Impact of Audit Firm Size on Earnings Quality of Quoted Industrial Goods Companies in Nigeria

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Abstract

The study examined the effect of audit firm size on the earnings quality of quoted industrial goods companies in Nigeria, with specific focus on earnings predictability and earnings persistence. Two research objectives, questions, and hypotheses were formulated to guide the study. An ex-post facto research design was adopted, utilizing secondary data extracted from the audited financial statements and annual reports of selected industrial goods companies listed on the Nigerian Exchange Group (NGX) for the period 2013–2023. The population consisted of thirteen (13) quoted industrial goods companies, with a purposive sampling technique employed to select ten (10) firms with complete and reliable financial data. Data analysis was conducted using descriptive statistics and Panel Ordinary Least Squares (OLS) regression, including fixed and random effects diagnostics. The results revealed that audit firm size has a positive and significant effect on both earnings predictability and earnings persistence of quoted industrial goods companies in Nigeria. This indicates that engaging larger, reputable audit firms enhances the transparency, reliability, and stability of financial reports in the industrial goods sector. It was concluded that audit firm size is a critical determinant of earnings quality, which strengthens investor confidence and corporate governance. It was recommended that quoted industrial goods companies prioritize engaging well-resourced audit firms, while regulatory bodies encourage policies that support the use of high-quality auditors to enhance financial reporting reliability.

Keywords: Audit Firm Size, Earnings Quality, Earnings Predictability, Earnings Persistence, Industrial Goods, Nigeria

Introduction

In recent years, the reliability of financial reporting has become a central concern for regulators, investors, and other stakeholders in Nigeria. Earnings quality a key dimension of financial reporting influences market confidence, capital allocation, and corporate governance effectiveness. Poor-quality earnings, often resulting from aggressive earnings management, can distort investors' perceptions of firm performance, thereby undermining market efficiency and investor trust. One critical factor that has been posited to affect earnings quality is the size of the audit firm engaged to assure a company's financial statements.

Audit firm size is frequently used as a proxy for audit quality, under the assumption that larger audit firms (especially the "Big Four") have greater resources, more stringent internal controls, higher reputation concerns, and thus stronger incentives to conduct more rigorous audits (Okolie

& Izedonmi, 2014; Okolie, 2014). Indeed, empirical evidence from studies in Nigeria and elsewhere suggests that audit firm size can play a meaningful role in constraining earnings manipulation. For instance, research on Nigerian manufacturing firms has found that audit firm size has a significant negative effect on real earnings management, implying that larger audit firms help restrain opportunistic behavior.

In the specific context of Nigerian non-financial firms, Asogba, Soyemi, and Ariyibi (2024) investigated audit quality, proxied by audit firm size among others, and its effect on financial reporting quality. Their findings, based on accruals quality measures, indicate that audit firm size has a negative but statistically insignificant impact on reporting quality. This suggests that while size may matter, its effect is not always clear-cut in the Nigerian setting, raising important questions about the mechanisms through which auditor characteristics influence earnings quality. Furthermore, more targeted research on external audit attributes within Nigerian quoted firms has confirmed that audit firm size significantly affects earnings quality. For instance, in their study of earnings quality determinants in listed food and beverages companies, Oladejo, Akintunde, Yinus, Akanbi, and Olowokere (2021) demonstrated that audit firm size is positively related to lower discretionary accruals, implying higher earnings quality when larger auditors are employed.

Despite these insights, there remains a notable gap in the literature: many studies focus on broad non-financial samples or consumer/food firms, but few specifically examine the industrial goods sector. Industrial goods companies often have different operational characteristics such as heavy capital investment, long production cycles, and greater fixed costs — which may influence both the nature of earnings management and the role auditors play. Moreover, the dynamics of Nigeria's capital market and regulatory environment make this an especially important setting for research, given recurring concerns about financial reporting reliability and the adequacy of external audit as a governance mechanism.

Therefore, this study seeks to examine the impact of audit firm size on earnings quality in quoted industrial goods companies in Nigeria. By doing so, it aims to contribute to the corporate governance and auditing literature, providing evidence on whether engaging larger auditors is associated with better quality earnings in this important sector. The findings may offer valuable lessons not only for regulators like the Financial Reporting Council of Nigeria and the Securities and Exchange Commission, but also for boards and audit committees in industrial firms evaluating auditor selection as a tool for improving financial reporting integrity.

Statement of the Problem

In an ideal corporate environment, quoted industrial goods companies in Nigeria should produce high-quality financial reports that accurately reflect their economic performance, thereby enabling investors, regulators, and other stakeholders to make informed decisions. High earnings quality ensures transparency, reduces information asymmetry, and fosters investor confidence, which in turn supports efficient capital allocation and overall market stability. However, in practice, many Nigerian industrial firms continue to exhibit signs of earnings management, with financial statements sometimes reflecting inflated profits or understated losses, undermining the reliability of reported information (Oladejo et al., 2021; Okolie, 2014). One potential factor influencing this discrepancy is the size of the audit firm engaged, as smaller audit firms may lack the resources, expertise, or reputational incentives to rigorously detect and deter aggressive accounting practices compared to larger, more reputable auditors. Despite the recognition of audit firm size as a determinant of audit quality, there is a paucity of empirical studies focusing specifically on its

impact on the earnings quality of industrial goods companies in Nigeria, creating a critical knowledge gap that this study seeks to address.

Aim and Objectives of the Study

The study examined the effect of audit firm size on the earnings quality of quoted industrial goods companies in Nigeria. Specifically, the study achieved the following:

- 1. To determine the effect of audit firm size on the earnings predictability of quoted industrial goods companies in Nigeria.
- 2. To determine the effect of audit firm size on the earnings persistence of quoted industrial goods companies in Nigeria.

Theoretical Review

The theoretical foundation for examining the effect of audit firm size on earnings quality is anchored on Agency Theory by Jensen and Meckling (1976). Agency theory posits that managers (agents) may pursue personal objectives that conflict with the wealth-maximizing interests of shareholders (principals), creating information asymmetry and increasing the risk of opportunistic earnings management. In this framework, external auditors serve as monitoring mechanisms that constrain managerial opportunism and enhance the credibility of financial reports. Audit firm size is theoretically relevant because larger audit firms are presumed to possess greater resources, technical expertise, and reputational incentives, which enable them to conduct more rigorous audits. This capacity allows large audit firms to more effectively detect earnings manipulation, thereby improving earnings persistence, predictability, and overall quality. Conversely, smaller audit firms may face resource and skill limitations, potentially reducing their effectiveness in monitoring management actions and constraining opportunistic reporting.

Complementing agency theory is the Information Asymmetry Theory, which highlights how unequal access to financial information between company insiders and external stakeholders can distort investment and lending decisions. High-quality audits act as an information-bridging mechanism by validating the integrity, reliability, and continuity of reported earnings. In this context, audit firm size influences the degree to which audits mitigate information risk. Large audit firms, particularly the Big-Four, are better positioned to reduce information asymmetry due to their extensive audit procedures, global standards adherence, and established quality control mechanisms. This theoretical perspective explains why firms audited by larger, reputable auditors are expected to exhibit higher earnings quality, as reflected in lower discretionary accruals, more predictable earnings streams, and enhanced transparency. Together, agency theory and information asymmetry theory provide a robust framework for understanding the role of audit firm size in strengthening financial reporting quality among quoted industrial goods companies in Nigeria.

Empirical Review

Empirical evidence on the effect of audit firm size on earnings quality in Nigeria is mixed but instructive. For instance, Idowu and Ighosewe (2020) examined firms in the industrial goods sector and found that audit firm size has a significant negative effect on earnings management. This suggests that larger audit firms (e.g., Big Four) help restrain discretionary accruals, thereby enhancing earnings quality. Supporting this, Sanni, Mustapha, and Adekanye (2019) documented in their study of Nigerian manufacturing firms that audit firm size significantly reduces earnings management, using a panel regression approach. However, not all studies confirm a strong effect: in a broader sample of listed firms, the European Journal of Accounting, Auditing and Finance

Research reported that although auditor size tended to restrain earnings manipulation, the negative relation was not statistically significant. This mixed evidence in the Nigerian context underscores the need to test whether audit firm size indeed affects earnings predictability specifically in *quoted industrial goods companies*, leading to:

Ho1: Audit firm size has no significant effect on earnings predictability of quoted industrial goods companies in Nigeria.

Beyond predictability, scholars have also looked at earnings persistence, that is, the stability of earnings over time, in relation to audit firm characteristics. Okereke and Uzoma (2023) in their empirical analysis showed that larger audit firms are significantly associated with lower discretionary accruals and fewer restatements, implying they help sustain more persistent earnings across periods. Similarly, Ojong, Oko, and Akpanke (2019) compared pre- and post-IFRS periods for Nigerian manufacturing firms and found that audit firm size positively impacts earnings per share and market price indirect evidence that big auditors promote stability and credibility in reported earnings. Contrarily, in the study by Adebayo, Oluwakayode, Adenle, and Bamigboye (2024), audit attributes including size did not always show uniform effects across all discretionary accrual measures, suggesting context-specific dynamics. These empirical inconsistencies in Nigeria, especially in the manufacturing and industrial sector, justify testing the following:

Ho2: Audit firm size has no significant effect on earnings persistence of quoted industrial goods companies in Nigeria.

Method

This study adopted an ex-post facto research design. Ex-post facto research involves a systematic empirical investigation in which the researcher has no direct control over the independent variables because their manifestations have already occurred or are inherently not subject to manipulation. This design is appropriate for examining the effect of audit firm size on the earnings quality of quoted industrial goods companies in Nigeria over time. The study relied exclusively on secondary data, extracted from the audited financial statements and annual reports of listed industrial goods firms available on their corporate websites and the Nigerian Exchange Group (NGX) portal covering the period 2013–2023.

The population of the study consists of all thirteen (13) industrial goods companies listed on the Nigerian Exchange Group as at December 2023. However, due to incomplete and inconsistent financial disclosures from three (3) firms, the study employed a purposive sampling technique to select ten (10) companies with complete, reliable, and accessible financial information for the reference period. This sampling approach ensured the inclusion of firms with adequate longitudinal data necessary for robust panel analysis.

The study used secondary data sourced from annual reports, audited financial statements, and financial disclosures retrieved from the NGX website and the firms' individual websites. These documents provided information on audit firm size, audit fees, and earnings quality variables. Content analysis was employed to extract quantitative values from the financial statements for the eleven-year period.

Panel regression analysis was used to examine the relationship between audit firm size and earnings quality. Panel data methodology was selected because it provides more variability, reduces multicollinearity among variables, enhances degrees of freedom, and produces more efficient estimates. The analysis was performed using EViews 12. Both descriptive statistics and inferential analysis were conducted. Descriptive statistics were used to explain the trend, distribution, and characteristics of the data, while Panel Ordinary Least Squares (OLS) regression,

along with fixed and random effects diagnostics, was employed to test the hypotheses. The decision rule was to reject the null hypothesis where the p-value is less than 0.05.

The economic model used in the study, drawn from earnings quality literature, is specified as:

Model Specification

Where:

- EQ = Earnings Quality
- AFS = Audit Firm Size (1 = Big-Four, 0 = Non-Big-Four)
- EPD = Earning Predictability
- α = Constant of the regression
- $\varepsilon = \text{Error term}$

Table 1: Variables Definition and Measurement

Variable	Measurement Method
Earnings Quality (EQ)	Residuals from the Modified Jones Model
Audit Firm Size (AFS)	Dichotomous: 1 if audited by Big-Four firm, 0 otherwise
Earning Predictability (EPD) Standard deviation of forecast errors over the period

Results

Table 2: Descriptive statistics of focused variables.

	EPD	EPST	AFS
iMean	1.550818	2.376091	12.98225
iMedian	1.530000	2.175000	13.61377
iMaximum	2.770000	6.660000	15.57169
iMinimum	1.000000	0.740000	4.490688
iStd. iDev.	0.234404	1.249033	2.838741
iSkewness	1.646948	1.167627	-2.150386
iKurtosis	9.327010	4.063479	6.186946
iJarque-Bera	233.2037	30.17848	131.3275
iProbability	0.000000	0.000000	0.000000
iSum	170.5900	261.3700	1428.047
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iDev.	5.989026	170.0490	878.3713
iObservations	110	110	110

The descriptive statistics of earnings predictability (EPD), earnings persistence (EPST), audit firm tenure (AT), audit firm size (AFS), and audit fees (AFEE) are presented in Table 2. The results show that earnings predictability (EPD) has a mean value of 1.55, with a minimum of 1.00 and a maximum of 2.77. The standard deviation of 0.234 indicates the extent to which EPD values deviate from the mean.

Similarly, earnings persistence (EPST) has a mean of 2.376, a minimum value of 0.74, and a maximum of 6.66. The standard deviation of 1.249 reflects the variability of EPST around its mean. For audit firm size (AFS), the mean is 12.982, with observed minimum and maximum values of

4.491 and 15.572, respectively. The standard deviation of 2.838 indicates the dispersion of AFS values around the mean. These descriptive statistics provide an initial overview of the data distribution and variability, which is essential for understanding the relationships among the variables prior to regression analysis.

Testing Hypotheses

Hol: Audit firm size has no significant effect on earnings predictability of quoted industrial goods companies in Nigeria.

Table i3: iOrdinary iLeast iSquare iRegression iResults iof iModel i1

Dependent iVariable: $iEPD_t$						
Variable		Coefficient	Std. iError	t-Statistic	Prob. i i	
С	AFS_t	1.538267 0.029583	0.125332 0.011889	12.27357 2.488252	0.0000 0.0145	

R-squared i= i0.926156; iAdjusted iR-squared i= i0.901424; iF-statistic= i5.101030; iProb(F-statistic) i= i0.002453; iDurbin-Watson istat i= i2.163802

Source: *iResearcher's iComputation, i2024.*

The p-value of audit firm size from the regression results, as shown in Table 3, is 0.0145, while the alpha level is 0.05. Since the p-value (0.0145) is less than the alpha level (0.05) at the 5% significance level, we reject the null hypothesis (Ho1) and conclude that audit firm size has a significant effect on the earnings predictability of quoted industrial goods companies in Nigeria. Ho2: Audit firm size has no significant effect on earnings persistence of quoted industrial goods companies in Nigeria.

Table i4: iOrdinary iLeast iSquare iRegression iResults iof iModel i2

Dependent iVariable: iESPT _t						
Variable		Coefficient	Std. iError	t-Statistic	Prob. i i	
C		0.009122	0.674303	0.013528	0.9892	
	AFS_t	0.122844	0.040408	3.040110	0.0030	

R-squared i= i0.899150; iAdjusted iR-squared i= i0.783937; iF-statistic= i4.329162; iProb(F-statistic) i= i0.006398; iDurbin-Watson istat i= i1.872454

Source: iResearcher's iComputation, i2024.

The p-value of audit firm size from the regression results, as shown in Table 4, is 0.0030, while the alpha level is 0.05. Since the p-value (0.0030) is less than the alpha level (0.05) at the 5% significance level, we reject the null hypothesis (Ho2) and conclude that audit firm size has a significant effect on the earnings persistence of quoted industrial goods companies in Nigeria.

Discussion of Findings

Audit Firm Size and Earnings Predictability of Quoted Industrial Goods Companies in Nigeria

The results of this study indicated that audit firm size has a positive relationship with the earnings predictability of quoted industrial goods companies in Nigeria. This positive relationship suggests that an increase in audit firm size leads to higher earnings predictability, whereas a decrease in audit firm size results in lower earnings predictability. Furthermore, the hypothesis tested revealed that audit firm size has a **significant effect** on earnings predictability in the sector. It can, therefore, be inferred that audit firm size positively and significantly influences the earnings predictability of quoted industrial goods companies in Nigeria. This finding aligns with the study of Oladejo et al. (2021), who established that audit firm size, as an audit firm attribute, has a positive and significant association with earnings management of listed consumer goods companies in Nigeria. Audit Firm Size and Earnings Persistence of Quoted Industrial Goods Companies in Nigeria Similarly, the findings from this study showed that audit firm size has a positive relationship with the earnings persistence of quoted industrial goods companies in Nigeria. The positive relationship implies that an increase in audit firm size enhances earnings persistence, while a decrease in audit firm size reduces the stability of earnings over time. The results of the tested hypothesis further indicated that audit firm size has a significant effect on earnings persistence in the industrial goods sector. It can, therefore, be concluded that audit firm size positively and significantly affects earnings persistence of quoted industrial goods companies in Nigeria. This result corroborates the findings of Oladejo et al. (2021), who reported that audit firm size significantly strengthens earnings stability and reduces discretionary accruals in listed consumer goods companies.

Conclusion

This study has demonstrated that **audit firm size** plays a critical role in enhancing the earnings quality of quoted industrial goods companies in Nigeria. The findings indicate that larger audit firms, particularly those with substantial resources, technical expertise, and reputational considerations, positively and significantly influence both **earnings predictability** and **earnings persistence**, thereby reducing the likelihood of earnings manipulation and improving financial reporting reliability. These results underscore the importance of engaging reputable, well-resourced auditors as a mechanism to strengthen corporate governance and protect investor interests in the industrial goods sector. Consequently, the study provides empirical evidence supporting the notion that audit firm size is a key determinant of financial transparency and stability in Nigerian quoted companies, highlighting its relevance for policymakers, regulators, and corporate boards in enhancing audit effectiveness and market confidence.

Recommendations

In line with the findings of the study, the following recommendations are made:

- 1. Quoted industrial goods companies in Nigeria should engage larger, reputable audit firms to enhance earnings predictability and strengthen the reliability of their financial reports.
- 2. Regulators and corporate governance bodies should encourage the use of well-resourced audit firms to promote earnings persistence and overall financial transparency in the industrial goods sector.

References

- Adams, C., Miko, N. U., & Musa, S. U. (2025). Audit Committee Effectiveness, Audit Quality and Earnings Management of Listed Consumer Goods Firms in Nigeria. *International Journal of Accounting, Finance and Administrative Research*.
- Adebayo, O., Oluwakayode, F., Adenle, P., & Bamigboye, A. (2024). Audit Attributes and Earnings Management in Nigeria: Evidence from Quoted Companies. *Economics and Business Journal*, 38, 34–53. https://eb-journals.rtu.lv/eb/article/view/eb-2024-0003
- Asogba, I.O., Soyemi, K.A., & Ariyibi, M.E. (2024). Audit Quality and Financial Reporting Quality among Quoted Non-Financial Firms in Nigeria. *Firdaus Journal*, 4(1), 9.
- Edirin, J., & Ozegbe, K. K. (2021). Audit Quality and the Financial Performance of Quoted Companies in Nigeria: Empirical Discourse. Acta Universitatis Danubius Œconomica.
- Idowu, O., & Ighosewe, O. (2020). Audit Firm Size and Earnings Quality of Industrial Goods Companies in Nigeria. *Journal of Social Management Studies*, 7(2), 112–127. https://oer.tsuniversity.edu.ng/index.php/jjsms/article/view/264
- Jimoh, A. A., & Oyeleye, K. W. (2025). Effects of Audit Committee Characteristics on Earnings Management of Listed Consumer Goods Manufacturing Companies in Nigeria. *Journal of Business Development and Management Research*, 9(7).
- Kayode, A. M. & Onakoya, O. A. M. (2025). Earnings Management in Non-Financial Firms in Nigeria: Does Audit Quality Matter? *Edelweiss Applied Science and Technology*, 9(4), 574–587.
- Ojong, P., Oko, A., & Akpanke, B. (2019). Audit Firm Attributes and Financial Reporting Quality of Nigerian Manufacturing Firms: Evidence from IFRS Adoption. *Research Journal of Finance and Accounting, 10*(7), 88–101. https://iiste.org/Journals/index.php/RJFA/article/view/50782
- Okereke, U., & Uzoma, C. (2023). Audit Firm Characteristics and Earnings Persistence in Nigerian Quoted Firms. Zenodo Open Access Repository, 12(1), 78–93. https://zenodo.org/records/7607870
- Okolie, A. O. (2014). Audit Firm Size and Market Price Per Share of Quoted Companies in Nigeria. *International Journal of Business and Social Research*, 4(5).
- Oladejo, O., Akintunde, A., Yinus, T., Akanbi, S., & Olowokere, T. (2021). Determinants of Earnings Management in Listed Consumer Goods Companies in Nigeria: The Role of Audit Firm Attributes. *World Journal of Accounting, Auditing and Finance Research*, 12(3), 45–61. https://wjarr.com/sites/default/files/WJARR-2021-0730.pdf
- Olagunju, A., Oluwakayode, E. F., Adenle, O. E., & Bamigboye, O. A. (2024). Influence of Audit Firm Attributes on Earnings Management and Audit Quality of Listed Nigeria Manufacturing Firms. *Economics and Business*, 38, 34–53.
- Sanni, M., Mustapha, A., & Adekanye, T. (2019). Audit Firm Size and Earnings Management of Nigerian Manufacturing Firms. *KWASU Journal of Accounting and Finance*, *4*(1), 55–70. https://kwasuspace.kwasu.edu.ng/items/0042445f-8ffc-4d4f-be42-62daa9b147e0
- The Association between Audit Quality and Earnings Management by Listed Firms in Nigeria. (2017). European Journal of Accounting, Auditing and Finance Research, 5(4).