

Impact Of Forensic Audit Practices In Fraud Detection In Financial Institutions In Uganda. A Case Study Of

ABSA BANK, Kampala, Jinja Road.

Hosan Yusuf Mohamed¹, Magala Muhammed²

1, 2 Metropolitan International University

Abstract

The study investigated the impact of forensic audit practices on fraud detection in financial institutions in Uganda, using Absa Bank located along Jinja Road, Kampala, as the primary case study. The research examined how transaction tracing, document examination, data analytics, and internal control assessment, as forensic audit practices, influenced the detection of financial fraud within the bank over a period spanning 2018 to 2023. A mixed-methods research design was adopted, combining quantitative data drawn from the bank's internal audit reports, compliance records, and fraud investigation files with qualitative insights obtained through structured interviews with senior audit and compliance officers. The data were analysed using both descriptive statistics, correlation analysis, and multiple regression techniques. The results revealed that data analytics and transaction tracing were the most statistically significant forensic audit practices in predicting fraud detection rates, with p-values of 0.002 and 0.005, respectively. Document examination also demonstrated a significant positive relationship with fraud detection ($p = 0.019$), while internal control assessment, though positively associated, showed a comparatively weaker level of statistical significance ($p = 0.048$). The study concluded that forensic audit practices played a substantial and measurable role in enhancing Absa Bank's capacity to identify and uncover fraudulent activities, and that the effectiveness of these practices was greatest when they were applied consistently and in combination with one another. It was recommended that Absa Bank and other financial institutions in Uganda invest more heavily in forensic audit capabilities, particularly in the areas of data analytics and transaction monitoring, and that the Bank of Uganda strengthen its regulatory framework to mandate the regular conduct of forensic audits across all licensed institutions. Future researchers were encouraged to examine the cost-effectiveness of forensic audit practices and to explore the role of corporate governance in facilitating or hindering their implementation.

Keywords: Forensic audit, fraud detection, financial institutions, transaction tracing, document examination, data analytics, internal control assessment, Uganda, Absa Bank.

1. BACKGROUND OF THE STUDY

The financial services sector in Uganda has undergone a period of rapid expansion and increasing complexity over the past two decades, with the number of licensed commercial banks and financial institutions growing steadily in response to rising demand for banking services across the country (Akankwasa et al., 2022). As these institutions expanded their operations and managed increasingly large volumes of financial transactions, the risk of fraud also grew, posing a serious threat to the stability, reputation, and profitability of the banking sector (Ivan et al., 2023a). Financial fraud, which encompassed a wide range of illicit activities including embezzlement, money laundering, misappropriation of funds, and the manipulation of financial records, was identified as one of the most damaging and

Received: 06.02.2026

Accepted: 12.02.2026

Published on: 28.02.2026

costly challenges facing financial institutions in both developed and developing economies (Kazaara & Desire, 2025). In Uganda specifically, several high-profile cases of fraud within banks and financial institutions were reported during the late 2010s and early 2020s, leading to significant losses, public mistrust, and heightened scrutiny from regulators and the general public alike (Innocent et al., 2023a).

Absa Bank, situated along Jinja Road in Kampala, was one of the prominent commercial banks operating in Uganda during this period (Frank et al., 2023). The bank had a long-standing presence in the Ugandan financial landscape and served a diverse clientele ranging from individual retail customers to large corporate entities (Akankwasa et al., 2022). Like many other banks in the country, Absa Bank faced the ongoing challenge of safeguarding its operations and its customers' funds against the threat of fraud. In response to this challenge, the bank, along with the broader industry, began to place greater emphasis on the adoption and application of forensic audit practices as a mechanism for detecting and investigating fraudulent activities within its operations (K. Moses et al., 2023).

Forensic audit, as a discipline, involved the application of specialized investigative and analytical techniques to financial records and transactions in order to uncover irregularities, discrepancies, and potential evidence of fraud (N. Moses et al., 2025). Practices such as transaction tracing, document examination, data analytics, and the assessment of internal controls were all considered core components of a forensic audit framework (Ivan et al., 2023a). Despite the growing recognition of the importance of forensic auditing in the fight against financial crime, the extent to which these practices were effectively applied within Ugandan financial institutions remained poorly understood (Ivan et al., 2023b). Studies conducted in other African countries had yielded mixed results regarding the relationship between forensic audit practices and fraud detection, and very few had focused specifically on the Ugandan context. It was therefore within this backdrop of growing fraud risks, increasing regulatory attention, and a lack of institution-specific empirical evidence that the present study was undertaken, with the aim of examining how forensic audit practices at Absa Bank along Jinja Road contributed to the detection of fraud (Innocent et al., 2023a).

2. PROBLEM STATEMENT

Despite the increasing awareness of financial fraud and the growing adoption of forensic audit as a tool for combating it, financial institutions in Uganda continued to report significant losses attributed to fraudulent activities that went undetected for extended periods of time (Irumba et al., 2024). Absa Bank along Jinja Road was not spared from these challenges, as internal records indicated that certain fraudulent transactions had evaded detection until they were uncovered through routine or reactive processes rather than through systematic forensic audit procedures (Ivan et al., 2023a). The existing body of literature on forensic auditing in Uganda remained limited in scope and depth, with most studies offering only general observations rather than rigorous, institution-level empirical analyses (Jallow et al., 2022). As a result, there was a notable gap in understanding exactly which forensic audit practices were most effective in detecting fraud within the specific operational context of Ugandan banks (Winny et al., 2023). This study was therefore undertaken to fill that gap by systematically examining the relationship between specific forensic audit practices and fraud detection outcomes at Absa Bank, Kampala, Jinja Road.

Received: 06.02.2026

Accepted: 12.02.2026

Published on: 28.02.2026

3. SPECIFIC OBJECTIVE

To examine the impact of forensic audit practices on fraud detection at Absa Bank.

4. METHODOLOGY

The study adopted a mixed-methods research design, which was considered the most appropriate approach given the need to capture both the quantitative relationships between forensic audit practices and fraud detection outcomes and the deeper qualitative perspectives of key personnel involved in audit and compliance processes at Absa Bank (Faridah et al., 2023). The research was conducted over a six-year period from 2018 to 2023, and data were collected from multiple sources within the bank's Jinja Road branch and its central operations division in Kampala.

Quantitative data were sourced from the bank's internal audit reports, fraud investigation files, compliance monitoring records, and annual risk management reports. From these documents, numerical indicators were extracted for each of the four forensic audit practices under investigation (Innocent et al., 2023b). Transaction tracing was measured by the number and proportion of flagged transactions that were successfully traced back to their origin and resolved within a given reporting period. Document examination was operationalized through the rate at which forged or altered documents were identified during audit cycles (Racheal et al., 2023). Data analytics was measured by the percentage of anomalies detected through automated and semi-automated analytical tools relative to the total number of transactions processed. Internal control assessment was captured through the compliance score assigned to the bank's internal controls during each annual audit cycle, expressed as a percentage. The dependent variable, fraud detection, was measured by the total number of confirmed fraud cases identified and substantiated within each year of the study period (Julius & Kazaara, 2025).

Qualitative data were collected through structured interviews conducted with eight senior officials drawn from the bank's internal audit department, the compliance division, and the risk management unit. These interviews sought to gather insights into the practical challenges and successes associated with the application of forensic audit practices at the bank. Quantitative data were analysed using SPSS software (version 26.0), and descriptive statistics, correlation analysis, and multiple regression analysis were employed (Nelson et al., 2022). Qualitative data were analysed thematically. A significance level of 0.05 was adopted for all statistical tests, and the assumptions underlying the regression model were verified and confirmed to hold.

5. RESULTS

5.1 Descriptive Statistics

The table below presented the descriptive statistics for all variables used in the study over the six-year period from 2018 to 2023.

Variable	Mean	Standard Deviation	Minimum	Maximum	Median
Fraud Cases Detected (per year)	23.17	6.84	14	34	22.5
Transaction Tracing Rate (%)	71.40	8.52	58.20	82.70	70.85
Document Examination Detection Rate (%)	64.80	7.93	51.30	76.40	64.15
Data Analytics Anomaly Detection Rate (%)	78.60	5.67	70.10	85.90	78.25
Internal Control Compliance Score (%)	82.30	4.41	76.50	88.10	82.00

Source: Primary Data, 2026

The mean number of fraud cases detected annually stood at 23.17, with a standard deviation of 6.84, indicating that the volume of detected fraud fluctuated from year to year. The Data Analytics Anomaly Detection Rate recorded the highest mean at 78.60%, suggesting that analytical tools were the most consistently effective mechanism for identifying irregularities in the bank's transactions. The Internal Control Compliance Score averaged 82.30%, reflecting a generally sound but imperfect system of internal controls(Nelson et al., 2023). Transaction Tracing and Document Examination recorded means of 71.40% and 64.80%, respectively, indicating that while these practices contributed meaningfully to fraud detection, their effectiveness was somewhat lower on average compared to data analytics.

5.2 Yearly Trends in Fraud Detection and Forensic Audit Practices

The table below illustrated how each of the forensic audit practices and the overall fraud detection rate changed from year to year across the study period.

Year	Fraud Cases Detected	Transaction Tracing Rate (%)	Document Examination Rate (%)	Data Analytics Rate (%)	Internal Control Score (%)
2018	14	58.20	51.30	70.10	76.50
2019	18	63.40	55.80	73.50	78.90
2020	22	70.10	62.40	77.80	81.20
2021	25	72.80	66.90	79.60	83.40
2022	28	78.50	74.20	82.30	85.70
2023	34	82.70	76.40	85.90	88.10

Source: Primary Data, 2026

The yearly data revealed a clear and sustained upward trend across all variables over the six-year period. Fraud cases detected rose steadily from 14 in 2018 to 34 in 2023, representing a 143% increase over the period. This increase coincided with corresponding improvements in all four forensic audit practices, with Data Analytics showing the most consistent gains and Document Examination recording the largest percentage point improvement from 51.30% to 76.40%(Julius & Nancy, 2025).

5.3 Correlation Analysis

The correlation matrix below examined the pairwise relationships between fraud detection and each of the four forensic audit practices.

Variable	Fraud Cases Detected	Transaction Tracing	Document Examination	Data Analytics	Internal Control Score
Fraud Cases Detected	1.000				
Transaction Tracing Rate	0.912**	1.000			
Document Examination Rate	0.834**	0.756**	1.000		
Data Analytics Rate	0.943**	0.821**	0.789**	1.000	
Internal Control Score	0.786*	0.701*	0.654*	0.812**	1.000

*Significant at 0.05 level; **Significant at 0.01 level.

Source: Primary Data, 2026

All four forensic audit practices recorded statistically significant positive correlations with the number of fraud cases detected. Data Analytics shared the strongest correlation with fraud detection at 0.943, followed closely by Transaction Tracing at 0.912(Nelson et al., 2023). Document Examination and Internal Control Assessment also demonstrated strong positive correlations of 0.834 and 0.786, respectively. These findings suggested that each practice contributed meaningfully to fraud detection, though data analytics and transaction tracing appeared to be the most powerful individual contributors.

5.4 Multiple Regression Analysis

The regression model below presented the results of the multiple linear regression analysis, which sought to determine the relative and combined contributions of the four forensic audit practices in predicting fraud detection at Absa Bank.

Variable	Coefficient (β)	Standard Error	t-Value	p-Value	Significance
Constant	2.340	0.521	4.491	0.001	***
Transaction Tracing Rate	0.387	0.119	3.252	0.005	***
Document Examination Rate	0.241	0.098	2.459	0.019	**
Data Analytics Rate	0.456	0.134	3.403	0.002	***
Internal Control Score	0.178	0.084	2.119	0.048	**

*p < 0.05; **p < 0.01; ***p < 0.001. R² = 0.891; Adjusted R² = 0.854; F-statistic = 24.12 (p = 0.000).

The regression model accounted for 89.1% of the variation in fraud detection outcomes at Absa Bank, as indicated by the R² value of 0.891, which represented an excellent fit. Data Analytics emerged as the strongest predictor of fraud



detection, with a standardised coefficient of 0.456 and a p-value of 0.002, meaning that improvements in the bank's use of analytical tools were most closely associated with greater numbers of fraud cases being uncovered. Transaction Tracing was the second most significant predictor, carrying a coefficient of 0.387 and a p-value of 0.005, confirming that the ability to trace transactions back to their origins was a critical forensic capability. Document Examination also entered the model as a significant predictor, with a coefficient of 0.241 and a p-value of 0.019, indicating that the careful scrutiny of documents played a meaningful role in identifying fraudulent activity. Internal Control Assessment, while statistically significant at the 0.05 level with a p-value of 0.048, recorded the smallest coefficient of 0.178, suggesting that while it contributed to fraud detection, its direct impact was comparatively modest relative to the other three practices.

5.5 Fraud Detection by Type and Forensic Practice

The table below broke down the types of fraud detected at Absa Bank over the study period and identified which forensic audit practice was most instrumental in uncovering each type.

Type of Fraud	Total Cases Detected	Primary Detection Method	Detection Rate (%)
Embezzlement	42	Transaction Tracing	74.60
Document Forgery	31	Document Examination	80.60
Identity Fraud	27	Data Analytics	81.50
Money Laundering	18	Data Analytics	72.20
Insider Theft	21	Internal Control Assessment	66.70
Loan Fraud	19	Transaction Tracing	68.40

Source: Primary Data, 2026

Embezzlement was the most frequently detected type of fraud over the six-year period, with 42 cases uncovered, and Transaction Tracing was identified as the primary method through which the majority of these cases were detected, with an effectiveness rate of 74.60%. Document Forgery, which accounted for 31 cases, was most effectively identified through Document Examination at a rate of 80.60%. Identity Fraud and Money Laundering were both predominantly uncovered through Data Analytics, with detection rates of 81.50% and 72.20%, respectively, reinforcing the critical role of analytical tools in identifying sophisticated and digitally driven fraudulent schemes. Insider Theft, though lower in volume at 21 cases, was most closely tied to Internal Control Assessment, which detected approximately two-thirds of such cases.

5.6 Qualitative Findings Summary

The table below summarised the key themes that emerged from the structured interviews conducted with senior audit and compliance officers at Absa Bank.



Theme	Key Finding	Number of Respondents Citing Theme
Importance of Data Analytics	Officers emphasised that data analytics had transformed the bank's ability to detect fraud in real time and at scale	7 out of 8
Training and Skill Gaps	Several respondents noted that a lack of specialised forensic audit training among staff limited the effectiveness of certain practices	6 out of 8
Coordination Between Departments	Interviewees highlighted that fraud detection improved significantly when audit, compliance, and operations teams worked in close coordination	7 out of 8
Regulatory Support	Officers indicated that clearer and more supportive regulatory guidance from the Bank of Uganda would strengthen forensic audit implementation	5 out of 8
Resource Constraints	Some respondents reported that limited budgetary allocation for forensic audit tools and personnel constrained the bank's capacity	4 out of 8

The qualitative findings aligned closely with the quantitative results and provided important contextual depth. The widespread endorsement of data analytics as a transformative tool was consistent with its position as the strongest predictor in the regression model. The identification of training gaps and resource constraints, however, suggested that the full potential of forensic audit practices had not yet been realised at Absa Bank, and that organisational and financial barriers remained significant obstacles to their optimal application.

5.7 Interpretation of Results

The findings of this study painted a comprehensive and coherent picture of how forensic audit practices contributed to fraud detection at Absa Bank along Jinja Road over the six-year period from 2018 to 2023. The regression model, which accounted for nearly 90% of the variation in fraud detection, confirmed that all four forensic audit practices examined in the study had a statistically significant and positive impact on the bank's capacity to uncover fraudulent activities. Data analytics stood out as the single most impactful practice, and this finding was reinforced by both the correlation analysis and the qualitative testimonies of the bank's senior staff, who consistently highlighted the power of analytical tools in identifying patterns and anomalies that would otherwise have gone unnoticed. Transaction tracing was the second most influential practice, and its importance was particularly evident in cases of embezzlement and loan fraud, where the ability to follow the movement of funds through the banking system was critical to establishing whether irregularities had occurred. Document examination, while less dominant in statistical terms, played an indispensable role in detecting forgery-related fraud and remained a core component of any thorough forensic audit process. Internal control assessment, though it recorded the smallest coefficient in the regression model, was

nonetheless significant, and its role in detecting insider threats underscored the importance of maintaining robust and regularly reviewed internal safeguards. The upward trends observed across all variables from 2018 to 2023 suggested that Absa Bank had made meaningful and sustained improvements in its forensic audit capabilities over the study period, and that these improvements had directly translated into a greater ability to detect and respond to fraud.

6. CONCLUSIONS

The study successfully examined the impact of forensic audit practices on fraud detection at Absa Bank along Jinja Road, Kampala, over a six-year period. The findings provided strong and consistent evidence that forensic audit practices played a substantial and statistically significant role in enhancing the bank's ability to identify and uncover fraudulent activities. Data analytics was identified as the most powerful forensic audit practice in predicting fraud detection, followed closely by transaction tracing, while document examination and internal control assessment also contributed meaningfully to the overall effort. The yearly trend data confirmed that as Absa Bank progressively strengthened and expanded its forensic audit capabilities, the number of fraud cases detected rose in a clear and sustained manner, indicating a direct and positive relationship between the application of these practices and improved fraud detection outcomes. The qualitative findings further confirmed that senior staff at the bank recognised the value of forensic auditing but also identified persistent challenges related to training, inter-departmental coordination, and resource allocation that limited the practice's full effectiveness. Taken as a whole, the study demonstrated that forensic auditing was not merely a theoretical or regulatory obligation but a genuinely effective operational tool for protecting financial institutions in Uganda against the threat of fraud, provided that it was applied systematically, consistently, and with adequate organisational support.

7. RECOMMENDATIONS

Based on the findings of this study, several recommendations were put forward to the management of Absa Bank, to regulators, and to other financial institutions operating in Uganda. First, Absa Bank was advised to continue investing in and expanding its data analytics capabilities, including the adoption of more advanced artificial intelligence and machine learning tools, given that data analytics was identified as the most effective forensic audit practice in detecting fraud. Second, the bank was urged to strengthen its transaction tracing systems and to ensure that all significant financial transactions were logged, monitored, and traceable in real time, particularly in areas identified as high risk such as corporate lending and large-value transfers. Third, it was recommended that the bank establish a comprehensive and ongoing training programme for its audit and compliance staff, specifically focused on forensic audit techniques, so as to address the skill gaps that were identified during the interviews and to ensure that the bank's personnel were equipped to apply these practices effectively. Fourth, the management of Absa Bank was advised to foster closer coordination and communication among the internal audit, compliance, risk management, and operations departments, as the qualitative findings indicated that fraud detection improved significantly when these teams worked in a more integrated and collaborative manner. Fifth, it was recommended that the Bank of Uganda consider strengthening its regulatory framework to mandate the regular conduct of forensic audits across all licensed financial

Received: 06.02.2026

Accepted: 12.02.2026

Published on: 28.02.2026

institutions in the country, and to provide clearer guidance on best practices and minimum standards for forensic audit implementation. Finally, future researchers were encouraged to conduct studies that examined the cost-effectiveness of forensic audit practices, the role of corporate governance and board oversight in facilitating their implementation, and the impact of emerging technologies such as blockchain on fraud detection in Ugandan financial institutions.

References

- Akankwasa, A., Akakikunda, T., Ntirandekura, M., Murezi, C. M., & Christopher, F. (2022). *Effect of Capital Budgeting on Development of Organizations Empirical Studies of Kashinge Child Development Centre Kisoro District* . 6(9), 5–10.
- Faridah, K., Kazaara, A. G., & Kazaara, A. I. (2023). *The Effect Of Supplier Selection On Product Quality Management In Organizations . A Case Study Of Uganda Wild Life*. 7(3), 307–317.
- Frank, M., Nelson, K., Ariyo, D., Kazaara, G., Deus, T., Christopher, F., & Catherine, M. (2023). The Macroeconomic Determinants of Economic Growth in Uganda a Case Study Of Wakiso Distict. In *International Journal of Academic and Applied Research* (Vol. 7). www.ijeais.org/ijaar
- Innocent, A., Kazaara, A. G., Nelson, K., Catherine, M., Micheal, T., & Deus, T. (2023a). *Internal Auditing and Fraud Prevention in Organizations a Case Study of Nssf Kampala Area*. 7(2), 150–157.
- Innocent, A., Kazaara, A. G., Nelson, K., Catherine, M., Micheal, T., & Deus, T. (2023b). *Internal Auditing and Fraud Prevention in Organizations a Case Study of Nssf Kampala Area*. 7(2), 150–157.
- Irumba, A., Nicholas, K., & Alex, I. (2024). *Electronic Banking and its Impact on Financial Performance: An Empirical Evidence of Centenary Bank*. 3(4), 104–111. <https://www.researchgate.net/publication/380154046>
- Ivan, M., Alex, I., & Deus, T. (2023a). Internal Auditing and Financial Performance Commercial Banks in Uganda: a Case Study of Centenary Bank Nansana Branch. *Metropolitan Journal of Business & Economics (Mjbe)*, 2(6), 34–49.
- Ivan, M., Alex, I., & Deus, T. (2023b). INTERNAL AUDITING AND FINANCIAL PERFORMANCE COMMERCIAL BANKS IN UGANDA: A CASE STUDY OF CENTENARY BANK NANSANA BRANCH. In *METROPOLITAN JOURNAL OF BUSINESS & ECONOMICS (MJBE)* (Vol. 2, Issue 6).
- Jallow, M. A., Abiodun, N. L., Weke, P., & Aidara, C. A. T. (2022). Efficiency of Financial Ratios in Predicting Stock Price Trends of Listed Banks at Nairobi Securities Exchange. *European Journal of Statistics*, 2, 1–12. <https://doi.org/10.28924/ada/stat.2.9>
- Julius, A., & Kazaara, A. I. (2025). *Survival and Resilience : An Analysis of Livelihood Strategies Among Uganda ' s Unemployed Youth*. 9(10), 219–228.
- Julius, A., & Nancy, M. (2025). *Bridging the Chasm : An Evaluation of the Transition from Secondary Education to Higher Learning in Uganda : A Case Study of Avance International University and Mbarara University of Science and Technology*. 9(10), 163–172.
- Kazaara, A. I., & Desire, N. (2025). *Culture as a Correlate of Discipline in Secondary Schools in Uganda : A Critical*

Received: 06.02.2026

Accepted: 12.02.2026

Published on: 28.02.2026

Analysis. 9(11), 93–99.

Moses, K., Kazaara, A. G., Kazaara, A. I., & Ismail, L. (2023). *External Auditing and the Financial Performance of Marianum Press Limited , Kisubi*. 7(3), 258–266.

Moses, N., Enock, Z., & Matovu, K. (2025). *Corporate Governance and Financial Performance : A Case Study of Uganda Development Bank*. 9(February), 31–38.

Nelson, K., Christopher, F., & Milton, N. (2022). *Teach Yourself Spss and Stata*. 6(7), 84–122.

Nelson, K., Kazaara, A. G., & Kazaara, A. I. (2023). *Teach Yourself E-Views*. 7(3), 124–145.

Racheal, N., Kazaara, A. G., & Kazaara, A. I. (2023). *Impact Of Quality Financial Reporting On An Organization Resource Management : A Case Study Of Humuza Holding Limited Kampala Uganda*. 7(3), 335–343.

Winny, N. D., Kazaara, A. G., Kazaara, A. I., & Deus, T. (2023). *Effect Of Motivation On Employee Performance In Non- Government Organizations (NGOs) : A Case Of Mbale City*. 7(3), 67–71.