nigeria. The study concluded that external auditor attributes have strong explanatory power in determining the quality of financial reporting and is an effective corporate governance mechanism for constraining the problem of earnings manipulation in the financial report of companies. The study, therefore, recommended that there is a need for companies, accounting regulators, the Financial Reporting Council of Nigeria and indeed all stakeholders to consider an expanded approach in examining the quality of attributes of external auditors in Nigeria.

Keywords: Audit fee, Audit firm size, AIS, Auditor tenure, FRQ.

Introduction

Globally, the primary pillar of capital markets is financial reporting quality as efficient resource allocation is determined by such information. When the true performance of a firm is neither disclosed in the annual reports nor reflected in the reported earnings; then the entire stakeholders to the financial information are at the risk of huge losses. Similarly, the evidences of Schipper and Vincent (2003) claimed that stakeholders are very much concerned in the financial reporting quality disclosed in annual reports as this information highly influence their decision making, specifically information related to investing and contracting.

In Nigeria, every registered company is required by law to appoint an external auditor who is mandated to render an independent opinion on the financial statements whether or not they show a true and fair view. The independence of auditors is regarded as key to their characteristics as

external verifiers of financial statements (Onaolapo et al., 2017). Companies are expected to prepare financial statement in order to know the financial position of the organisation so that stakeholders can rely on such information for effective decisions. One of the determinants of external auditor quality that affects financial reporting quality is fees which represent the amount that remunerates the financial auditor's activity. The code of ethics for professional accountants' states that audit fees should be calculated in an objective way and the auditor's independence should not be influenced by them. Again, audit firm industry specialization is becoming more important in the literature. Willenborg (2002) indicates that audit firms benefit from specialization in two ways. In addition, industry specialist auditors are incentivized to protect the reputation they have developed as an industry specialist. Furthermore, several studies have assessed the ability of auditors in detecting and reporting earnings management with mixed findings. Undoubtedly, larger size audit firms often have higher expected audit quality and less opportunistic behaviours of auditors are found. They are more likely to report fraud, error and irregularities and less likely to accept questionable accounting estimates (Inaam, 2012). On the other hand, Zhou (2005) reviews Arthur Andersen case and a series of scandals exposed from Big 4, and finds that not larger firms supervise earnings management better.

The need to ensure high audit quality of financial reports of companies cannot be overemphasized. This is based on the fact that high-quality external auditing is a central component of a well-functioning capital market. Companies with a reputation for credible financial reporting are likely to change auditors when their audit quality is questioned to avoid capital market consequences of unreliable financial reporting. The performance of independent auditors is deemed fundamental to the functioning of the financial and capital markets based on the assumption that, by issuing an opinion on the reliability of accounting information, it contributes to a business environment characterized by trust and credibility.

However, the spite of corporate failures and scandals at the start of the century and other subsequent market crises have eroded the confidence of stakeholders in the external auditors' report. There is also, loss of confidence in auditor reports because stakeholders are unable to appreciate quality of audit reports, as quality is unobservable and no full understanding of factors affecting the report. Auditors' characteristics has been linked to the Quality of financial report especially because of a number of worrisome failures being recorded across the world: Enron, in the US, Northern Rock in the United Kingdom, Parmalat in Italy; other corporate failures locally in Nigeria are Unilever in (1998), African Petroleum (2000) and Cadbury.

Most of the studies in this area are foreign-based and given the disparities in the nature of economies, the level of sophistication in the monitoring mechanisms and litigation risks faced by external auditors, studies from Nigeria may produce different results. This gives a considerable justification for the current study. Also, their findings are mixed and inconsistent which makes the area amiable to further research.

Also, most of the prior studies on audit quality and financial reporting quality in Nigeria such as Okolie, Izedonmi and Enofe (2013) and Okolie (2014), focused more on audit firm size, audit fees and auditor tenure even though the literature has listed other proxies of audit quality. This approach limits the general ability of findings concerning the effect of audit quality on financial reporting quality of firms in Nigeria. A study that includes more variables such as auditor industry specialization and is desirable as it provides a better understanding of the effect of audit quality on the financial quality of firms in Nigeria. It is important to study auditor industry specialization to decide empirically the extent to which it is associated with financial reporting quality in the

Nigerian manufacturing sector. This is important because, given the complex nature of the manufacturing companies and business operations, industry specialist auditors are expected to play a prominent role in mitigating the problem-earning management of companies operating in the sector due to their specific knowledge of the industry.

This study will, therefore, fill the gaps in the literature by empirically, examining the effect of external auditor characteristics on the financial reporting quality of quoted manufacturing companies in Nigeria.

The study relied on the following hypotheses;

H_01: Audit fees have no significant effect on financial reporting quality of listed manufacturing firms in Nigeria

H_02: Auditor specialization has no significant effect on financial reporting quality of listed manufacturing firms in Nigeria

H_03: Auditor tenure has no significant effect on financial reporting quality of listed manufacturing firms in Nigeria

H_04: Audit firm size has no significant effect on financial reporting quality of listed manufacturing firms in Nigeria

Conceptual Framework

Audit Fees

International Standards on Auditing defines Audit fees as the amount that remunerates the financial auditor's activity, the certification of financial statements. The code of ethics for professional accountants stated that audit fees should be calculated in an objective way and the auditor's independence should not be influenced by them. A number of researches have been carried out on the determinants of audit fee. Most of the research findings showed that the major determinants of audit fees may include firm size, business complexity, auditor type, audit tenure, company performance, leverage etc. AL-Khaddash et al. (2013) defined audit fees as all charges that the companies pay to the external auditors against the audit services and non-audit services, e.g. management advisory and consultants. The Securities and Exchange Commission (SEC) defined audit fee as the fees paid for annual audits and reviews of financial statements for the most recent fiscal year. Chersan et al. (2012) also defined audit fee as the sums payable/paid to the auditor, for the audit services offered to the auditee.

Audit fee can be explained to be the amount charged by the auditor for an audit assignment carried out. That is, the amount charged by the auditor for any work done in order to express opinion on the true and fair state of affairs or position of the client's enterprise. Iskak (1999 in Suharli and Nurlaelah, 2008) described audit fee as the fee charged by a public accountant to the client for the financial audit services. This is in accordance with the opinion of The Securities and Exchange Commission, Final Rule (in Yuniarti, 2011) that the audit fee is the fees paid for annual audits and reviews of financial statements for the most recent fiscal year. The amount of audit fee can vary depending on the complexity of services, assignment risk, the cost structure of Public Accountants Firm, the required level of expertise, and other professional considerations.

Auditor Industry Specialization

Industry specialist auditors are auditors who have gained great training and experience concentrated in a specific industry. Solomon et al. (1999) averred that industry specialist auditors have more accurate non-error frequency knowledge than non-industry specialists. Owhoso, Messier, and Lynch (2002) suggested that industry specialists can more effectively detect seeded errors in staff work papers during the audit review process. Low (2004) posited that auditors' industry specialization improves their audit risk assessments. Hammersley (2006) found that matched specialists (i.e., specialists working in their industry) develop more complete problem representations about the seeded misstatement when they receive partial- or full-cue patterns than when they receive no-cue patterns, whereas mismatched specialists are not able to develop more complete problem representations even when they receive full-cue patterns. These behavioural auditing studies suggest that auditor industry specialization can enhance the effectiveness of auditors' work as a result of their greater industry-specific knowledge.

Auditor specialization is where auditor or audit firms have deep understanding (awareness) and long experiences of the client's exact business and industry operations and specific accounting and auditing guidance which are required for doing a high-quality audit. The nature of the client's business and industry affects clients' business risk and the risk of material misstatements in the financial statements (Arena et al., 2011 and Cohen, Krishnamoorthy, & Wright). Rittenberg, Johnston and Gramling (2010) and Balsam, Krishnan and Yang (2003) are of the opinion that firms that engage the services of specialized auditor in their audit process will be able to select and implement audit procedures that are more precise and effective than the non- specialized auditor. The competence and expertise are obtained from repetition of the same audit procedures in certain industries for many years. For this reason, it is expected that such auditor should detect financial reporting misconduct and mis-statement, as such reducing earnings management arising from discretionary accruals.

Auditor Tenure

Audit tenure is the length of time an audit firm has been auditing financial statement of an organization. A lot of debates have evolved in the academic literatures and accounting profession on the relationship among audit tenure and audit quality (Jenkins & Vermeer, 2013; Blandon & Bosch, 2015). The center of the argument is the issue of auditor's independence in the auditor-client relationship; which is the ability of auditors to maintain an unbiased position in performing their audit assignments, issuing audit opinion and ensuring high quality audit report (Odia, 2015). There have been two opposing views on the effects of audit tenure on audit quality. Some are of the view that as the auditor–client relationship lengthens, the auditor may develop a close relationship with the client and impair independence which will eventually result in poor audit quality and allows for greater earnings management (resulting in lower earnings quality) (Becker, DeFond, Jiambalvo & Subramanyam, 1998; Lys & Watts, 1994).The other view is that as audit tenure lengthens, auditors increase their understanding of their clients' business and develop their expertise during the audit exercise and gain better insights into the clients operations and business strategies as well as internal control over financial reporting which will result in higher audit quality (Arens et al., 2005; and Tepalagul, & Lin, 2015).

Audit failure may be more common in cases of short period auditor continuity with the same client, as the auditor—after accepting the new client—needs some time to understand the nature of the client's process, which causes the auditor not to discover physical errors in financial statements;

whereas, with a long period employment of an auditor, the auditor acquires better experience and a deep understanding of the risks associated with the client firm, as well as the way in which their accounting systems work as well as the strong and weak points in the systems. Accordingly, the auditor is able to determine zones characterized with a high degree of risks, increase the possibility of significant errors in these systems, thus inducing him to exert more effort and more time when examining such financial statements, and therefore performing a high-quality audit (Turner & Godwin 1999; Geiger & Raghunandan 2002).

Audit Firm Size

As at date, there appears to be no agreed – upon metric for the measurement of audit quality construct (Gerayli et al., 2011; Knechel, 2009 and IAASB, 2011). DeAngelo (1981) developed a two-dimensional definition of audit quality that set the standard for addressing the issue. First, a material misstatement must be detected, and second, the material misstatement must be reported. audit quality is influenced by many other factors as well. Since 1981, accounting studies have attempted to define, measure, and study multiple dimensions of audit quality. DeAngelo (1981) theorizes that larger firms perform better audits because they have a greater reputation at stake. In addition, because larger firms have more resources at their disposal, they can attract more highly skilled employees. Others have theorized that large auditors attract a fee premium because their greater wealth reduces clients' exposures in litigation (the deep pockets theory). Others have theorized that there is no real audit quality difference, but the perception exists because large firms are well known and have gained a reputation for high quality.

On the whole, the evidence is mixed, but it appears that there is some relationship between audit firm size and earnings management. What is unclear is whether this difference is actual or perceived. Based on DeAngelo's (1981) reports, many other studies use auditor size (specifically Big8, Big6 or Big5 Vs non-Big8, non-Big6 or non-Big5) to differentiate audit quality levels.

Concept of Financial Reporting Quality

Consistent with numerous studies (Francis et al., 2005; Dhaliwal et al., 2010), accrual quality served as a proxy for financial reporting quality. Audit committee members' fiduciary duties are to provide effective monitoring of financial reporting process of the company and ensure the management provides high quality financial reporting to reflect true firm performance. In this way, any incidence of unethical performance manipulation by managers will be detected early. Managers manipulate firm performance mainly through manipulation of accounting numbers (i.e., accruals), hence accruals quality will be employed in the study as primary measure of financial reporting quality. There is no universally accepted measure for accruals quality and will adopt the Dechow and Dichev (2002) model. The basic Dechow and Dichev model assume that accruals quality depends on how precisely the current accruals map into past, present and future cash flows. High precision on the mapping of current accruals and cash flows indicates high financial reporting quality.

FRQ can be defined as the faithfulness of the information conveyed by the financial reporting process. According to the leading authorities on the evaluation of financial reporting (such as the FASB, the SEC or the Jenkins committee), the main characteristics required are relevance, reliability, transparency and clarity. Jonas and Blanchet, (2000); Lu et al. (2011). It has been asserted that high quality accounting information is a valuable means of counteracting information asymmetry (Chen et al., 2011).

FRQ requires companies to voluntarily expand the scope and quality of the information they report, to ensure that market participants are fully informed in order to make well-grounded decisions on investment, credit, etc. This high-quality information facilitates greater transparency and this greater transparency reduces the information asymmetries and satisfies investors and stakeholders' needs. Numerous advantages of providing high-quality information have been cited: FRQ reduces information risk and liquidity (Lambert et al., 2007), prevents managers from using discretionary power for their own benefit and helps them make efficient investment decisions (Chen et al., 2011).

Empirical Review

Dijah et al. (2022) investigated the association that exists between the audit attributes and the financial reporting quality of firms listed under insurance sector of Nigerian economy. The study had five objectives that include the investigation of audit type, audit tenure, joint audit, industry specialized audit and audit fee on the financial reporting quality as was measured by discretionary accruals using modified Jones model. The use of ex post facto research design was adopted which necessitated collection of secondary data from the annual report of the twenty-two sampled insurance firms, from 2011 to 2020 financial years. The data were analyzed using statistical tools like descriptive statistics, correlation analysis, fixed effect and random effect model tests, where Hausman test was used to choose the best between the two models, as a requirement for running panel data regression analysis. The empirical result therefrom indicates that audit type has positive and no significant effect on the financial reporting quality. Further result shows that audit fee has inverse statistically significant effect on financial reporting quality at 1% level. Nonetheless, audit tenure, joint audit and industry specialized audit have negative but no significant effect on financial reporting quality of the listed insurance firms.

Emmanuel and Emem (2020) examined the impact of audit firm attributes on the financial reporting quality of quoted manufacturing firms in Nigeria for the period of 2011 to 2015. Ex-post facto research design was adopted in the study. Data were obtained from the published annual reports and accounts, notes to the financial statements of the sixteen firms that represent the sample of the study. Multiple regression analysis was employed in analyzing the data and testing the stated hypotheses. The results of the findings showed that auditor fees have a significant influence on the financial reporting quality of quoted manufacturing firms in Nigeria. However, it was discovered that audit firm size and audit delay have an insignificant impact on the financial reporting quality of manufacturing firms in Nigeria. This current study has a longer observation which might present a different finding due to changes in both reporting and regulatory frameworks.

Rabab'ah, Al-Sir and Alzoubi (2017) examined the impact of audit attributes on the quality of the information in the banking financial reports: This study aims to identify the impact of the audit committees' properties on the quality of the information of the banking financial reports in the Saudi commercial banks by identifying the effect of identifying tasks and duties, independence, accounting and banking experience and efficiency of the audit committee on achieving the quality of the Saudi banking and financial reports. 110 questionnaires were distributed on the research sample and 105 questionnaires were received and analyzed through ANOVA. Results indicate that the availability of the audit committees' properties affect increasing the quality of the financial reports in the Saudi banking at the level of properties as a whole where the (P) probable value was (0.000), which is less than 0.05. It represents the functions and duties of the audit committee, the committee's independence in banks, the availability of the accounting and banking experience for the members of the audit committee and the efficiency of the audit committees at banks.

Karajeh and Ibrahim (2017) determined the impact of audit committee on the association between financial reporting quality and shareholders' value. They sample 300 firms out of the 814 firms listed on the bursa stock exchange Malaysia for the period of six year starting from 2010 to 2015. The study proxy audit characteristics using independent audit committee, financial and accounting expertise and audit committee size while they applied modified Jones model for the computation of financial reporting quality. More so, they measured shareholders value with stock returns of firms for each year. Secondary data was generated from the annual report of the firms selected and the data was analysed using descriptive statistics and ordinary least square regression analysis. Their result uncovered that independent audit committee, financial and accounting expertise and larger audit committee size should be linked to the financial reporting quality at all times to improve greater shareholders value

Legitimacy Theory

Legitimacy theory is established on the ground that the activity of an organisation is appropriate, right and good in line with the socially build system of norms, values, and beliefs of the society (Suchman, 1995). In a different view, Deegan et al. (2000) posit that legitimacy theory is a function of a social contract between an organization and the society. The social contract is impliedly the varieties of expectations the society has about how an organization should conduct its operations (Deegan et al., 2002). Bearing in mind that every organisation should engage the external auditors, whose responsibility is to issue his opinion of free and fair view of the financial statement and also to detect fraud and error as widely expects by the public. Notably, legitimacy theory targets to managing the relationships among the stakeholders that are of critical importance to the existence and continuity of the enterprise. Hence the reason for the reliability that is placed on the financial statements by all stakeholders the moment it's audited. In effect we built our study on this theoretical foundation.

Methodology

This study employs the longitudinal Panel Series design which is a quasi-experimental study examining how an independent variable, present prior to the study in the participants affects a dependent variable. The population of the study consists of forty-five (44) quoted manufacturing firms operating on the Nigeria, Stock Exchange (NSE) as at 31st December 2020. This comprises: Consumer goods sector (21), Industrial goods sector (13) and Healthcare sector (10). The sample size of the study is twenty-nine (29) manufacturing firms drawn from the defined population and arrived at using Yamane sample size formula, which is represented thus:

$n = N / (1 + Ne^2)$

Where n = Number of samples

N = Total population

e = Error tolerance

Hence: $n = 44/1 + 100 (0.15)2 = 30$ Firms

Table 1 presents the summary of listed manufacturing firms based on their strata and the basis of computation used to arrive at the number of sampled firms in each of the eight strata.

Table 1: Population and sample size of the manufacturing firms used in the study

S/N	Strata	Number of Firms	Computation	Number of Firms from each Strata
1	Consumer Goods	21	21/45*30	14
2	Industrial Goods	13	14/45*30	8
3	Health Care	10	10/45*30	7
	TOTAL	**45**		**29**

Sources: Author's computation based on NSE Fact Book, 2022

The study employs the secondary sources and method of data collection to achieve its objectives. The secondary quantitative data are derived from the Financial Annual Reports of the companies collected from the Nigerian Stock Exchange (NSE) from 2011 to 2020, while other qualitative data would be sourced from relevant journal and textbooks. Multiple regression analysis technique was adopted for the purpose of analysis because it is used to test the changes in the combination of two or more predictors. Basically, it is used to predict the level of change in the outcome variable. The following equation forms the model of the study; this equation is represented as follows;

EM=f (AF, AIS, AT, AFZ)

Explicitly, the regression model is econometrically represented as:

$$FRQ = \beta 0_{it} + \beta_1 AF_{it} + \beta_2 AIS_{it} + \beta_3 AT_{it} + \beta_4 AFZ_{it} + e_{it}$$

Where: FRQ =Financial Reporting Quality, B0 =Constant, AF= Audit Fees, AIS= Auditor Industry Specialization, AT= Audit Tenure, AFZ= Audit Firm Size, $e_=$ Error Terms, β_1-β_4= are the parameters estimate or coefficients in equation, it= cross-sectional time series

Earnings management is proxy by discretionary accruals by on Dechow, Sloan and Sweeny (1995) model as stated below:

$$DACC = TAcc_{it}/AT_{it-1} - \alpha 0 + \alpha 1 (1/ AT_{it-1}) + \alpha 2 (\Delta REV_{it} / AT_{it-1}) + \alpha 3 (PPE_{it} / AT_{it-1}) + \alpha 4 ROA_{it-1} + \varepsilon_{it}$$

TAccit=Total Accruals of the company; PPEit = Property, plant and equipment of the company; ΔREVit, t= Change in Revenue of the company; ATit-t= Assets total of the company in year t-1; ROA it-1= Return on Assets of the company in year t-1; ε = random error term.

s/n	Variables	Variables measurement
1	AFS	Measured by Dichotomous:1 if company is audited by a Big4, otherwise 0 (DeAngelo, 1981; Khrishan & Schauer, 2000; Khrishan, 2003).
2	AIS	Measured by dichotomous variable 1 for the companies audited by industry specialist auditors and 0 for non-specialist auditors. Zhou and Elder (2001): Krishnan & Yang 2003).
3	AF	Measured as a natural logarithm of the amount of audit fees paid to the auditor by the company. (Effiok, & Eton, 2013)
4	AT	The length of time (number of years) spent by the audit in the firm (Jayeola, Taofeekb & Toluwalase, 2017).

Source: Researcher's Compilation, 2022

Analysis and Discussion

Table 2: Descriptive Statistics

Variables	Obs	Mean	Std. Dev.	Min	Max
FRQ	290	.0733	.0686	.0089	.37
AF	290	3.4085	1.4060	1.0791	6.9491
AIS	290	.5482	.4985	0	1
AT	290	.7413	.4386	0	1
AFS	290	.6241	.4851	0	1

Source: Output from STATA, 2022.

The result of the descriptive statistics in Table 2 indicates that the measure of financial reporting quality (RQ), which is the inverse of absolute discretionary accruals of manufacturing firms has an average value of .0733393with standard deviation of .06867, and minimum and maximum values of .0089 and .37 respectively. The extent of absolute value of discretionary accruals in the sample firms has a mean of 7.33% with standard deviation of 6.86%. The values of minimum and maximum which far from each other indicates a high deviation between companies. The, firms tend to record a reasonably high financial reporting quality in some years than in others.

The descriptive statistics also indicates that the sample firms have an average of log audit fees (AF) of 3.408578 with standard deviation of 1.406077 respectively. The minimum and the maximum as shown by the table is 1.812913 and 6.623249. This implies that the least amount spent on audit fees is 1.81 million naira and the largest is 6.9million naira. The descriptive statistics in Table 2 shows that on average, the auditor industry specialist auditors (AIS) during the period of the study 54.84%, from the mean value of .5482759 with standard deviation of.4985243. The auditor industry specialization shows a minimum of 0 and maximum of 1 respectively. The descriptive statistics from Table 2 also indicates the mean of the auditor tenure (AT) is .7413793 which signifies that on the average it can be said that approximately 74.13% of the firms rotate their auditors after three years of engagement. The auditor tenure shows a minimum and maximum of 0 and 1 respectively. The table one show that audit firm size (AFS), has a mean value of .6241379 and a corresponding standard deviation of .4851819. This shows that 62.41% of the

firms under study deployed the services of Big4 auditors for their audit assignments and the value of the standard deviation confirms this assertion given its closeness to the means.

Table 3: Correlation Matrix

Variables	FRQ	AF	AIS	AT	AFS	FZ
FRQ	1.0000					
AF	0.1882	1.0000				
AIS	0.1855	0.3336	1.0000			
AT	0.0593	0.0649	0.1918	1.0000		
AFS	0.1710	-0.0466	0.2398	0.2733	1.0000	

Source: Output from STATA, 2022.

Table 3 shows the correlation between the dependent variable, FRQ and the independent variables, AF, AIS, AT, AFS and FSZ on one hand, and among the independent variables themselves on the other hand. Generally, high correlation is expected between dependent and independent variables while low correlation is expected among independent variables. According to Gujarati (2004), a correlation coefficient between two independent variables 0.80 is considered excessive and thus certain measures are required to correct that anomaly in the data. From the descriptive statistics in table 3, it can be seen that all the correlation coefficients among the independent variables are below 0.80. This points to the absence of possible Multicollinearity. Though, the value inflation factor (VIF) and tolerance value (TV) tests are still required to confirm the assumption. The table reveals a positive correlation between the dependent variable of financial reporting quality and the explanatory variables of audit fees, industry specialization, auditor tenure and audit firm size as well as the control variable firm size with coefficients of 0.1882, 0.1855, 0.0593, 0.1710 and 0.0779 respectively. This implies that the three explanatory variables move in the same direction with financial reporting quality.

Test for Multicollinearity

Non-existence of Multicollinearity is a key assumption of linear regression analysis. Multicollinearity occurs when the explanatory variables are not independent of each other. Multicollinearity is examined using tolerance and variance inflation factor (VIF) values. The result of Multicollinearity test is shown in the table below.

Table 4: Tolerance and VIF Values

Variable	VIF	1/VIF
AF	1.24	0.8053
AIS	1.24	0.8089
AT	1.23	0.8140
AFS	1.18	0.8477
Mean VIF |	1.21	

Source: STATA Output, 2022.

Based on the evidence presented in Table 4, it can be concluded that there is no Multicollinearity problem. This is because the VIF values for all the variables are less than 10 and the tolerance values for all the variables are greater than 0.10 (rule of thumb).

Test for Heteroscedasticity

Heteroscedasticity arises when the error terms along the regression are not equal. Heteroscedatiscity was tested using Breusch Pagan's Test. Based on the results, it can be concluded that there is no problem of heteroscedasticity as the chi square is 0.15, with a corresponding probability of 0.2401 which is insignificant, implying that there is absence of heteroscedasticity.

Hausman Speciation Test

In panel data analysis (the analysis of data over time), the Hausman Test can help to choose which between fixed effects model or a random effects model is appropriate for interpretation. The result of the Hausman Test reveals that the value of chi2 is 5.39 and the prob>chi 0.3699. The insignificant value as reported by the probability of chi2 indicates that the Hausman Test is in favour of random effect model. Furthermore, to meet the condition that one or more equations have to be satisfied exactly by the chosen values of the variables and further check between the stated model and random effect model which is more appropriate, the Breusch and Pagan Lagrangian Multiplier Test for random effect was conducted. The result revealed that the chi2 value is 17.89 with prob>chi2 = 0.0000. The result indicated that the best model to be interpreted is the random effect model.

Table 5: Random Effect Regression Model

REM	Coefficient	T	p-value
AF	.02614	3.05	0.003
AIS	.02465	2.51	0.012
AT	.0063	0.63	0.528
AFS	-.0307	-3.04	0.002
FZ	.0493	1.99	0.046
R-Squared:			
Within=	.2302		
Between=	.2993		
Overall=	. 4427		
Wald chi2(5)	188.72		.0002

Source: output from STATA, 2022.

The R-square value showed the level at which the explanatory variables explain the dependent variable. The regression result in Table 4.4 reveals that the R-square is 0.4427. This means that the external auditor attributes in the study explained the financial reporting quality (FRQ) to the tune of 44.27%. The value of Wald chi2(5) with a probability of chi2 = 0.0002. The probability of chi2 is significant at 1%, indicating that the model is fit. This serves as substantial evidence to conclude that the external auditor attributes selected for the study are suitable for the study on the effect of external auditor characteristics on the financial reporting quality of manufacturing firms in Nigeria.

H$_0$1: Audit fees have no significant effect on financial reporting quality of listed manufacturing firms in Nigeria

The result in table 4.4 shows that audit fees have a t-value of 3.05, a coefficient of .0261489 and a p-value of 0.003 which is significant at 5%. This means that audit fees have a significant positive

relationship with financial reporting quality of listed manufacturing companies in Nigeria. This means a percentage increase in audit fees will increase that quality of financial reporting of manufacturing companies by 2.6% while holding AIS, AT and AFS constant. The 5% significance level reveals that audit fees have a strong statistical influence on financial reporting quality of quoted manufacturing firms in Nigeria. Based on this, the study rejects the null hypothesis one (H_01) which states that, audit fees have no significant effect on financial reporting quality of listed manufacturing firms in Nigeria. This finding is in tandem with Onaolapo, Ajulo and Onifade (2017), Bamahros and Wan-Hussin (2015), Okolie (2014), Okolie, Izedonm and Enofe (2013), who revealed that audit fees have positive effect on financial reporting quality suggesting that an increase in fees paid to auditors for their audit engagement does enhance financial reporting quality as predicted by the agency theory.

H_02: **Auditor industry specialization has no significant effect on financial reporting quality of listed manufacturing firms in Nigeria**

The regression result on table 4.4 also shows that auditor industry specialization has a significant positive effect on financial reporting quality manufacturing firms in Nigeria, from the coefficient of .0246553 with t-value of 3.89 and a p-value of 0.000 which is statistically significant at 5% level of significance. This result suggests that, an increase in use of industry specialist auditors increases the level of financial reporting quality by 2.46% while holding AF, AT and AFS constant. Based on this, the study rejects the null hypothesis two (H_02) which states that, auditor industry specialization has no significant effect on the financial reporting quality of listed manufacturing companies in Nigeria. The finding is also in line with Balsam, Krishnan, and Yang (2003), Dunn and Mayhew (2004), Stanley and DeZoort (2007), Romanus, Maher and Fleming (2008), Chiang, Lin and He (2015), Sair (2018) and Burgen (2015).

H_03: **Auditor tenure has no significant effect on financial reporting quality of listed manufacturing firms in Nigeria**

The regression result also shows that auditor tenure has an insignificant positive effect on financial reporting quality of listed manufacturing firms in Nigeria, from the coefficient of .0063946 with t-value of 0.63 and a p-value of 0.528 which is statistically insignificant at 5% level of confidence. The implication of this result is that a unit increase in the tenure of auditors increases the financial reporting quality insignificantly by 0.63% while holding AF, AIS and AT constant. Based on this, the study accepts the null hypothesis three (H_03) which states that, auditor tenure has no significant effect on financial reporting quality of quoted manufacturing companies in Nigeria. The implication of this result is that, auditor tenure is not a determinant of financial reporting quality. This finding contradicted that of Muogbo, Nneka and Ikena (2019), Bamahros and Wan-Hussin (2015), Ching, Teh and San (2015), Karimi and Gerayli (2014) and Okolie (2014).

H_04: **Audit firm size has no significant effect on financial reporting quality of listed manufacturing firms in Nigeria**

The result of the study as shown on table 4.4 indicates that audit firm size has a coefficient of-.0307728, a t-value of -3.04 and a p-value of 0.002. This suggests that audit firm size has a negative significant effect FRQ of quoted manufacturing companies in Nigeria. A unit increase in the use of Big4 companies will lead to a corresponding significant decrease in FRQ by 3.07%. Based on this, the study rejects the null hypothesis four (H_04) which states audit firm size has no significant

effect on financial reporting quality of quoted manufacturing companies in Nigeria. Given the result of this study and the assertions of other scholars, it therefore means audit firm size as measured by big4 companies can reduce the possibility of fraudulent financial reporting. This finding is in tandem with the finding of Junaidu and Oladele (2018), Kingsley (2016), Aliyu, Musa and Zachariah (2015), Ching, Teh and San (2015).

Conclusion and Recommendations

This study examined the association between external auditor characteristics and financial reporting quality of quoted manufacturing companies in Nigeria. Specifically, study assessed the combined effect of audit firm size, audit fees, auditor tenure and auditor industry specialization and on financial reporting quality. The overall result of this study suggests that there is a significant positive association between audit quality and financial reporting quality. The study particularly, concludes that audit fees play an important function in improving the level of financial reporting quality. This is based on the fact that a higher level of audit fees is the major driver of enhanced audit quality, in turn is used to reduce managers' flexibility to use aggressive earnings patterns and to manipulate reported earnings. Also, the study resolved that industry specialist auditors are a necessary governance factor in reducing fraudulent financial reporting. Conversely, the study lacks statistical evidence to conclude that auditor tenure does play any important role in monitoring managerial opportunistic behaviour of listed manufacturing companies in Nigeria. Finally, the study further concludes that the existence of Big4 audit firms helps in mitigating the possibility of accrual manipulation and financial reports misstatements. Insinuating that bigger audit firms provide higher-quality audits because they have fewer incentives to compromise their standards to ensure retention of clients in comparison with smaller firms.

The study thus recommends the following;

Firstly, the study provided statistical and empirical evidence to support that audit fees have significant influence on financial reporting quality among quoted manufacturing firms in Nigeria. Based on this, the study recommends that firms should pay fees commensurate with the type and magnitude of the audit assignment. This is because the possibility of more aggressive financial reporting quality occurs predominantly among firms that pay less than expected for audit services. Although, audit regulations recommend that audit partners determine fees that would cover for all expenses that maybe incurred in conducting the audit while reserving a considerable amount as profit.

Secondly, industry specialist auditor possesses greater competence in applying industry-specific earnings recognition standards and has acquired a reputation for providing an audit of superior quality. It is expected that an industry specialist auditor will be better equipped to identify and rein in aggressive earnings manipulation. Hence, it is recommended that given the complex nature of the manufacturing companies they should insist on hiring industry specialist auditors. Even, the "Code" stipulates that in order to ensure quality audit outcomes, the engagement partner and audit team should possess the knowledge, relevant skills and experience.

Thirdly, the study findings revealed that auditor tenure has insignificant negative effect on financial reporting quality of quoted manufacturing companies in Nigeria. Specifically, the study provides empirical evidence supporting that auditor tenure comes across as a highly significant

component that has striking implications on likelihood of audit quality. Given this assertion, the study recommends that, in order to preserve independence, there should be a rotation of the audit engagement partner every five years, although the Nigerian Code of Corporate governance (2018) places such tenure at ten years.

Lastly, the study provided empirical evidence to support that larger audit firms possess better attributes to arrest the likelihood of financial reporting quality. The expectation is that, Big4 audit firms provides the necessary confidence to the stakeholders that financial reports are credible and reliable. The study therefore recommends that the choice of large audit firms should be highly considered if not made a priority while engaging audit firms.

References

Aliyu, M. D., Musa, A. U., & Zachariah, P. (2015). Impact of audit quality on earnings management of listed deposit money banks in Nigeria. *Journal of Accounting and Finance Management*, *1*(4), 1-16.

Al-Khaddash, H., Al Nawas, R., & Ramadan, A. (2013). Factors affecting the quality of auditing: The case of Jordanian commercial banks. *International Journal of Business and Social Science*, *4*(11).

Alleyne, P., & Howard, M. (2005). An exploratory study of auditors' responsibility for fraud detection in Barbados. *Managerial Auditing Journal*.

Arena, M., Arnaboldi, M., & Azzone, G. (2011). Is enterprise risk management real? *Journal of Risk Research*, *14*(7), 779-797.

Balsam, S., Krishnan, J., & Yang, J. S. (2003). Auditor industry specialization and earnings quality. *Auditing: A journal of practice & Theory*, *22*(2), 71-97.

Bamahros, H. M., & Wan Hussin, W. N. (2015). Non-audit services, audit firm tenure and earnings management in Malaysia. *Asian Academy of Management Journal of Accounting and Finance*, *11*(1), 145-168.

Becker, C. L., DeFond, M. L., Jiambalvo, J., & Subramanyam, K. R. (1998). The effect of audit quality on earnings management. *Contemporary accounting research*, *15*(1), 1-24.

Chen, F., Hope, O. K., Li, Q., & Wang, X. (2011). Financial reporting quality and investment efficiency of private firms in emerging markets. *The accounting review*, *86*(4), 1255-1288.

Chen, K. Y., Lin, K. L., & Zhou, J. (2005). Audit quality and earnings management for Taiwan IPO firms. *Managerial Auditing Journal*.

Chersan, I. C., Robu, I. B., Carp, M., & Mironiuc, M. (2012). A circular causality analysis on the determinants of the audit fees within the NYSE-quoted companies. *Communications of the IBIMA*, *2012*, 1.

Chiang, H. T., Lin, S. L., & He, L. J. (2015). Implications of auditor characteristics and directors' and officers' liability insurance for going-concern audit opinions: evidence from Taiwan. *International Business Research*, *8*(5), 130.

Ching, C. P., Teh, B. H., San, O. T., & Hoe, H. Y. (2015). The Relationship among Audit Quality, Earnings Management, and Financial Performance of Malaysian Public Listed Companies. *International Journal of Economics & Management*, *9*(1).

Clarkson, P. M., & Simunic, D. A. (1994). The association between audit quality, retained ownership, and firm-specific risk in US vs. Canadian IPO markets. *Journal of Accounting and Economics*, *17*(1-2), 207-228.

Cohen, J., Krishnamoorthy, G., & Wright, A. (2010). Corporate governance in the post-Sarbanes-Oxley era: Auditors' experiences. *Contemporary Accounting Research*, *27*(3), 751-786.

Copley, P. A. (1991). The association between municipal disclosure practices and audit quality. *Journal of Accounting and Public Policy*, *10*(4), 245-266.

DeAngelo, L. E. (1981). Auditor independence,'low balling', and disclosure regulation. *Journal of accounting and Economics*, *3*(2), 113-127.

Dechow, P. M., & Dichev, I. D. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The accounting review*, *77*(s-1), 35-59.

Deegan, C., Rankin, M. and Tobin, J. (2002), "An examination of the corporate social and environmental disclosures of BHP from 1983-1997", Accounting, Auditing and Accountability Journal, Vol. 15 No. 3, pp. 312-343.

Deegan, C., Rankin, M., & Voght, P. (2000, March). Firms' disclosure reactions to major social incidents: Australian evidence. In *Accounting forum* (Vol. 24, No. 1, pp. 101-130). Taylor & Francis.

Dhaliwal, D. A. N., Naiker, V. I. C., & Navissi, F. (2010). The association between accruals quality and the characteristics of accounting experts and mix of expertise on audit committees. *Contemporary accounting research*, *27*(3), 787-827.

Dunn, K. A., & Mayhew, B. W. (2004). Audit firm industry specialization and client disclosure quality. *Review of accounting studies*, *9*(1), 35-58.

Emmanuel, E. D. and Emem, M. G. (2020). The impact of audit firm attributes on the financial reporting quality of quoted manufacturing firms in Nigeria. *International Journal of Economics and Management Studies*, 7(1) 1-17.

Francis, J., LaFond, R., Olsson, P., & Schipper, K. (2005). The market pricing of accruals quality. *Journal of accounting and economics*, *39*(2), 295-327.

Geiger, M. A., & Raghunandan, K. (2002). Auditor tenure and audit reporting failures. *Auditing: A journal of practice & theory*, *21*(1), 67-78.

Gerayli, M. S., Yanesari, A. M., & Ma'atoofi, A. R. (2011). Impact of audit quality on earnings management: evidence from Iran. *International Research Journal of Finance and Economics*, *66*(1), 77-84.

Hammersley, J. S. (2006). Pattern identification and industry-specialist auditors. *The Accounting Review*, *81*(2), 309-336.

Inaam, Z., Khmoussi, H. L. I. O. U. I., & Fatma, Z. (2012). Audit quality and earnings management in the Tunisian context. *International Journal of Accounting and Financial Reporting*, *2*(2), 17.

Jenkins, D. S., & Vermeer, T. E. (2013). Audit firm rotation and audit quality: evidence from academic research. *Accounting Research Journal*.

Jonas, G. J., & Blanchet, J. (2000). Assessing quality of financial reporting. *Accounting horizons*, *14*(3), 353.

Junaidu, A. S., & Oladele, J. U. O. (2018). Firm Size and Audit Quality on Earnings Management of Quoted Oil and Gas Marketing Companes in Nigeria. *Asian Journal of Multidisciplinary Studies*, *6*, 12.

Karajeh, A. I., & Ibrahim, M. Y. B. (2017). Impact of audit committee on the association between financial reporting quality and shareholder value. *International Journal of Economics and Financial Issues*, *7*(3), 14-19.

Karimi, K., & Gerayli, M. S. (2014). An investigation into the relationship between auditor industry specialization and length of auditor tenure, and earnings management in the firms listed in Tehran Stock Exchange. *Indian Journal of Fundamental and Applied Life Sciences*, *4*(4), 1258-1264.

Krishnan, G. V. (2003). Does Big 6 auditor industry expertise constrain earnings management?. *Accounting horizons*, *17*, 1-16.

Lambert, R., Leuz, C., & Verrecchia, R. E. (2007). Accounting information, disclosure, and the cost of capital. *Journal of accounting research*, *45*(2), 385-420.

Low, K. Y. (2004). The effects of industry specialization on audit risk assessments and audit-planning decisions. *The accounting review*, *79*(1), 201-219.

Lu, H., Richardson, G., & Salterio, S. (2011). Direct and indirect effects of internal control weaknesses on accrual quality: Evidence from a unique Canadian regulatory setting. *Contemporary Accounting Research*, *28*(2), 675-707.

Lys, T., & Watts, R. L. (1994). Lawsuits against auditors. *Journal of accounting research*, *32*, 65-93.

Martinez-Blasco, M., Garcia-Blandon, J., & Argiles-Bosch, J. M. (2015). Does the informational role of the annual general meeting depend on a country's legal tradition?. *Journal of Management & Governance*, *19*(4), 849-873.

Muogbo, O. Nneka, G. &Ikena, E. (2019). Effect of tenure of audit on earnings management of listed firm in Nigeria. International journal of management and social science, 1(7), 2321-1784

Odia, J. O. (2015). Auditor tenure, Auditor Rotation and Audit Quality. A review. *European Journal of Accounting, Auditing and Finance Research*, *3*(10), 76-96.

Okolie, A. O. (2014). Audit quality and earnings response coefficients of quoted companies in Nigeria. *Journal of Applied Finance and Banking*, *4*(2), 139.

Okolie, A. O., Izedonmi, F. O. I., & Enofe, A. O. (2013). Audit Quality and Accrual – Based Earnings Management of Quoted Companies in Nigeria. *Journal of Economics and Finance, 2*(2), 07-16. https://doi.org/10.9790/5933-0220716

Okolie, A. O., Izedonmi, F. O., & Enofe, A. O. (2014). Audit Quality and Cash–Based Earnings Management of Quoted Companies in Nigeria. *Journal of Finance and Investment Analysis*, *3*(1), 35-50.

Onaolapo, A. R., Ajulo, O. B., & Onifade, H. O. (2017). Impact of Audit Fees on Audit Quality: Evidence from Cement Manufacturing Companies in Nigeria. *Journal of Financial Economics*, *5*(1), 157-185.

Onuora, O.A & O.T.Okegbe (2015). The impact of professional Accounting Ethics in quality assurance in Audith. *International Journal of Academic Research in Business and social sciences.* 5(8).222-6990.

Owhoso, V. E., Messier, Jr, W. F., & Lynch, Jr, J. G. (2002). Error detection by industry-specialized teams during sequential audit review. *Journal of accounting research*, *40*(3), 883-900.

Rabab'ah, M., Al-Sir, O., & Alzoubi, A. A. (2017). The Impact of the Audit Committees' Properties on the Quality of the Information in the Banking Financial Reports: A Survey on Saudi Commercial Banks. *International Business Research*, *10*(11), 175-192.

Rittenberg, L. E., Johnston, K. M., & Gramling, A. A. (2010). The public accounting profession: auditing, a business risk approach. *Edition, South Western Engage Learning, Mason USA*, 21-22.

Romanus, R. N., Maher, J. J., & Fleming, D. M. (2008). Auditor industry specialization, auditor changes, and accounting restatements. *Accounting Horizons*, *22*(4), 389-413.

Schipper, K., & Vincent, L. (2003). Earnings quality. *Accounting horizons*, *17*, 97-110.

Stanley, J. D., & DeZoort, F. T. (2007). Audit firm tenure and financial restatements: An analysis of industry specialization and fee effects. *Journal of Accounting and Public Policy*, *26*(2), 131-159.

Suchman, M. (1995), "Managing legitimacy: strategic and institutional approaches", The Academy of Management Review, Vol. 20 No. 3, pp. 571-610.

Tepalagul, N., & Lin, L. (2015). Auditor independence and audit quality: A literature review. *Journal of Accounting, Auditing & Finance*, *30*(1), 101-121.

Turner, L. E., & Godwin, J. H. (1999). Auditing, earnings management, and international accounting issues at the Securities and Exchange Commission. *Accounting Horizons*, *13*(3), 281.

Vander Bauwhede, H., Gaeremynck, A., & Willekens, M. (2000). Drijfveren voor winstmanagement voor Belgische beurs en niet-beursgenoteerde bedrijven. *Tijdschrift voor Economie en Management*, (3), 367-386.

Willenborg, M. (2002). Discussion of" brand name audit pricing, industry specialization, and leadership premiums post-Big 8 and Big 6 mergers". *Contemporary Accounting Research*, *19*(1), 111.

Yuniarti, R. (2011). Audit firm size, audit fee and audit quality. *Journal of global management*, *2*(1), 84-97.

Zhou, J., & Elder, R. (2001). Audit firm size, industry specialization and earnings management by initial public offering firms. *State University of New York at Binghamton,(315)*.