

Influence of Firm size on Audit Quality and Earnings Management Relationship: Evidence from Listed Manufacturing Firms in Nigeria

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DOI: 10.56201/jafm.v8.no7.2022.pg163.179

Abstract

The study investigated the influence of Firm size on the relationship between Audit quality and Earnings Management of listed Consumer Goods Manufacturing firms in Nigeria. This study tested a number of audit quality indicators (auditor's tenure, Audit firm size and joint audit) and earnings management proxies that is (earnings restatement and discretionary accruals), using 26 listed consumer-goods manufacturing firms as the study population. Secondary data were extracted from the annual report of 13 listed consumer-goods manufacturing firms while judgmental sample from the population, covering the study period from 2012 to 2018 using historical data were adopted. The data were tested through the use of Univariate, Bivariate and Multivariate analysis. Univariate/descriptive, Bivariate, Pearson Product Moment Correlation (PPMC) techniques by use of E-view 10 Econometric software and Multivariate – regression model. The findings of the study showed that firm size variability does not influence every aspect

of the Firm's attributes. Some aspects of Firms' characteristics are influenced by the size of the Firm whereas some other aspects do not respond to size variability. As was indicated by the Firm size analyses, earnings restatement of consumer-goods manufacturing firms does not respond to Firm size attribute while their discretionary accrual practices significantly depend on their size attributes. The study concludes that firm size is a significant moderator between the use of audit quality and earnings management, however it depends of the variable of earnings management used. In the light of these, it is the recommendation of this study that to ensure positive significant relationship with earnings management, the firms should voluntary engage two audit firms in all to other to allow for effective comparison, so that hidden information in financial statement could be dictated or revealed; the total assets as a dimension of firm size should be represented faithfully, so as to positively moderate it influence on audit quality indicators and earnings management.

Keywords: *Audit Quality, Earnings Management, Firm Size, Manufacturing Companies, Nigeria*

1. INTRODUCTION

Earnings management is the strategy used by company managers and other staff to deliberately manipulate company earnings to match a predetermined target and involves the planning and execution of certain activities that manipulate or smooth earnings, activate elevated income intensity and sway the firm share price (Healy & Wahlen, 1999). Earnings management is achieved by the manipulation of the operating activities of a company. Roychowdhury (2006) defines earnings management as departures from normal operational practices, motivated by managers' desire to mislead, at least, some stakeholders into believing that certain financial reporting goals have been met in the normal course of operations. Thus it is assumed that earnings management in an emerging market like the Nigerian Stock Exchange (NSE) is likely to present some problems for a true and qualitative earnings report.

Healy and Wahlen (1999), indicated that earnings management studies have paid only negligible attention to its real economic consequences. While there is growing evidence that firms engage in real earnings management (Roychowdhury, 2006), evidence on its economic consequences is scanty. Consistent with Graham et al., (2005); Cohen et al. (2008), have shown that managers have shifted away from discretionary accrual management to earnings management. However, the non-quantitative nature of "audit quality" as a variable has necessitated the existence of a plethora of proxies and indicators for its measurement (Cameran, 2007). Thus the need for enhanced audit that could be used to check incidences of earnings management. This is where audit quality comes to play. Audit quality is defined as the probability that an auditor will both discover and truthfully report material errors, misrepresentation and omissions detected in a client's accounting system. This probability depends upon the broad concept of an auditor's professional conduct, which includes factors as objectivity, due professionalism and conflict of interest (Francis, 2004). Geiger and Raghunandan, (2002), measured Audit quality in terms of audit or reporting failure, based on the idea that audit quality is inversely related to audit or reporting failures. Nagy, (2005) and

Myers et al. (2003), use earnings as a surrogate for audit quality. The implicit assumption is that high Audit quality implies high earnings quality (Johnson et al. 2002). Wallace (1980), noted that a measure of audit quality is the auditor's ability to reduce bias and improve the fairness and objectivity in accounting information. Researchers have also used estimated discretionary accruals as a surrogate for Audit quality (Dechow & Dicheve, 2002; and Krishna, 2003). Assuming that higher estimated discretionary accruals reflect lower earnings quality and thus lower audit quality. Knechel and Vanstraelen (2007), noted that Audit quality is measured by the propensity of the auditor to issue a going concern opinion. Audit quality is concerned with the ability of the auditor to be with an independent mind in issuing audit opinion without any form of compromise, thus following on the heels of the trouble of identifying factors that drive Audit quality is the complex and problematic task of audit quality measurement (Broberg et al., 2017).

Efforts in measuring Audit quality can be classified to direct measures and indirect measures. Direct measures include financial reporting compliance with General Acceptable Accounting Principles (GAAP), quality control review, bankruptcy desk review and Stock Exchange Council (SEC) performance. Examples of outcome measures of Audit quality include litigation or regulatory enforcement actions against auditors, correct issuance of a going-concern opinion and under certain circumstances; auditor switches (Francis, 2011). These proxies are limited in the sense that besides merely exemplifying poor audit quality, they only possess ex-post facto value. On the other hand, audit firm size, auditors' tenure, industry expertise, audit fees, economic dependence, reputation and cost of capital are indirect measures of audit quality, (Chandegani, 2011).

The perceived failure of audit to fully alert equity and other stake-holders concerning the said misrepresentations, and others in financial position and to sufficiently report accurate operational earnings has resulted to inability shareholders of investors to undertake rational economic choices and decisions affecting firms generally. The need for more private investments to sustain the current level of growth rate is imperative. The consumer goods manufacturing sector which ought to serve as the engine of growth for the Nigerian economy, now given the resolve of the economy is that managers' and other operators as catalyst should diversify the economy away from oil base, to enable this country to stabilize economically. All these challenges and effects, might not be unconnected with concerns about the quality of reported earnings and the inability of audit quality to effectively reduce earnings management of firms, exemplified by recent corporate accounting scandals (Badawi, 2008; Enofe, 2010). Differences in audit quality result in uncertainty in the credibility of auditors and the reliability of the earnings reports of firms. The recent corporate financial scandals pose a great challenge to the veracity, credibility, utility or value relevance of the audit function. In the opinion of Alles et al. (2004), the degree to which assurance adds value to communication between an auditor and its audience is directly related to the credibility of the auditor. Whatever may be their real cause, the effect of corporate scandals in the last two decades, especially Enron and the subsequent collapse of Arthur Anderson, has been to undermine public confidence in the audit programme. Badawi (2008) reports a list of firms involved in cases of accounting scandals related to poor audit quality and earnings manipulations in the past decade.

Therefore, the study investigated the influence of firm size measured as total asset on the relationship between audit quality and earnings management of listed consumer goods manufacturing firms in Nigeria.

1.3 Conceptual Framework on Audit quality and Earnings Management Practices of Listed Consumer Goods Firms in Nigeria

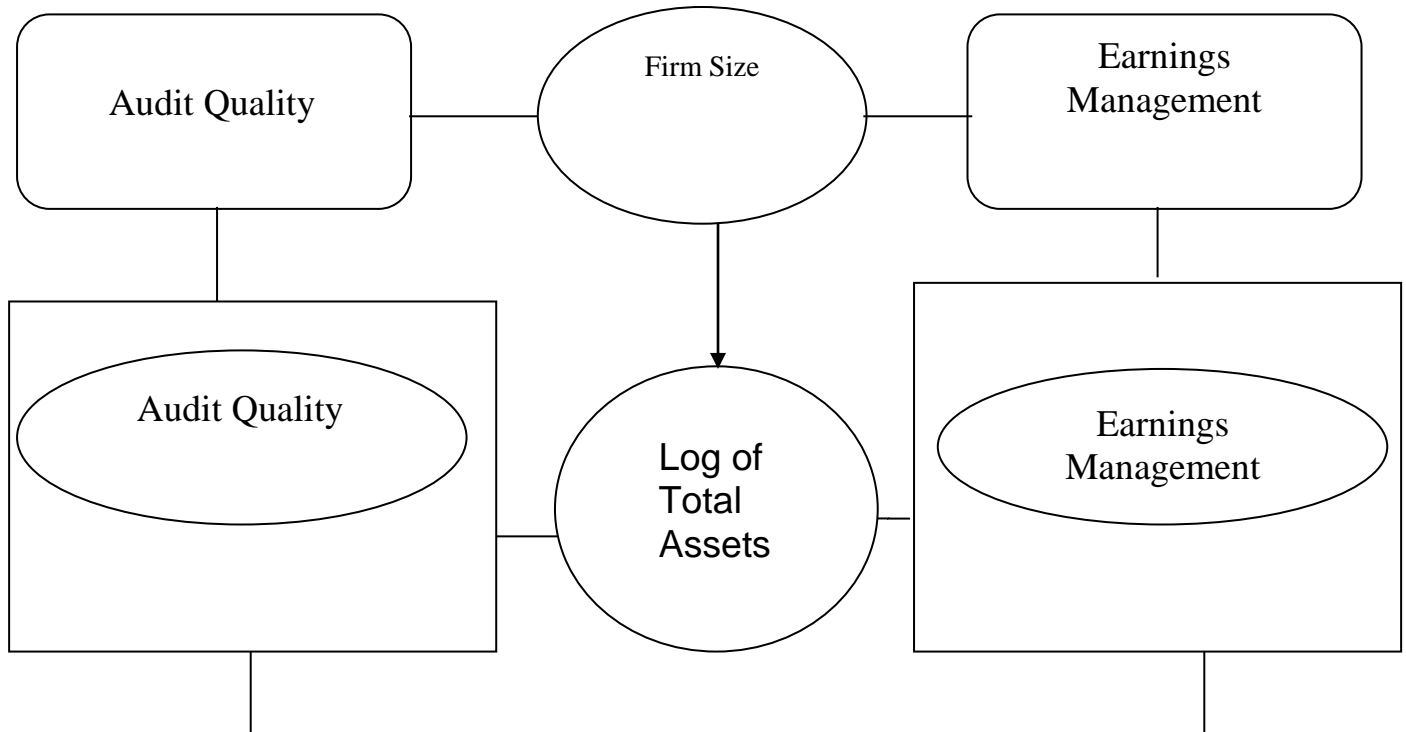


Figure 1.1: Conceptual framework on Influence of Firm Size on Audit quality and Earnings Management practices of listed consumer goods firms in Nigeria.

Source: Modification by Gold (2012), Ratzinger et al., (2013), Lope (2018).

1.2 Objective of the Study

Ascertain the influence of firm size on audit quality indicators and earnings management of listed consumer goods manufacturing firms in Nigeria.

1.3 Research Question

Based on the objective, the following research question is raised to include:

What is the influence of firm size on audit quality and earnings management of listed consumer-goods manufacturing firms in Nigeria?

1.4 Research Hypothesis

In line with the objective and research question of this study, the following hypothesis stated in the null form was formulated:

H₀₁: Firm size of Listed consumer goods manufacturing Firms in Nigeria does not significantly moderate the relationship between their earnings management practices and audit quality.

2. REVIEW OF RELATED LITERATURE

Conceptual Review

Audit Quality

Audit quality concerned with the auditor willingness to disclose an unbiased audit report based on the audit result. De Angelo (1981) further suggests that audit quality is a function of the auditor's ability which is distinguished into two dimensional functions: technical capability and auditor independence. Technical capability dimension is concerned with its capability to detect material misstatements and errors in financial statements. Auditor independence dimension is concerned with the report of these materials misstatements and errors. Audit quality measurement is a complex issue. Audit quality is recognized to influence financial reporting and strongly impact on investors' confidence (Levitt, 2000). Statutory auditors typically engage in significant and greatly demanding tasks in guaranteeing the credibility of financial reports (Mautz & Sharaf, 1961; Wallace, 1987). To the extent that exercising such liberty in professional judgment is in direct violation of the notion of faithful representation, such practice undermines the credibility and relevance of reported accounting information to interested members. Hence, the susceptibility of stewardship account to misrepresentation underscores the imperativeness of stakeholders' demand for an independent third-party assurance on the integrity of reported financial statement. Thus, in view of the critical role, the external auditor has to play towards upholding financial statement credibility, its relevance in the economic development of any country, and the concern for professional judgment because abuse has raised serious questions about the effectiveness of auditors' role in monitoring and controlling managerial opportunistic behavior. This concern has even heightened in recent times due to recent corporate accounting scandals involving giant multinational firms mainly because of manipulation of the accounting figures provided in the financial statements, (Goncharov, 2005). The auditors' maintenance of reasonable quality assurance eliminates audit failure, provides guarantee to the stakeholders and supports confidence in the capital markets along with financial reporting, corporate governance and regulations.

Albeit the term 'audit quality' is difficult to define, for the IAASB it encompasses a number of key elements that create an environment which maximizes the likelihood that quality audits are performed on a consistent basis. The key elements of audit quality identified by the Framework are: Inputs, Process, and Outputs. Key Interactions within the Financial Reporting Supply Chain, Contextual Factors as discussed in the following paragraphs, Inputs are grouped into the following input factors: The values, ethics and attitudes of auditors, which in turn, are influenced by the culture prevailing within the audit firm; and the knowledge, skills, and experience of auditors and the time allocated for them to perform the audit. Within the above input factors, quality attributes are further Firm size between those that apply directly at the audit engagement level, The level of an audit firm, and therefore indirectly to all audits undertaken by that audit firm; and the national (or jurisdictional) level and therefore indirectly to all audit firms operating in that country and the audits they undertake.

The process is concerned with the rigor of the audit process and quality control procedures impact audit quality. Outputs include reports and information that are formally prepared and presented by one party to another, as well as outputs that arise from the auditing process that are generally not visible to those outside the audited Firm. For example, these may include improvements to the entity's financial reporting practices and internal control over financial reporting, that may result from auditor's findings. The outputs from the audit are often

determined by the context, including legislative requirements. While some stakeholders can influence the nature of the outputs, others have less influence. Indeed, for some stakeholders, such as investors in listed firms, the auditor's report is the primary output (IAASB, 2014)

Earnings Management Practices

Corporate earnings represent the end product of a company and have been recognized as the distinct central item in financial statements which exclusively indicates the amount of value added activities of a company. Earnings signal the direction of resource allocation in capital markets as the speculative value of a company's shares is the present value of its future earnings. Hence, increase or decrease in earnings represent an increase or decrease in the value of a company (Lev, 1989). Earnings management has various definitions, but they all share the same underlying meaning reflecting that earnings management's objective is to misrepresent a firm's performance. Earnings management has been defined by Schipper (1989) as "a purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain". Another commonly used definition by Healy and Wahlen (1999) is that earnings management takes place when managers try to maneuver transactions that can affect the outcome presented in the financial reports in order to hide the real economic performance of the company or to influence some contractual outcomes. According to Fields et al. (2001), earnings management is initiated from the flexibility of accounting choices given by the Accounting Principles, allowing managers to choose the proper reporting procedures and pick assumptions and estimations that are suitable for each business environment.

Giving managers with an opportunistic behavior a chance to choose certain reporting procedure that helps them maximize their wealth (Watt & Zimmerman, 1990). Therefore, Stakeholders find it hard to recognize the exact net worth and economic value of a firm, as financial reports do not reflect the actual performance of the firm. Earnings management is commonly estimated in literature using the discretionary accruals models; it is popular that discretionary accruals are usually used as a synonym for earnings management (Kothari, 2001). There is a growing attention on earnings management as manipulation methods that allow managers to meet reporting goals under a certain economic circumstances (Chen et al., 2006). In this perspective, Healy and Wahlen (1999) stated that "Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting practices". In addition, earning management could also be referenced as a reasonable and legal management decision-making and reporting, intended to achieve and disclose stable and predictable financial results (Chen, 2010). Meanwhile, Roychowdhury (2006) views earnings management as departures from normal operational practices that occur through managerial intervention in the reporting process; i.e., via accounting estimates and methods and operational decisions as well. According to Healy and Wahlen (1999), managers engage in earnings management for three reasons: capital market motivation, contracting motivation, and regulatory motivation. This could be achieved through, for example, acceleration of sales, alterations in shipment schedules, and delaying of research and development and maintenance expenditures.

Chen et al. (2006) described managers engage in earnings management to minimize the cost of capital or political costs, or to maximize their compensation such as bonus plan and stock options. In this sense, the minimization of capital or political costs will work to the advantage of the firms, while compensation maximization will benefit management at the cost of shareholders.

This earning management practices, in part can be mitigated by hiring high quality auditors, presuming that high quality auditors tend to offer higher quality of audit and produce higher information quality and credibility.

The engagement of executives in earnings management might occur through accounting estimates and methods, and operational decisions as well. This intervention includes accruals manipulation in term of sales, shipment schedules, and research, development, and maintenance expenditures. Roychowdhury (2006) is of opinion that the engagement of executives in earnings management is by accrual manipulation, i.e., manipulation of accruals which has no direct cash flow consequences. This include under-provisioning for bad debt expenses and delaying asset write-offs. In addition, managers might engage in earning management through real activities manipulation during the year to meet certain earnings targets. This type of real activities manipulation, such as reductions in expenditures on research and development, will affect cash flows and in some cases, accruals.

Firm Size as Moderating Variable Linking the Predictor and the Criterion Variable.

For the purpose of this study, and as conceptually employed in this study, is with firm size. The term 'firm' refers to the business unit or undertaking which owns a production center (whether primary, secondary or tertiary production), controls and manages it. Thus this term (firm) is broader in its scope. It is essentially a unit of control, ownership and management thus making assets ownership, assets controllership and assets management as the main features of firms. However, to the present date, firm size remains a poorly defined concept. Where the use of size is required by theory, empirical studies typically revert to some proxy or other, such as the number of employees, Total Assets, Sales or Market Capitalization. Conversely, the concept of firm size has also been used to proxy for numerous theoretical constructs ranging from risk to liquidity or even political costs (Ball & Foster, 1982). As a result, firm size has been interpreted in many different ways, allowing it to explain everything, and thus nothing at the same time, (Bujaki & Richardson, 1997).

In addition, the pursuit of a precise definition of firm size is considered by many as topic, either because it is speculated that size may be multidimensional or because size is deemed to be essentially an ambiguous concept. Yet, the advantages of possessing a precise definition of firm size are evident. Variables presently used to proxy for firm size in empirical studies contain variability of their own. A realization of Total Assets for instance, reflects several statistical effects of which only one; size, is desirable in this context. When proxies are used instead of size, the undesirable portion of their variability has the potential to distort predictions made by statistical models. Also, since size is itself used to proxy for other variables, a size measurement that is free from spurious influences will enhance such usefulness. A precise definition of size will dispel undue relativism, contributing to a better understanding of the statistical behavior of accounting numbers. Data from accounting reports are often viewed as intrinsically complex, the possibility of applying clear-cut rules to such data being rejected a priori. As a consequence of this belief in the opacity of accounting data, empirical research lacks the level of definition that is required to draw appropriate inferences.

The conceptual complexity of definition notwithstanding, this study attempt to develop an empirical concept of firm (Firm) size on the premise of assets ownership, control and management. This underscores why, in our conviction, total assets remain the most widely used proxy of firm size in empirical literature.

Theoretical Framework

Auditors' Theory of Inspired Confidence

Limperg Institute, (1985), offers a linkage between the users' requirement for credible financial reports and the capacity of the audit processes to meet those needs. It sees through the development of these needs of the public (stakeholders) and the audit processes over time. The theory suggests an inspired confidence bestowed on the auditor as a confidential agent who derives his function in society extensively from the call for professional and autonomous assessment as well as the necessity for skilled and objective opinion sustained by tests and attestations. The public expectation of a low rate of audit failures means that audit process must minimize the risk of undetected material misstatements and the accountant must not betray the confidence which he commands before the rational person. However, the accountant may not produce what is greater than the public expectation. The confidence determines the existence of the process and its betrayal logically terminates the process or function.

Review of Empirical Literature

Mandour et al. (2018), ascertained the effect of joint audit and dual audits on earning management practices during the period 2010-2014. The study used multiple regressions to analyze the data. The research follows a quantitative approach to collect and analyze data from companies listed on the Egyptian stock exchange. The findings of the empirical studies showed that there are consistent earnings management practices in the studied sample regardless of the type of audit (Joint or Dual audit). There is a negative association between joint audit and discretionary accruals compared to dual audit. This means that firms with joint audit are less engaged in accrual earnings management practices. In addition, large firms that adopt joint audit are less engaged in accrual earnings management. However, there is no effect of joint audit on real earnings management practices compared to dual audit. The results are consistent for firm size, profitability, and leverage. Both firm profitability and leverage show positive association with earnings management practices while size did not have a significant effect on either type of practice. Finally, the study recommends that, firms with high (low) profitability that adopts joint audits are less (more) likely to engage in real earnings management practices.

Alzoubi (2016) ascertained the effect of disclosure quality on the magnitude of earnings management among 86 industrial companies quoted on the Amman Stock Exchange for four years between 2007 and 2010. Using a GLS regression in order to surmount the heteroskedasticity problems of OLS, the findings from the study showed disclosure quality exerting a negative influence on incidence of earning management, accounting for 45 percent variations therein, thereby improve the quality of accounting information. Of note are size of the audit firm (measured by Big4 versus non-Big4 dichotomy), client's size (natural log of total assets) and clients' profitability (proxied with ROA). As expected, all displayed a negative and significant relationship with earnings management.

Marco and Roberto (2016), examined the relationships between voluntary joint audits and earnings quality, as well as the reasons why some firms decided, on a voluntary basis, to be joint audited, in the Italian context. The result of the study indicated that a joint audit is positively related to earnings quality, and that firms choose to be audited by two different auditors mostly because of their ownership structure, size, and operational complexity.

Deng et al. (2014) compared one big firm and one small firm in their study, and they found that audit independence was unlikely to be compromised by joint audits in either case, and that, although, it is more expensive to compromise auditor independence through joint audits, joint

audits provide an opportunity for a company to “shop” for a better audit opinion (Deng et al. 2014).

Thus from the foregoing literature, it can be deduced that either of positive or negative association between joint audit and earnings management is possible. However, judging from the concentration degree of the Nigerian audit market environment, joint audit might appear to be a rare opportunity for non-big four audit firms to compete with the big-four audit firms. As such, there is very compelling tendency that such rare opportunity will be used to make a point, hence we expect a negative association between joint audit and earnings management.

3. METHODOLOGY

The study adopted the balanced panel data methodology design covering the period from 2012 to 2018 was employed. Accordingly, pooled historical data were collected and analyzed, using quantitative approach with a view to obtaining statistical evidence, on which basis inferences are drawn. Consumer-goods manufacturing firms whose stocks are listed on the floor of the Nigerian

Stock Exchange (NSE) as at 3rd of October, 2019 constitutes the population of this study. A total of 26 listed consumer goods firms served as the study population. Firms whose data history does not fall within the study period were not included. Since the population is finite and relatively small, a census approach is adopted instead of taking a sample. Thus 26 firms were sampled for the study. Secondary data were obtained from the published annual reports, databases of the Nigerian Stock Exchange (NSE). The analytical procedure is carried out in two distinct phases, namely univariate (or descriptive) analysis and bivariate analysis. In line with Dechow's et al. (2012) recommendation that controlling the determinants will lead to stronger findings in future studies of earnings management because they help mitigate the impact of omitted variables on earnings management, thus, FSIZE size (*FSIZE*) is used as moderating variable in this study. Some researchers argue that the larger the firm size, the higher the likelihood that the managers will engage in earnings management. Watt and Zimmerman (1990) found that larger FSIZE are associated with higher political costs, and that there is thus a higher incentive to manipulate reported earnings. Following in the footsteps of Rusmin (2010) and Uwuigbe et al. (2015), firm size is measured as the natural logarithm of total assets.

4. RESULTS AND ANALYSIS

Descriptive Analysis

This is operationalized in relation to the magnitude of resources at the disposal of a firm, which can be deployed in furtherance of its objective. It is operationalized as natural logarithm of total assets.

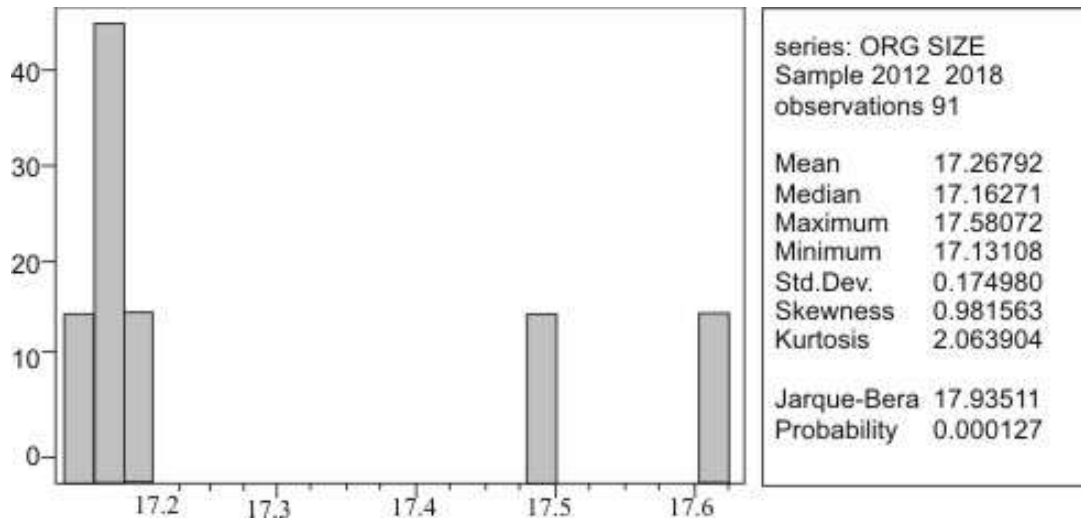


Figure 4.4: Sizes of Firms in the consumer-goods manufacturing sub-sector of the Nigerian Manufacturing Firms

Source: Researchers desk

Data from 13 listed consumer-goods manufacturing firms, totaling 91 points were observed and the result is presented in figure 6. According to the results, the average size of the surveyed firms in terms of logarithms of total assets is 17.27. Furthermore, the statistic indicates that on the average, the firms are evenly sized, as point out by the standard deviation. However, majority of the firms are fairly below the average size, suggesting that relatively very few firms are overly bigger than the rest, thus constituting outliers. This fact is alluded to by the positive skewness (0.9816). What the descriptive statistics suggests therefore, is the notion that the firms are fairly at similar levels of operational scales and are thus operating at almost similar scales of economy.

Statistical Test of Hypothesis

For the purpose of this study, Pearson's Product Moment Correlation (PPMC) technique was used. The analyses were made in two phases. First the unrestricted Correlation was computed and the results are presented in table 4.1 as Correlation Matrix.

Table 4.1: Correlation Matrix

Correlation Probability Observations	REST	DISC	ASIZE	JOINT	TENURE
REST	1.000000 91				
DISC	0.407753 0.0001 91	1.000000 ----- 91		«	
ASIZE	-0.335454 0.0012 91	-0.498589 0.0000 91	1.000000 ----- 91		

JOINT	-0.159040 0.1321 91	0.065625 0.5366 91	- 1.000000 0.0001 91	91		
TENURE	0.078712 0.4583 91	0.055352 0.6023 91	- 0.150220 0.0062 91	0.1552 91	1.000000 91	
FSIZE	0.095669 0.3670 91	0.176108 0.0950 91	- 0.213341 0.0000 91	0.0423 91	0.272269 0.0090 91	91

Key:

<i>REST</i>	<i>Earnings restatement</i>
<i>DISC</i>	<i>Discretionary Accrual</i>
<i>ASIZE</i>	<i>Audit Firm Size</i>
<i>JOINT</i>	<i>Joint Audit</i>
<i>TENURE</i>	<i>Auditor's tenure</i>
<i>FSIZE</i>	<i>Firm Size</i>

This phase of the analysis is crucially important because it offers a sneak peek of potentially distortionary effect of multi-collinearity. Multi-collinearity is a phenomenon in which one predictor variable in a multiple regression model can be linearly predicted from the others with a substantial degree of accuracy (Wikipedia, 2019). The correlate on matrix can be used to detect the manifestation of multi-collinearity. According to Gujarati (2004), if the paired variables have coefficient of 0.8 and above, then there is a strong indication of the existence of excess correlation. Furthermore, the correlation matrix as presented in table 4.2 is important because it is instrumental in evaluating the moderating roles of the moderator variable. It gives insight into the interaction levels between the moderator variable and each of the variables at a glance. In order to control for moderating influence of contextual factor (represented by FSIZE Formal size), the term *FSIZE* is included in the model along with its interactions with the explanatory variables:

$$DISC = \lambda_0 + \lambda_1 TENURE + \lambda_2 JOINT + \lambda_3 ASIZE + \lambda_4 FSIZE + \lambda_5 TENURE * FSIZE + \lambda_6 JOINT * FSIZE + \lambda_7 ASIZE * FSIZE + U$$

With the moderator variable included, its interactions with the independent variables are then evaluated for statistical significance based on the established 5% significance threshold. The bases for evaluating the moderating impact of the moderator variable are similar to the rejection criteria set above. To facilitate easy comparison, the results of each of the two equations are presented in one compact

Table 4.2: Regression Results of DISC under two distinct conditions of moderated and un-Moderated fixed effect models

Variable	Un-moderated FEM			Moderated FEM		
	Coeff	t-Stats	Prob.	Coeff	t-Stats	Prob.

JOINT	-0.1049	-28.2888	0.0000	1.2197	2.01622	0.0476
TENURE	-0.245	-11.3045	0.0000	0.2977	0.83538	0.4063
ASIZE	-0.1501	-44.3027	0.0000	1.1888	2.47201	0.0158
FSIZE				0.0724	2.54398	0.0131
FSIZE*JOINT				-0.76	-2.17965	0.0326
FSIZE*TENURE				-0.019	-0.91604	0.3627
FSIZE*ASIZE				-0.077	-2.79613	0.0066
C.	0.2197	73.9552	0.0000	-1.039	-2.09389	0.0398
R-squared		0.9720			0.9720	
Adjusted R-square		0.9665			0.9645	
F-statistic		173.8435			129.6524	
Prob (F-statistics)		0.0000			0.0000	
Mean depvar		0.2779			0.1857	
S.D depvar		0.3018			0.1913	
D.W stat		1.6782			1.8558	

On the basis of coefficient of determination (i.e. adjusted R^2), the “*Unmoderated*” equation seems to have slightly better explanatory capacity. However, the moderator variable and some of the interaction terms are significant, meaning that *FSIZE* is having some confounding relationships with some of the explanatory as well as with the explained variables. This implies that the results of “*Unmoderated*” equation are not reliable, thus leaving the “*Moderated*” equation as the better suited models of discretionary accruals. Contrastingly however, all variables are positively related with discretionary accruals.

Hypothesis Testing for the influence of Firm size on audit quality and earnings management

Given the respective equation models:

$$DISC = \lambda_0 + \lambda_1 TENURE + \lambda_2 JOINT + \lambda_3 ASIZE + \lambda_4 FSIZE + \lambda_5 TENURE * FSIZE +$$

$$\lambda_6 JOINT * FSIZE + \lambda_7 ASIZE * FSIZE + U.$$

$$REST = \beta_0 + \beta_1 TENURE + \beta_2 JOINT + \beta_3 ASIZE + \beta_4 FSIZE + \beta_5 TENURE * FSIZE +$$

$$\beta_6 JOINT * FSIZE + \beta_7 ASIZE * FSIZE + \varepsilon.$$

To confirm a significant moderating effect of *FSIZE* (*Firm Size*) on the *DISC* and audit quality, at least one of the probability value of the associated t-statistics of λ_5 , λ_6 and λ_7 must be less than 5%, which implies either:

$$P\text{-value of } \lambda_5 < 0.05; \text{ or } P\text{-value of } \lambda_6 < 0.05; \text{ or } P\text{-value of } \lambda_7 < 0.05$$

Similarly, to confirm a significant moderating effect of *FSIZE* on the relationship between *REST* and audit quality, at least one of the probability value of the associated Wald-statistics of β_5 , β_6 and β_7 must be less than 5%, which also implies either:

P-value of $\beta_5 < 0.05$; or P-value of $\beta_6 < 0.05$; or P-value of $\beta_7 < 0.05$

Since *REST* and *DISC* are respective proxies of earnings management, if *FSIZE* is confirmed to moderate the relationship between either of *REST* or *DISC* with audit quality, then the moderating capacity of *FSIZE* is deemed to have been confirmed. Result:

P-value of $\beta_5 = 0.3627 > 0.05$

P-value of $\beta_6 = 0.0326 < 0.05$

P-value of $\beta_7 = 0.0066 < 0.05$

P-value of $\beta_5 = 0.5725 > 0.05$;

P-value of $\beta_6 = 0.2837 > 0.05$;

P-value of $\beta_7 = 0.1796 > 0.05$

Therefore, with respect to null H_{01} , we reject the null hypothesis and conclude that *Size of listed consumer-goods manufacturing firms in Nigeria significantly moderate the relationship between their earnings management practices and audit quality.*

Summary and Discussion of findings

Table 4.3: Summary of Findings

	Hypothesis	Bivariate	Multivariate
H₀₁:	Firm size of Listed consumer goods manufacturing Firms in Nigeria does not significantly moderate the relationship between their earnings management practices and audit quality.	Rejected	Rejected

Discussion of Findings

Moderating Influence of Firm Size

The question of whether Firm size significantly moderates the relationship between audit quality and earnings management or not, depends on the prism which earnings management is viewed from. For the purpose of the current study, earnings management is either viewed from earnings restatement perspective or from discretionary accrual perspective. When earnings management is viewed from the earnings restatement perspective, Firm size fails to have significant moderating influence on the relationship between audit quality and earnings management. On the other hand, when viewed from the perspective of discretionary accrual, firm size exerts significant moderating influence on the relationship between audit quality and earnings management. The size of a firm can influence earnings management practice of that firm in many ways. Crucial attributes of a large firm are its diverse capabilities, the abilities to exploit economies of scale and scope and the formalization of procedures. These characteristics, by making the implementation of operations more effective, allow larger firms to generate superior earnings relative to smaller firms (Amato & Wilder, 1990). Also, there is consensus in academic literature that economies of scale and synergies arise up to a certain level of size. Beyond that level, Firms

become too complex to manage and diseconomies of scale arise. Like any other firm, manufacturing firm's earnings is significantly influenced by economies of scale at the firm's disposal, (Muriu, 2011).

However, firm size variability does not influence every aspect of the Firm's attributes. Some aspects of Firms' characteristics are influenced by the size of the Firm whereas some other aspects do not respond to size variability. As was indicated by the Firm size analyses, earnings restatement of consumer-goods manufacturing firms does not respond to Firm size attribute while their discretionary accrual practices significantly depend on their size attributes. This is evident in the statistical significance of coefficients of Firm size variable and its interactions with audit quality dimensions in the respective regression equations of earnings restatement and discretionary accrual. Whereas at least one of the coefficients is significant in discretionary accrual equation, none is significant in that of earnings restatement equation.

5. CONCLUSION AND RECOMMENDATION

In view of the findings, the study concludes that firm size is a significant moderator between the use of audit quality and earnings management, however it depends of the variable of earnings management used. On the other hand, if auditees' size variability is controlled, it is the conclusion of this study that firms audited by a Big 4 firm are associated with a greater magnitude of discretionary accruals and, as such, are more prone to manipulation of results. This study also reveals that the larger the size of listed consumer-goods firms, the greater the practice of earnings management. The study recommends that:

1. To ensure positive significant relationship with earnings management, the firms should voluntarily engage two audit firms in all to other to allow for effective comparison, so that hidden information in financial statement could be dictated or revealed.
2. The total assets as a dimension of firm size should be represented faithfully, so as to positively moderate its influence on audit quality indicators and earnings management.

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