



Influence of Audit on Fraud Mitigation in Public ... Abah, M. S., Et. al. (2026)

Influence of Audit on Fraud Mitigation in Public Procurement: A Case Study of Federal University of Health Sciences Otukpo, Benue State, Nigeria

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Abstract

This study examines Procurement audit as a tool on fraud mitigation in public procurement, using the Federal University of Health Sciences, Otukpo (FUHSO) as a case study. Public procurement processes in Nigeria are often vulnerable to financial irregularities, contract inflation, and unethical practices that undermine compliance, transparency and accountability. The Procurement audit function serves as a vital mechanism for ensuring compliance, detecting irregularities, and promoting sound governance within public institutions. The report adopted a descriptive survey design, utilizing both primary and secondary data. Questionnaires were administered to staff of the Procurement Audit Unit, Procurement Department, Bursary Department, and Administrative Units directly involved in procurement processes at FUHSO. The collected data were analyzed using descriptive statistics, inferential techniques and regression analysis to determine the relationship between Procurement audit and fraud mitigation in procurement activities. Findings from the administered questionnaires revealed that Procurement audit significantly contributes to fraud detection, prevention, and control within procurement operations. However, its effectiveness is often hindered by challenges such as limited independence, inadequate resources, poor management support, and restricted access to procurement records. The study also found that timely implementation of audit recommendations and continuous capacity developments of Procurement auditors enhance fraud mitigation outcomes. The study concludes that a robust Procurement audit system is indispensable for promoting compliance, accountability, transparency, and integrity in public procurement. The study recommends that FUHSO and similar institutions strengthen Higher Education Institution Procurement audit functions through autonomy enhancement, adequate funding, and compliance enforcement. Additionally, there is a need for continuous procurement audit engagement in procurement planning, execution, and monitoring to minimize fraud risks and ensure value for money in public expenditure.

KEYWORDS: Procurement, Audit, Mitigation. Fraud

Introduction

Fraud in public procurement processes poses significant financial reputational risks especially in public sector. Procurement audits are a key control mechanism to mitigate fraud risks by examining procurement processes and transactions, for compliance and efficiency. In Nigeria the need for effective fraud mitigation in procurement is critical due to the prevalence of corruption risks like contract splitting, bid rigging, collusion, supply of inferior materials, and over invoicing. Public procurement represents one of the most significant areas of government expenditure and management of public resources. According to the World Bank (2019), procurement accounts for approximately 15–30% of GDP in many developing countries. Despite reforms such as the enactment of the Public Procurement Act (2007), loopholes persist in contract awards, tendering processes, supplier selection, and project execution. These weaknesses create fertile ground for fraud and misappropriation. Fraud in public procurement can manifest through contract inflation (Ezeji, U. (2025) & OECD (2025). Procurement Audit, by design, is positioned to serve as a watchdog over institutional compliance. Public

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procurement is one of the most critical functions in public sector management, as it involves the acquisition of goods, works, and services necessary for the smooth running of government and public institutions. In Nigeria, public procurement accounts for a significant proportion of government expenditure, representing almost 15–30% of the Gross Domestic Product (GDP). Because of the large volume of financial resources involved, the procurement process is highly susceptible to fraud, corruption, and mismanagement. This underscores the need for effective control mechanisms such as procurement Audit to mitigate risks and ensure accountability. Procurement Audit helps in assessing compliance with the Public Procurement Act (2007), detecting irregularities, preventing fraudulent practices, and ensuring that due process is followed. Its role goes beyond compliance, as it also supports management in identifying systemic weaknesses, strengthening Procurement controls, and promoting a culture of transparency. Fraud in public procurement manifests in different forms and as such, the research work specific objective will be, to examine its effectiveness on fraud mitigation in public procurement using FUHSO as a study area. This study is motivated by the growing demand for transparency and accountability in Nigerian public institutions. While the Public Procurement Act (2007) and other regulatory frameworks such as the Financial Regulations (2009) provide a legal foundation for procurement practices, their effectiveness largely depends on enforcement and monitoring. Procurement Audit, when adequately empowered and resourced, provides the assurance that procurement processes are conducted in accordance with these laws, thereby reducing the incidence of fraud. In summary, this research seeks to explore the impact of procurement Audit on fraud mitigation in public procurement, using FUHSO as a case study. It will assess the current audit practices in the University, identify gaps in the existing system, and propose strategies for strengthening the Procurement audit function to ensure effective fraud prevention and detection in procurement.

Objectives of The Study

The main objective of this study is to examine the Procurement audit procurement Audit on fraud mitigation in public procurement, with a specific focus on the Federal University of Health Sciences, Otuipo (FUHSO). The specific objectives of the study therefore, are

1. To verify compliance with laws, regulations, and Procurement policies governing procurement processes
2. To evaluate the economy, efficiency, and effectiveness of procurement processes and transactions.
3. To identify potential fraud, corruption, or irregularities in procurement activities.

Research Questions

The study seeks to answer the following report questions:

1. To what extent do procurement audits ensure compliance with laws, regulations, and Procurement policies in public procurements?
2. How do procurement audits evaluate the efficiency and effectiveness of procurement processes in achieving organizational objectives?
3. what is the Procurement audit procurement audits on detecting and preventing fraud in public procurement transactions?

Research Hypothesis

This study is anchored on the assumption that procurement Audit plays a significant role in fraud mitigation within public procurement processes. However, given the institutional peculiarities of Nigerian public universities, including FUHSO, it is necessary to empirically test these assumptions.

H₀₁: Procurement audits have no significant effect on ensuring compliance with laws, regulations, and Procurement policies in public procurements.

H₀₂: Procurement audits do not significantly assess the efficiency and effectiveness of procurement processes.

H₀₃: Procurement audits have no significant impact on detecting and preventing fraud in public procurement transactions.



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Research Methodology

This section describes the design, population, sampling methods, data sources, instruments, and analytical techniques to be employed to investigate the procurement Audit on fraud mitigation in public procurement in Federal University of Health Sciences, Otukpo (FUHSO). The methodology is designed to ensure rigor, reliability, and validity while addressing the research objectives.

Research Design

The study adopts a descriptive case study design. This design is suitable for exploring institutional processes such as procurement Audit and procurement in-depth within a single organization. A case study approach provides detailed insights into the interactions between audit practices and procurement fraud risks at FUHSO. The descriptive design also allows the researcher to document the current state of audit practices, identify gaps, and assess their effectiveness in mitigating procurement fraud.

Study Area

The study is situated in the Federal University of Health Sciences, Otukpo (FUHSO), located in Otukpo Local Government Area of Benue State, Nigeria. FUHSO is one of the newly established specialized federal universities in Nigeria, created by the Federal Government to advance teaching, learning, and in health sciences and related fields. The University plays a critical role in training healthcare professionals, advancing medical, and supporting Nigeria's health sector development.

Population of Study

The population of the study comprises of 676 staff members as obtained from the nominal roll of the University which cut across both academic and nonteaching staff. Staff members who are directly or indirectly involved in procurement processes are sampled for questionnaire administration as on the table below. These staff members are the ones that are involve in procurement activities within the University departments including procurement, Bursary, Administrative Department, and Procurement audit since the organizational work is carried out in various departments. The population of the study comprised of staffs of the organization.

Table 2: Staff Population of FUHSO, Benue State

SN	DEPARTMENT	NUMBER OF STAFF
1	Audit Staff	16
2	Procurement Staff	28
3	Bursary Staff	33
4	Heads of Units/Department	40
5	Senior Administrative & Management Staff	145
	TOTAL	262

Source: FUHSO HRM, (2026).

This population provides a holistic view of procurement and Audit processes at FUHSO.

Sample and Sampling Technique:

A purposive sampling technique was adopted. This ensures the inclusion of staff with direct knowledge and experience of procurement Audit and procurement processes. The sample size is adequate for a focused case study and allows for in-depth quantitative.



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Instruments of Data Collection

The study used both quantitative and qualitative instruments to obtain data to enhancing the credibility, validity, and reliability of the findings. A structured questionnaire was designed as the primary instrument for collecting quantitative data. The questionnaire was divided into sections based on the research objectives and variables under study. The questionnaire consisted of closed and open-ended questions (using the Likert scaling model of SA = Strongly Agree | A = Agree | U = Undecided | D = Disagree | SD = Strongly Disagree)

Methods of Data collection

The researcher sought approval from FUHSO management to access staff and relevant documents. Questionnaires was distributed in person to ensure maximum response and collected within a two-week timeframe. Interviews were scheduled based on participants' availability and conducted face-to-face to allow detailed probing. Confidentiality and anonymity was guaranteed to all participants, thereby encouraging openness and honest responses. Ethical considerations in data collection be applied for conformity through, Informed consent be obtained from all respondents before data collection, Participants be assured that the information gathered would be used strictly for academic purposes, Sensitive procurement and audit documents be handled with confidentiality and in compliance with institutional ethics guidelines.

Methods of Data Analysis Techniques

This section outlines the statistical techniques that will be employed to analyze data collected for the study on the impact of procurement Audit on fraud mitigation in public procurement, with specific reference to public sector institutions. The choice of techniques is guided by the study objectives, research questions, hypotheses, and the nature of the data collected.

The study will primarily generate quantitative data through structured questionnaires administered to procurement officers, Procurement auditors, finance officers, and management staff. Responses will be measured mainly on a Likert scale, making them suitable for both descriptive and inferential statistical analysis.

Presentation of Results

Presentation of the Results Based on the Specific Objectives

Objective (i): To verify compliance with laws, regulations, and Procurement policies governing procurement processes.

The result from the table showed the analysis of the question items on To what extent do procurement audits ensure compliance with laws, regulations, and Procurement policies in public procurements. 68 respondents (representing 26.0 %) strongly agreed, 127 respondents (representing 48.5 %) agreed, 44 (representing 16.8 %) disagreed and 23 respondents (representing 8.8 %) strongly disagreed. This result implied that procurement audits ensure compliance with laws, regulations, and Procurement policies in public procurements. In finding out, how often are procurement staffs trained on relevant laws and regulations, 61 respondents (representing 23.3 %) strongly agreed, 114 (representing 43.5 % agreed), 66 respondents (representing 25.2 %) disagreed while 21 (representing 8.0 %) of the respondents strongly disagreed. This implies that are procurement staffs trained on relevant laws and regulations. Also, finding out that, are procurement documents (e.g., tender documents, contracts) reviewed for compliance with laws and regulations, 65 (representing 24.8 %) of the respondents strongly agreed, 93 respondents (representing 35.5 %) agreed, 67 respondents (representing 25.6 %) disagree and 37 respondents (representing 14.1 %) strongly disagreed. Hence, we can conclude that procurement documents (e.g., tender documents, contracts) reviewed for compliance with laws and regulations.

Table 3: Respondents' Views on to verify compliance with laws, regulations

SN	QUESTIONS	SA (%)	A (%)	U (%)	SD (%)
1	procurement processes in your organization guided by a clear procurement policy	68(26)	127(48.5)	44(17)	23(8.8)



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2	procurement staffs trained on relevant laws and regulations	61(23.3)	114(44)	66(25.2)	21(8)
	Are procurement documents (e.g., tender documents, contracts) reviewed for compliance with laws and regulations				
3		65(24.8)	93(35.5)	67(26)	37(14.12)

Objective (ii): To Evaluate economy, efficiency, and effectiveness in FUHSO,

In order to evaluate economy, efficiency, and effectiveness in FUHSO, the table below was drawn and the results were presented: To evaluate the economy, efficiency, and effectiveness of procurement processes and transactions, 75 respondents (representing 28.8 %) strongly agreed, 86 respondents (representing 32.8%) agreed, while 52 respondents (representing 19.8 %) disagree and 49 (representing 18.7 %) of the respondents strongly disagree. This implies that economy, efficiency, and effectiveness of procurement processes and transactions is achieved through procurement audit.

Finding out that are procurement timelines (e.g., tendering, contract award) met?

80 (30.5 %) of the respondents strongly agreed, 69 (representing 26.3 %) agreed, while 53 (representing 20.2 %) disagreed and 60 (representing 22.9 %) strongly disagreed. This result implies that procurement timelines (e.g., tendering, contract award) met. Also, finding out that, how do you rate the use of resources (e.g., budget, staff) in procurement, 66 (representing 25.2) % of the respondents strongly agreed, 116 respondents (representing 44.3 % agreed), 34 (representing 13.0%) disagreed whereas 46 (representing 17.6 %) of the respondents strongly disagreed. We can conclude that, there is high rate use of resources (e.g., budget, staff) in procurement.

Table 4: Respondents' Views on to Evaluate economy, efficiency, and effectiveness

SN	QUESTIONS	SA (%)	A (%)	U (%)	SD (%)
1	How do you assess the procurement planning process in your organization?	75(26)	86(48.5)	52(17)	49(8.8)
2	Are procurement timelines (e.g., tendering, contract award) met?	80(23.3)	69(44)	53(25.2)	60(8)
3	How do you rate the use of resources (e.g., budget, staff) in procurement	66(24.8)	116(35.5)	34(26)	46(14.12)

Objective (iii): To identify potential fraud, corruption, or irregularities in procurement activities in FUHSO.

To identify potential fraud, corruption, or irregularities in procurement activities in FUHSO, 72 respondents (representing 27.5 %) strongly agreed, 102 respondents (representing 38.9 %) agreed, while 73 (representing 27.9 %) disagreed and 15 respondents (5.7 %) strongly disagreed. This implies that potential fraud, corruption, or irregularities in procurement activities are identified in FUHSO. Finding out whether employees find that, are there mechanisms for reporting suspected fraud or misconduct in FUHSO? 93(representing 35.5 %) of the respondents strongly agreed, 72 (representing 19.5 %) agreed, 47respondents (representing 17.9%) disagreed while 71 (representing 27.1 %) strongly disagreed. This result implied that, there are mechanisms for reporting suspected fraud or misconduct? Also in finding out that, are procurement transactions reviewed for anomalies frequently? 67 (representing 25.6 %) of the respondents strongly agreed, 98 respondents (representing 37.4 %) agreed, whereas 47 (representing 17.9 %) disagreed and 50 respondents (representing 19.1 %) strongly disagreed. Hence, we can conclude that, procurement transactions are reviewed for anomalies frequently?



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Table 5: Respondents' Views on to identify potential fraud, corruption, or irregularities

SN	QUESTIONS	SA (%)	A (%)	U (%)	SD (%)
1	Have you encountered any suspected fraud or irregularities in procurement processes?	72(26)	102(48.5)	73(17)	15(8.8)
2	Are there mechanisms for reporting suspected fraud or misconduct?	93(23.3)	72(44)	47(25.2)	71(8)
3	Are procurement transactions reviewed for anomalies frequently?	67(24.8)	98(35.5)	47(26)	50(17.93)

Discussion of Findings

This study examined the Procurement audit on fraud mitigation in public procurement, using the Federal University of Health Sciences, Otukpo (FUHSO) as a case study. A descriptive survey design was adopted, involving structured questionnaires, interviews, and document reviews. A total of 10 respondents, comprising Procurement audit staff, procurement officers, bursary staff, heads of departments, and senior administrators, provided responses. The data collected were analyzed using descriptive statistics, thematic analysis, and chi-square hypothesis testing. The study concludes that procurement audit is a critical tool for fraud mitigation in public procurement systems. When effectively implemented, it enhances transparency, ensures compliance with regulatory frameworks, and reduces opportunities for corrupt practices. Procurement audit not only detects fraud but also acts as a deterrent by increasing the likelihood of exposure and sanction.

Despite its importance, the effectiveness of procurement audit is often constrained by institutional weaknesses, lack of independence, and inadequate enforcement mechanisms. In many cases, audit findings are not acted upon, thereby limiting their impact on fraud prevention. Furthermore, the absence of modern audit tools and insufficient training of audit personnel reduces the ability of auditors to detect complex fraud schemes. Therefore, while procurement audit has significant potential to curb fraud, its success largely depends on the strength of institutional frameworks, the professionalism of auditors, and the commitment of management and government authorities to enforce accountability.

Conclusion

The study concludes that procurement audit is a critical tool for fraud mitigation in public procurement systems. When effectively implemented, it enhances transparency, ensures compliance with regulatory frameworks, and reduces opportunities for corrupt practices. Procurement audit not only detects fraud but also acts as a deterrent by increasing the likelihood of exposure and sanction. Despite its importance, the effectiveness of procurement audit is often constrained by institutional weaknesses, lack of independence, and inadequate enforcement mechanisms. In many cases, audit findings are not acted upon, thereby limiting their impact on fraud prevention. Furthermore, the absence of modern audit tools and insufficient training of audit personnel reduces the ability of auditors to detect complex fraud schemes. Therefore, while procurement audit has significant potential to curb fraud, its success largely depends on the strength of institutional frameworks, the professionalism of auditors, and the commitment of management and government authorities to enforce accountability.

Recommendations:

Based on the findings and conclusions of the study, the following recommendations are proposed:

1. Strengthen Procurement Audit Capacity

Public institutions should invest in continuous training and professional development of procurement auditors. This includes training in forensic auditing, data analytics, risk-based auditing, and fraud detection techniques.



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2. Enhance Independence of Procurement Auditors

Procurement audit units should be structurally independent from management and procurement departments to avoid undue influence. Reporting lines should be directed to higher authorities such as audit committees or governing councils.

3. Enforce Audit Recommendations

Government and institutional management must ensure strict implementation of audit recommendations. Sanctions should be applied to individuals found guilty of procurement irregularities to serve as a deterrent.

4. Adopt Technology-Driven Audit Systems

The use of e-procurement platforms and digital audit tools should be encouraged. Automation enhances transparency, improves audit trails, and facilitates real-time monitoring of procurement activities.

5. Strengthen Regulatory and Legal Frameworks

Existing procurement laws and audit regulations should be reviewed and strengthened to close loopholes. Anti-corruption agencies should collaborate closely with procurement auditors to ensure enforcement.

6. Promote Transparency and Public Disclosure

Procurement information such as tender notices, bid evaluations, and contract awards should be made publicly available. Transparency increases external scrutiny and reduces opportunities for fraud.

References

- Adeyemi, B. & Akinyele, T. (2020) *Procurement audit capacity and procurement fraud detection in Nigerian universities*. Journal of Accounting and Public Sector Management, 8(2), pp. 55–72.
- Akindele, R. I., & Adegbe, F. F. (2020). Procurement audit effectiveness and fraud control in the Nigerian public sector. International Journal of Accounting and Finance, 9(2), 45–59.
- Alwardat, Y. (2019) 'Risk-based Procurement audit and fraud prevention in public procurement: Evidence from Jordan.' *Journal of Public Procurement and Audit Studies*, 7(1), pp. 1–19.
- Alzeban, A., & Sawan, N. (2015). The impact of audit committee characteristics on the implementation of Procurement audit recommendations. Journal of International Accounting, Audit and Taxation, 24(1), 61–72.
- Anigbogu, T.U., Eze, G.A. & Udeh, S.N. (2019) 'Procurement audit and procurement fraud control in Nigerian universities.' *African Journal of Business Management*, 13(4), pp. 121–131.
- Badara, M.S. & Saidin, S.Z. (2013) 'Procurement audit effective Procurement control system on the Procurement audit effectiveness at local government level.' *Journal of Social and Development Sciences*, 4(1), pp. 16–23.
- Davis, J.H., Schoorman, F.D. & Donaldson, L. (1997) 'Toward a stewardship theory of management.' *Academy of Management Review*, 22(1), pp. 20–47.
- Institute of Procurement Auditors (IIA) (2017) *International Professional Practices Framework (IPPF): Standards and Guidance*. Altamonte Springs, FL: The IIA.
- Mihret, D.G. & Yismaw, A.W. (2007) 'Procurement audit effectiveness: An Ethiopian public sector case study.' *Managerial Auditing Journal*, 22(5), pp. 470–484.
- Nigeria (Federal Government). (2007) *Public Procurement Act (PPA) 2007*. Abuja: Federal Government Printer.
- Okafor, R. & Agbi, J. (2021) 'Audit quality and procurement compliance in Nigerian higher institutions.' *Nigerian Journal of Accounting Research*, 10(1), pp. 88–103.
- Okezie, B.N. & Okerie, C.A. (2018) 'Procurement audit and procurement fraud control in Nigeria's public sector.' *International Journal of Auditing and Accounting Studies*, 6(3), pp. 45–63.
- Rotich, G.K. & Okello, B. (2015) 'An analysis of the role of Procurement audit in public procurement in Kenyan county governments.' *African Journal of Procurement and Supply Chain Management*, 3(1), pp. 23–37.
- Transparency International (2021) *Corruption Perceptions Index 2021*. Berlin: Transparency International.



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World Bank (2020) *Enhancing Government Effectiveness and Transparency: The Fight Against Corruption*. Washington, DC: World Bank Publications.