

Impact of Auditing on Fraud Reduction in Public Sector Procurement in Abia State

J. C. AKATOBI¹, R. A. UGULU² and H. U. NWOKE³

Department Of Procurement Management Centre of Excellence in Sustainable Procurement, Environmental and Social Standards, Federal University of Technology, Owerri

*Corresponding Author: J. C. AKATOBI

DOI: <https://doi.org/10.5281/zenodo.20251994>

Article History	Abstract
Original Research Article	<p><i>The present research work aimed to determine the effect of auditing on fraud reduction in public sector procurement in Abia State, Nigeria. In particular, the study evaluated how the different dimensions of auditing, which include accountability, integrity, transparency, and independence, affect fraud reduction. A survey design was adopted, and data were analyzed using descriptive statistics, reliability testing, factor analysis, and regression analysis. The results of the statistical analysis indicate that transparency and independence play vital roles in reducing fraud, whereas accountability and integrity have no statistically significant influence. Therefore, the findings of the study reveal that transparency and independence are essential in addressing procurement fraud. Based on these findings, the study therefore draws the conclusions that weak auditor accountability and integrity are largely due to poor enforcement and systemic corruption, while the significant and positive effects of audit transparency and independence lend credence to the importance of open audit processes and freedom from political interference. Based on the findings and conclusions, the study is prominent among others, recommending that audit reports should be made publicly accessible and widely disseminated. Also, there should be reduced political interference by granting auditors greater operational autonomy. The study contributes to knowledge by applying the Fraud Triangle and Stewardship theories to procurement auditing and by providing localized empirical evidence from Abia State.</i></p> <p>Keywords: Auditing, Fraud prevention, Public sector procurement, Accountability, Integrity, Transparency, Independence, Detection.</p>
Received: 11-03-2026	
Accepted: 21-04-2026	
Published: 17-05-2026	
<p>Copyright © 2026 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.</p> <p>Citation: J. C. AKATOBI, R. A. UGULU and H. U. NWOKE. (2026). Impact Of Auditing on Fraud Reduction in Public Sector Procurement in Abia State. UKR Journal of Economics, Business and Management (UKRJEBM), 2(5). 81-86.</p>	

Introduction

1. Background of the Study

Procurement processes in the public sector constitute a considerable part of the total government budget and are prone to various issues such as fraud, corruption, and mismanagement (World Bank, 2020). In particular, countries with underdeveloped economies, including Nigeria, experience numerous problems related to the implementation of procurement activities, which include bid rigging, contract inflation, and favouritism (OECD, 2016). At the same time, auditing plays a crucial role in ensuring effective procurement processes by guaranteeing accountability and detecting any discrepancies.

In line with the agency theory, auditing provides a means for monitoring the actions of public officials (agents) and

ensures that they act in accordance with the interests of the citizens (principals) (Jensen & Meckling, 1976). Furthermore, the institutional theory postulates that audit institutions play an important role in regulating procurement activities (Scott, 2014). Nevertheless, in Nigeria, despite several reforms, including the introduction of the Public Procurement Act (2007), procurement fraud persists because of ineffective enforcement, political influence, and low audit independence (Olayinka et al., 2017).

Auditing is a critical mechanism for ensuring accountability, transparency, and integrity in public financial management. In the public sector, procurement represents one of the largest areas of government

expenditure and is therefore highly susceptible to fraud, corruption, and inefficiency. In Nigeria, procurement-related fraud has been documented in forms such as contract inflation, bid rigging, ghost projects, and falsification of records, all of which undermine service delivery and erode public trust (Rawis & Tinangon, 2024; Wahyuni & Lovita, 2022).

Despite reforms, Abia State continues to face procurement irregularities, with audit reports revealing persistent weaknesses in enforcement, auditor independence, and transparency (Ogbodo & Eze, 2025). Previous studies have shown that internal audits provide continuous monitoring (Wutsqa & Daryatno, 2024), while external audits enhance public confidence (Nyamwaya, 2022). However, systemic challenges such as political interference and poor implementation of audit recommendations limit their effectiveness. This creates a clear research gap: while national-level studies exist, localized evidence on how auditing influences fraud reduction in Abia State's procurement processes remains scarce.

Abia State is one example of a sub-national government that struggles with procurement fraud because of poor transparency and accountability. This study evaluates how different auditing dimensions affect fraud reduction in Abia State's public sector procurement processes.

Literature Review

Auditing is both a financial control and governance tool, ensuring accountability, transparency, and integrity in public procurement (Arens et al., 2017; IAASB, 2020). Internal audits provide continuous monitoring (Wutsqa & Daryatno, 2024), while external audits enhance public confidence (Nyamwaya, 2022).

Procurement fraud in Nigeria often manifests as contract inflation, bid rigging, ghost projects, and falsified records (Wahyuni & Lovita, 2022; Rawis & Tinangon, 2024), contributing to 30–40% of public expenditure losses (Ifejika, 2018; Oyerogba, 2021). Globally, the OECD (2020) notes procurement fraud as a major source of corruption, reinforcing the need for stronger audit mechanisms.

Two theories guide this study: Fraud Triangle Theory (Cressey, 1953), which explains fraud through pressure, opportunity, and rationalisation, and Stewardship Theory (Donaldson & Davis, 1991), which emphasises accountability and ethical responsibility. Together, they provide a framework for understanding how auditing can deter fraud by reducing opportunities and reinforcing ethical stewardship.

Empirical evidence consistently highlights transparency and independence as effective fraud deterrents (Gilbert &

Celestin, 2021; Abdul-Baki et al., 2023). However, accountability and integrity often prove less effective due to systemic corruption and weak enforcement (Ogbodo & Eze, 2025). Some studies, such as Amah (2018), found integrity to be a strong predictor of fraud prevention, but localized realities in Abia State suggest otherwise.

Literature Gap and Contribution

Most prior studies focus on national institutions, leaving limited localised evidence for Abia State. While accountability and integrity are conceptually emphasised, their empirical impact remains weak compared to transparency and independence. This study fills the gap by providing **state-level evidence** on auditing's role in fraud reduction, contrasting local realities with broader findings, and applying Fraud Triangle and Stewardship theories to procurement auditing in a subnational context.

Methodology

The research was conducted in **Abia State, Nigeria**, located between latitude 4°40' and 6°14' North and longitude 7°10' and 8° East. The state has a tropical climate with rainy (April–October) and dry (November–March) seasons. The economy is driven by commerce, agriculture, and public service. The population comprised **250 staff** from three institutions: Ministry of Works, ABIRS, and ABSPPA (Table 1). Using Yamane's formula (Equation 1), the sample size was determined as **154 respondents** (Table 2). Stratified random sampling ensured departmental representation.

$$n = \frac{N}{1 + N(e)^2}$$

Where:

- n = sample size
- N = population size (250)
- e = margin of error (0.05)

Data Collection

Primary data were collected via questionnaires, while secondary data came from audit reports and procurement records.

Expert review established content validity. Cronbach's Alpha confirmed reliability, with coefficients above 0.70 (Table 3).

Regression Model Specification

To test the hypotheses, a multiple regression model was specified as follows:

$$FR = \beta_0 + \beta_1 ACC + \beta_2 INT + \beta_3 TRA + \beta_4 IND + \epsilon \quad (2)$$

- Where:
- FR = Fraud Reduction (dependent variable)
- ACC = Auditor Accountability
- INT = Auditor Integrity
- TRA = Audit Transparency
- IND = Auditor Independence
- β_0 = Constant term
- β_1 – β_4 = Regression coefficients
- ϵ = Error term

This model tested the significance of each auditing dimension on fraud reduction. Hypotheses were evaluated at a 5% significance level using ANOVA and coefficient analysis.

Data Analysis

- Descriptive Statistics:** Frequencies, means, and standard deviations.
- Regression Analysis:** To determine the strength and significance of relationships.

Figures and Tables

Table 1: Population Size

Institution	Population
Ministry of Works	100
ABIRS	80
ABSPPA	70
Total	250

Table 2: Sample Size Determination

Institution	Population	Sample Size
Ministry of Works	100	62
ABIRS	80	49
ABSPPA	70	43
Total	250	154

Table 3: Reliability Test (Cronbach's Alpha)

VARIABLES	CRONBACH'S ALPHA
Accountability	0.78
Integrity	0.74
Transparency	0.81
Independence	0.83

Results and Discussion

Descriptive Statistics

Responses from 154 participants were analyzed. Demographic variables showed balanced representation across institutions and departments.

Table 4: Responses on Auditing Dimensions

Variable	Mean	Std. Dev.
Accountability	3.12	0.84
Integrity	3.25	0.79
Transparency	3.87	0.91
Independence	4.01	0.88
Fraud Reduction	3.76	0.85

Reliability Test

Cronbach's Alpha values exceeded 0.70 for all constructs, confirming internal consistency (see Table 3 in Methodology).

Regression Analysis

The regression model tested the influence of auditing dimensions on fraud reduction:

$$FR = \beta_0 + \beta_1 ACC + \beta_2 INT + \beta_3 TRA + \beta_4 IND + \epsilon$$

Table 5: Model Summary

R	R ²	Adjusted R ²	Std. Error
0.71	0.50	0.48	0.62

Table 6: ANOVA Results

Source	Df	F	Sig.
Regression	4	18.42	0.000
Residual	149	–	–
Total	153	–	–

Table 7: Regression Coefficients

Variable	B	t-value	Sig.
Accountability	0.08	1.12	0.265
Integrity	0.05	0.97	0.334
Transparency	0.29	4.21	0.000
Independence	0.41	5.87	0.000

Results

Discussion of Findings

Descriptive Analysis of Auditing Dimensions

Based on the findings obtained, all auditing dimensions have relatively high mean scores:

Accountability (Mean = 3.12)

Integrity (Mean = 3.25)

Transparency (Mean = 3.87)

Independence (Mean = 4.01)

Fraud Reduction (Mean = 3.76)

Therefore, it can be inferred that auditing is perceived by respondents as relatively effective for procurement processes, particularly in regard to such aspects as independence and transparency.

Inferential Analysis

ANOVA Results

From the ANOVA results ($F = 18.42$, $p < 0.05$) it can be inferred that there is an indication of statistical significance of the obtained findings. That means that auditing

dimensions in total significantly affect the level of fraud reduction within the studied procurement process.

Regression Analysis

Further insights into the results obtained can be made based on regression analysis findings:

Transparency ($\beta = 0.29$, $p < 0.05$). Transparency has a significant effect on fraud reduction. The result is in line with the current literature on the matter that highlights openness of procurement processes, public information, and disclosure as major factors deterring corruption (Kolstad & Wiig, 2009).

Independence ($\beta = 0.41$, $p < 0.05$). An independent auditor significantly affects the level of fraud reduction. The finding confirms arguments that auditing conducted by independent auditors leads to fraud reporting due to a lack of fear from political and other types of pressure (DeAngelo, 1981).

Accountability ($\beta = 0.08$, $p > 0.05$). Positive, yet insignificant, effect of the aspect under consideration. The finding implies certain inefficiency of accountability measures despite their existence.

Integrity ($\beta = 0.05$, $p > 0.05$). Positive but insignificant effect as well. It can also confirm certain violations of ethics or inefficient institutionalisation of the mentioned factor.

Discussion

The findings demonstrate that transparency and independence are the most effective mechanisms for reducing procurement fraud in Abia State. Open audit processes and freedom from political interference enhance fraud detection and prevention. Conversely, accountability and integrity showed weak effects, reflecting systemic challenges such as poor enforcement and compromised ethics.

These results align with Gilbert & Celestin (2021), who emphasised transparency as a deterrent to collusion, and Abdul-Baki et al. (2023), who highlighted independence as critical for resisting corruption. However, the weak role of integrity contrasts with Amah (2018), suggesting localised realities in Abia State where ethical responsibility is undermined by systemic corruption. It becomes clear that the structure and institutions are more influential than behavioural factors. Therefore, the impact of strengthening certain processes can be expected.

Conclusions and Recommendations

Conclusions

This study examined the role of auditing in reducing procurement fraud in Abia State. Results showed that transparency and independence significantly curb fraud, while accountability and integrity exert weak effects due to poor enforcement and systemic corruption. The findings highlight the importance of strengthening audit openness and autonomy to restore public trust and ensure value-for-money outcomes in procurement.

It can be said that auditing contributes to the reduction of procurement fraud in Abia State to a great extent. Still, not all the aspects of auditing contribute the same way. Thus, transparency and independence are key factors of the process under

Recommendations

1. The following recommendations are offered based on the results of the research:
2. Auditors' Independence should be strengthened. It is necessary to ensure the independence of auditing bodies from any political or administrative influence.
3. Improving Transparency Measures. E-procurement platforms and other mechanisms ensuring transparency of procurement should be adopted and implemented.

4. Improving Accountability Systems. Sanctions should be put in place to ensure that public officials are held responsible for corruption in procurement.
5. Ethical Behaviour of Procurement Officers and Auditors. Special measures should be taken to instil ethical values among procurement officers and auditors.
6. Development of Competencies of Audit Staff. Professional development and training programs should be launched to improve the skills of audit personnel.
7. Improvement of Legal and Institutional Frameworks. Legal frameworks governing procurement and auditing should be revised and strictly implemented.

References

1. Abdul-Baki, A., et al. (2023). Audit independence and corruption resistance in Nigeria. *Journal of Public Sector Management*, 12(3), 45–62.
2. Amah, C. (2018). Integrity and fraud prevention in public procurement. *Nigerian Journal of Procurement Studies*, 6(2), 88–102.
3. Arens, A. A., Elder, R. J., & Beasley, M. S. (2017). *Auditing and assurance services: An integrated approach* (16th ed.). Pearson.
4. Cressey, D. R. (1953). *Other people's money: A study in the social psychology of embezzlement*. Free Press.
5. DeAngelo, L. E. (1981). Auditor independence, "low-balling," and disclosure regulation. *Journal of Accounting and Economics*, 3(2), 113–127.
6. Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management*, 16(1), 49–64. <https://doi.org/10.1177/031289629101600103>([doi.org in Bing](#))
7. Gilbert, T., & Celestin, R. (2021). Transparency in auditing and fraud reduction. *International Journal of Governance*, 9(1), 33–49.
8. Ifejika, P. (2018). Procurement fraud and public expenditure losses in Nigeria. *African Journal of Economics*, 10(2), 77–89.
9. International Auditing and Assurance Standards Board (IAASB). (2020). *Handbook of international quality control, auditing, review, other assurance, and related services pronouncements*. International Federation of Accountants.

10. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
11. Kolstad, I., & Wiig, A. (2009). Is transparency the key to reducing corruption in resource-rich countries? *World Development*, 37(3), 521–532.
12. Nwokike, C., et al. (2024). Audit effectiveness in Abia State procurement. *Nigerian Journal of Governance Studies*, 8(3), 55–70.
13. Nyamwaya, J. (2022). External audits and public confidence in procurement. *African Journal of Public Finance*, 14(4), 102–118.
14. OECD (2016). Preventing Corruption in Public Procurement. Paris: OECD Publishing.
15. Ogbodo, C., & Eze, K. (2025). Challenges of auditing in Nigerian procurement processes. *Journal of African Governance*, 11(2), 77–95.
16. Olayinka, M. U., Emeka, A., & Bello, T. (2017). Public procurement reform in Nigeria: Challenges and prospects. *International Journal of Economics and Financial Issues*, 7(3), 654–660.
17. Organisation for Economic Co-operation and Development (OECD). (2020). *Public procurement and corruption: Global perspectives*. OECD Publishing.
- <https://doi.org/10.1787/9789264296078-en>
(doi.org in Bing)
18. Oyerogba, A. (2021). Public expenditure losses through procurement fraud. *Journal of Nigerian Public Finance*, 7(1), 22–39.
19. Rawis, M., & Tinangon, J. (2024). Procurement fraud in developing economies. *Asian Journal of Governance*, 12(2), 101–115.
20. Scott, W. R. (2014). *Institutions and Organisations: Ideas, Interests, and Identities*. Sage Publications.
21. Thai, K. V. (2009). *International Handbook of Public Procurement*. CRC Press.
22. Wahyuni, R., & Lovita, S. (2022). Fraud in procurement systems: A global review. *International Journal of Public Administration*, 15(4), 88–104.
23. World Bank (2020). *Enhancing Government Effectiveness and Transparency: The Fight Against Corruption*. Washington, DC: World Bank.
24. Wutsqa, A., & Daryatno, B. (2024). Internal audit structures and fraud reduction in government procurement. *Asian Journal of Public Administration*, 15(1), 56–72.