AUDIT QUALITY INDICATORS AND FINANCIAL PERFORMANCE OF SELECTED QUOTED MANUFACTURING FIRMS IN NIGERIA

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Abstract

This study examines the impact of Audit Quality Indicators (AQIs) on the financial performance of selected quoted manufacturing firms in Nigeria over a five-year period: from 2019 to 2023. The research employs an ex post facto design and panel data analysis, focusing on 20 out of 41 listed manufacturing firms. The AQIs examined are: timing of audit execution; professional competence; audit tenure; and audit firm type. The findings reveal that these AQIs have minimal impact on the financial performance of the firms, as evidenced by their insignificance in affecting Return on Assets (ROA). Notably, the study shows that Big 4 audit firms do not have a significant advantage over non-Big 4 firms in terms of financial performance. Based on these results, the study recommends enhancing audit quality by selecting reputable audit firms, incorporating a broader range of performance indicators, and ensuring continuous professional development for auditors. It also suggests that government agencies should update regulatory frameworks and support research initiatives. Additionally, professional bodies should focus on improving standards, offering training, and funding research into advanced auditing techniques. Lastly, investors and the public are encouraged to demand greater transparency and high standards, fostering a culture of accountability that can improve both audit quality and financial performance.

Keywords: Audit Quality, Audit Quality Indicators, Financial Performance

1. INTRODUCTION

Organisations are established with specific objectives, with profit maximization being a key goal for private firms. Financial reporting serves as a crucial mechanism for corporate transparency, providing stakeholders with relevant information for decision-making. However, ensuring the credibility of financial statements requires an effective audit process, which assesses compliance with statutory legislation and international auditing standards (Soyemi, Tiamiyu & Omale, 2022). A high-quality audit is essential for reducing financial misstatements and fraud while enhancing internal controls, thereby strengthening corporate accountability and governance structures (Ehiedu & Toria, 2022). High-quality audits provide assurance to investors, creditors, and regulators, fostering confidence in financial reports and mitigating risks associated with financial misrepresentation (Ugwu, Aikpitanyi & Idemudia, 2020).

Audit quality indicators (AQIs) have emerged as important tools for evaluating the effectiveness of audit engagements. AQIs measure key aspects such as audit firm type, auditor tenure, professional competence, and the timing of audit execution (Satyawan, 2018). These indicators help assess an audit's ability to detect and prevent financial irregularities, thereby enhancing. This study seeks to address these gaps by examining the relationship between AQIs and financial performance in Nigeria's manufacturing sector. Manufacturing firms are integral to economic growth, yet weak audit practices and financial misstatements remain prevalent concerns. This research evaluates how AQIs influence financial stability, corporate governance, and operational efficiency in this sector, providing empirical evidence that can inform policy decisions and improve auditing standards. The study is anchored in Agency Theory (Jensen & Meckling, 1976), which explains how external audits mitigate agency conflicts by ensuring financial transparency, thereby aligning managerial actions with shareholder interests. Additionally, Stakeholder Theory (Freeman, 1984) supports the argument that reliable audits benefit not just shareholders but all stakeholders, including creditors, employees, and regulatory bodies.

The significance of this study lies in its potential to enhance financial reporting standards, regulatory compliance, and corporate governance in Nigeria. Given the country's evolving economic landscape, understanding how AQIs impact financial performance can inform strategies to strengthen corporate accountability and investor confidence. The study’s findings will provide practical recommendations for regulatory bodies such as the Financial Reporting Council of Nigeria (FRCN) and the Securities and Exchange Commission (SEC) to improve audit regulations and enforcement. Furthermore, this research contributes to knowledge by offering a sector-specific analysis of audit quality in manufacturing firms, which has received limited attention in previous literature. By integrating theoretical perspectives and empirical evidence, this study advances the discourse on audit quality, financial performance, and corporate governance in emerging economies.

2. Empirical Review and Theoretical Review

Several studies have examined how audit-related factors influence financial performance across various sectors and regions. McMillan (2021), focusing on UK-listed companies, found that the timing of audit execution significantly affects firm performance, suggesting that timely audits contribute to better financial outcomes. Similarly, Kuffor (2022) employed a descriptive cross-sectional design and revealed a strong link between timely audits and enhanced financial performance, recommending that firms strengthen their internal audit functions to improve efficiency. In terms of professional competence, Skender (2022) provided evidence from the

Kosovo insurance sector, indicating that the expertise of audit professionals positively impacts financial performance, particularly through return on assets. Ian (2019) further supported this view, showing that auditor competence plays a vital role in driving firm performance. He advocated for regular rotation of audit firms to leverage diverse audit expertise and emphasized the importance of prioritizing audit quality over cost in auditor selection.

Moreover, the impact of audit tenure and audit firm type on audit quality and financial performance has attracted considerable attention. Segun and Ebipanipre (2013), using data from Nigeria, identified a negative—though not statistically significant—relationship between audit tenure and audit quality, raising concerns for regulators in developing countries. In contrast, Patrick and Henning (2013) found no significant effect of audit tenure on audit quality in German firms, while Quick and Wiemann (2011) observed that longer auditor tenures could enhance audit quality, challenging the idea of mandatory firm rotation. Concerning audit firm type, evidence consistently shows that companies audited by Big Four firms—Deloitte, PwC, EY, and KPMG—tend to report better financial performance. Studies by Egbunike and Okoye (2020), Okolie (2021), and Nwankwo & Ibegbunam (2023) highlight that the Big Four's robust methodologies, advanced technologies, and credibility foster investor confidence and improve reporting accuracy. Conversely, non-Big Four firms, while often more cost-effective, may lack the resources needed to deliver audits of similar quality (Ojo & Ajibolade, 2022), reinforcing the regulatory emphasis on high-standard audits (Adeyemi & Fagbemi, 2020).

Agency theory was introduced by Jensen and Meckling (1976), it explains the inherent conflicts within the principal-agent relationship, where divergent interests, asymmetric information, and differing risk preferences between shareholders and managers can lead to agency problems and associated costs. These agency costs such as monitoring expenses, bonding mechanisms, and residual losses can impair organisational performance. The theory underscores the need to align the interests of principals and agents through governance mechanisms, incentive structures, and transparency. Within the auditing context, agency theory provides a foundation for understanding the auditor's role in mitigating these conflicts by enhancing accountability, credibility, and the reliability of financial reporting, thereby serving the interests of shareholders and stakeholders alike.

Supporting this, information asymmetry theory, developed by Akerlof (1970), focuses on the disparities in access to relevant information among parties involved in decision-making processes. In the realm of auditing, this theory highlights the crucial role auditors play in bridging the information gap between corporate management and external stakeholders such as investors, lenders, and regulators. By ensuring transparency, verification, and disclosure, audits reduce uncertainty and improve decision quality. Similarly, stakeholder theory, as advanced by Freeman (1984), expands the scope of accountability beyond shareholders to encompass all parties affected by corporate actions. It reinforces the relevance of audit quality by advocating for inclusive, transparent practices that promote trust, engagement, and long-term value creation for a broad range of stakeholders within the corporate governance framework.

3. Materials and Methods

Research Design, Population, Sample Size and Sampling Technique

The study adopted an ex post facto research design method as well as a panel Data analysis is collecting data by administering from annual reports of selected firms from 2019-2023. The population consists of 41 selected quoted manufacturing firms in Nigeria out of which the study adopted 20 firms as sample size. This study adopted purposive sampling technique.

Table 1: Operationalisation and Measurement of Variables

Variables	Definition	Measurement	Source
Dependent			
ROA	It is a financial ratio that shows the percentage of profit a company earns from its overall resources.	Profit after tax/Total Asset	(Enekwe et al., 2023, p. 522)
Independent			
Timing of Audit Execution	It is the gap of audit time, that is, the time required by the auditor to produce audit reports on the performance of a firm's operation.	Audited report date -Fiscal date.	(Puspitasari, 2014)" (Situanti, 2019, p. 116)
Professional competence	Competence is related to the adequate education and experience of a public accountant that is relevant to the field of auditing and accounting.	Qualification of Lead Audit Engagement team. 3 score (FCA), 2 score(ACA), 1 score(No certification)	(Yolandra et al., 2020, p. 81)
Audit Tenure	audit-firm tenure is considered a determinant of effective and qualitative financial reporting, measured as the length of the audit-firm-client relationship as of the financial year-end covered by the audited financial statements	1' assigned for auditor tenure of more than 5 years, and '0' if otherwise."	(Baffa et al., 2023, p. 108)
Audit Firm Type	It is assumed that the size (Big 4 or Big 5, Big 6 ... Big 8, etc.) of audit firms suggests reputation, international affiliation, and integrity which are reflected in the audit report on the accounts of their clients	1" if the auditor firm is a Big 4, otherwise "0".	(Baffa et al., 2023, p. 105)
Log of Audit fee	Audit fees are an indication of how well the audit quality is produced"	The natural logarithm of the audit fee	(Ananda and Faisal, 2023, p. 215)

Source: Fieldwork 2025

4. Result and Discussion

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	100	.566	5.405	-5.75	53.662
Time	100	80.07	31.941	17	261
ProfCom	100	2.59	.494	2	3
Tenure	100	.86	.349	0	1
Type	100	.67	.473	0	1
Fee	100	36370.61	41098.369	200	261107

Source: Fieldwork 2025

The average Return on Assets (ROA) for the selected firms is 0.566, with a maximum of 53.662 and a minimum of -5.75, indicating significant variability in profitability. The average time to complete audits is approximately 80 days, with some firms exceeding the statutory period of 261 days. The average professional competence score is 2.59, suggesting that most engagement partners hold ACA or FCA designations. Additionally, 86% of the engagements adhered to the statutory audit tenure of 5 years. Notably, 67% of the firms were audited by Big 4 accounting firms, reflecting a strong preference for their services. This overview highlights key aspects of financial performance, timing of audit execution, professional competence, audit tenure, and audit firm type among the selected firms.

Panel Effect of the Model

Breusch and Pagan Lagrangian multiplier test for random effects

ROA[Year,t] = Xb + u[Year] + e[Year,t]

Estimated results:

	Var	Sd
ROA	29.21113	5.404733
E	29.82399	5.461134
U	0	0

chibar2(01) = 0.00

Prob > chibar2 = 1.0000

Source*:* Stata 15 Output (2024)

The Breusch and Pagan Lagrangian multiplier test indicates a probability value of 1.0000, showing that a random effects model is unnecessary. This implies the random effect variance is zero, simplifying the model to linear regression. The variance of Return on Assets (ROA) is 29.21113 with a standard deviation of 5.404733, while the error term variance is 29.82399 with a standard deviation of 5.461134. The random effect component's variance is zero, suggesting no contribution from random effects. As the p-value is 1.0000, the data is better modeled using a pooled OLS estimation

Random effect

Hausman (1978) specification test

	Coef.
Chi-square test value	2.419
P-value	.789

Breusch and Pagan test indicated that a pooled regression model might be suitable for the data. To validate this, a Hausman test was conducted to compare fixed and random effects models. The test yielded a chi-squared value of 2.419 and a high p-value of 0.789. This implies no significant difference between the models, justifying the use of random effects. Thus, the random effects model aligns with the pooled OLS recommendation.

Table 3: Linear regression

ROA	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Time	-.005	.018	-0.29	.769	-.04	.03	
ProfCom	-.887	1.178	-0.75	.453	-3.227	1.452	
Tenure	-.124	1.636	-0.08	.94	-3.371	3.124	
Type	-.609	1.518	-0.40	.689	-3.622	2.405	
log_fee	-.326	.442	-0.74	.463	-1.204	.552	
Constant	6.959	5.201	1.34	.184	-3.367	17.285	

Mean dependent var	0.566	SD dependent var	5.405
R-squared	0.030	Number of obs	100
F-test	0.579	Prob > F	0.716
Akaike crit. (AIC)	629.205	Bayesian crit. (BIC)	644.836

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

Source: Stata 15 Output (2024)

The regression analysis in Table 4.6 examines variables like Audit Time execution, Professional Competence, Audit Tenure, and Audit Type, along with the control variable Log of Audit Fees, impacting ROA. The F-statistic is 0.579 with a p-value of 0.716, indicating statistical insignificance. The R-squared value of 0.030 shows that the model explains only 3% of ROA variation, suggesting a minimal impact. None of the tested variables significantly affect ROA, as their p-values exceed the 0.05 threshold. This implies that other unexamined factors might influence ROA more substantially.

5. Discussion and Recommendations

This study examined the impact of audit quality indicators: timing of audit execution, professional competence, audit tenure, and audit firm type on the financial performance of selected quoted manufacturing firms in Nigeria. Contrary to some prior findings, the study revealed that timing of audit execution does not significantly affect financial performance, supporting the view that timeliness alone may not be a sufficient measure of audit effectiveness (Rahardjo, 2017; Panjaitan et al., 2016). Similarly, the results showed that professional competence has no significant impact on financial performance, aligning with Alzeban (2020), who argues that competence does not always translate into improved financial outcomes. Furthermore, both audit tenure and audit firm type were found to have no statistically significant effects on firm performance. The study also found no significant difference in the financial performance of firms audited by Big 4 and non-Big 4 firms, challenging prior assertions in the literature (Zureigat et al., 2021). These inconsistencies highlight the contextual and industry-specific dynamics that may moderate the role of audit quality indicators in emerging markets like Nigeria.

Given these findings, it is imperative for corporate management, regulators, and professional bodies to re-evaluate their strategies for enhancing audit quality. Firms should prioritize developing internal mechanisms that support continuous monitoring of audit effectiveness and adopt “a broader set of financial metrics beyond Return on Assets” to capture performance holistically. Regulatory agencies should update and enforce audit guidelines tailored to reflect the complex nature of audit quality determinants in the Nigerian context, while also funding empirical research on the subject. Professional accountancy bodies must also facilitate “ongoing education, certification, and methodological innovation” Including modern tools such as Structural Equation Modeling and Machine Learning for auditors to remain effective in a rapidly evolving environment. Finally, the involvement of stakeholders such as investors and the public is crucial in demanding transparent, accountable, and high-integrity audit practices. Such a collective effort will contribute to fostering a culture of audit excellence and sustained financial health in Nigeria’s manufacturing sector.

REFERENCES

Alzeban, A. (2020). The relationship between the audit committee, internal audit and firm performance. *Journal of Applied Accounting Research. h*ttps://doi.org/10.1108/JAAR-03-2019-0054

Ananda, C., & Faisal, F. (2023). Audit fees, audit tenure, auditor industry specialization, audit firm size, and audit quality: Evidence from Indonesian listed companies. *Jurnal Dinamika Akuntansi Dan Bisnis***,** 10(2), Article 2. https://doi.org/10.24815/jdab.v10i2.27750

Andrade, C. (2021). The inconvenient truth about convenience and purposive samples. Indian *Journal of Psychological Medicine,* 43(1), 86–88. https://doi.org/10.1177/0253717620977000

Baffa, A. M., Lasisi, I. O., & Ojo, T. C. (2023). Auditor tenure, audit firm size and value relevance of accounting information of quoted companies in Nigeria. *European Journal of Accounting, Auditing and Finance Research,* 11(7), 101–116. https://doi.org/10.37745/ejaafr.2013/vol11n7101116

Brooks, L. Z. (2022). Does audit firm tenure enhance firm value? Closing the expectation gap through corporate social responsibility. **Managerial Auditing Journal**. https://doi.org/10.1108/maj-11-2020-2902

Cho, M., Kwon, S. Y., & Krishnan, G. V. (2021). Audit fee lowballing: Determinants, recovery, and future audit quality. *Journal of Accounting and Public Policy*, 40(4), 106787. https://doi.org/10.1016/j.jaccpubpol.2020.106787

Enekwe, C. I., Ayogu, S. E., & Bolaji, A. D. (2023). Effect of non-current assets on the financial performance of manufacturing firms in Nigeria. *International Journal of Academic Research in Accounting, Finance and Management Sciences,* 13(2), 519–529.

Evani, E. S., Susilowati, D., & Kusumastati, W. W. (2022). The influence of company performance on audit delay with public accounting firm quality as the moderating variable. *Soedirman Accounting, Auditing and Public Sector Journal (SAAP)*, 1(2), Article 2. https://doi.org/10.32424/1.saap.2022.1.2.8049

Kamarudin, K. A., Ismail, W. A. W., & Ariff, A. M. (2021). Auditor tenure, investor protection and accounting quality: International evidence. *Accounting Research Journal*. https://doi.org/10.1108/ARJ-07-2020-0179

Kamran, M. R., Shami, M. Z., Khan, A., & Hussain, M. (2023). Firm performance: An analysis of financial policy and audit quality in Pakistan. *Journal of Advances in Finance and Economics*, 9(4). https://doi.org/10.26710/jafee.v9i4.2792

Kirana, G. A. M. I., & Ramantha, W. (2020). The effect of auditor rotation, time pressure, and audit tenure on audit quality with auditor specialization as a moderation variable (empirical study of manufacturing companies listed on the Indonesia stock exchange in 2014-2018). *International Research Journal of Management, IT and Social Sciences*. https://api.semanticscholar.org/CorpusID:226742657

Lai, T. T. T., & Pham, D. H. (2020, January). The quality of audit services: An assessment from FDI clients in Vietnam. *In Growing Science*, 1071–1076), https://doi.org/10.5267/j.ac.2020.7.012

Lestari, N., & Aeni, N. (2019). The effect of audit quality and earnings management on firm performance. https://doi.org/10.2991/ICAESS-19.2019.7

Listed Companies—Nigerian Exchange Limited. (2020, September 1). https://ngxgroup.com/exchange/trade/equities/listed-companies/

López, M. (2023). The effect of sampling mode on response rate and bias in elite surveys. *Quality & Quantity*, 57(2), 1303–1319. https://doi.org/10.1007/s11135-022-01406-9

Louis, R. R., Sulaiman, N. A., & Zakaria, Z. (2022). A preliminary study on auditors' performance attributes – perceptions from accounting firm practitioners. *Asian Journal of Accounting Perspectives*. https://doi.org/10.22452/ajap.vol15no2.1

Najaf Karami, & Mohammadvand, J. (2016). The relationship among financial and non-financial characteristics and duration of implementation and completion of the audit of listed companies in Tehran Stock Exchange. https://doi.org/10.5281/ZENODO.56836

Nguyen, T. M. H., To, Y. N., & Nguyen, T. K. O. (2020). Auditing quality from the perspective of auditing firms in Vietnam. *Growing Science*, 763–772. https://doi.org/10.5267/j.ac.2020.6.007

Noor, N. F. M., Sanusi, Z. M., Jusoh, Z. S. M., Johari, R. J., & Kasbun, N. F. (2024). The mediation effect of audit assessment on audit competency and digital audit to audit work performance effectiveness. https://doi.org/10.61707/xnaxqd85

Panjaitan, Z. F., Wahidahwati, W., & Amanah, L. (2016). Faktor-faktor yang mempengaruhi audit delay dan timeliness atas penyampaian laporan keuangan. https://api.semanticscholar.org/CorpusID:168236035

Phukon, A., & Gakhar, D. V. (2020). Perils of public sector enterprises in India: Is privatization of central public sector enterprises a sustainable strategy? *Emerald Publishing Limited*, 6(1), 59–73. https://doi.org/10.1108/prr-07-2020-0021

Rahardjo, B. T. (2017). Influence of the role ambiguity and time budget pressure on the auditor performance (Empirical study on public accounting firm South Jakarta Indonesia).

Rahman, M. M., Meah, M. R., & Chaudhory, N. U. (2019). The impact of audit characteristics on firm performance: An empirical study from an emerging economy. *The Journal of Asian*

Finance, Economics and Business, 6(1), 59–69. https://doi.org/10.13106/JAFEB.2019.VOL6.NO1.59

Shu, P.-G., Chen, T.-K., & Hung, W.-J. (2015). Audit duration quality and client credit risk. *Asia-Pacific Journal of Accounting & Economics*, 22(2), 137–162. https://doi.org/10.1080/16081625.2014.981936

Situanti, R. Y. A., & R. (2019). The effect of audit tenure and firm size on financial reporting delays. *International Journal of Economics and Business Administration*, 6(3), 115–126.

Stockemer, D. (2019). Multivariate regression analysis. In D. Stockemer (Ed.), Quantitative methods for the social sciences: A practical introduction with examples in SPSS and Stata, 63–174. Springer International Publishing. https://doi.org/10.1007/978-3-319-99118-4_9

Suwarno, A. E., Anggraini, Y. B., & Puspawati, D. (2020). Audit fee, audit tenure, auditor's reputation, and audit rotation on audit quality. *Riset Akuntansi Dan Keuangan Indonesia*, 5(1), 1. https://doi.org/10.23917/reaksi.v5i1.10678

Tehupuring, R., & Sitanala, T. F. (2016). Anteseden dan konsekuensi audit delay pada perusahaan perbankan perioda 2011-2014. *Jurnal Ekonomi Dan Bisnis*, 19(2), 2. https://doi.org/10.24914/jeb.v19i2.555

Yolandra, A. S., Sumiadji, & Handayawati, K. U. (2020). The influence of independence, competence, work experience, and professional ethics on auditor's performance: Empirical study done to public accounting firms in East Java. I*nternational Journal of Advances in Scientific Research and Engineering*, 6(9), 80–87. https://doi.org/10.31695/ijasre.2020.33880

Zureigat, R. H. R., Jalaludin, D., & Pitchay, A. A. (2021). A conceptual model for firm performance through audit committee and audit quality. *Turkish Online Journal of Qualitative Inquiry*, 7.