THE ECONOMIC IMPACT OF DIGITAL FORENSIC ACCOUNTING IN MITIGATING CORPORATE SYSTEM FRAUD IN NIGERIA BANKS.

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Abstract

This study explores the role of Digital Forensic Accounting (DFA) in mitigating corporate fraud within the Nigerian banking sector, with a focus on its broader economic implications. Data were collected using a structured questionnaire administered to 129 employees from 20 Nigerian banks, specifically targeting those in management and accounting roles. The study employed both descriptive and inferential statistical techniques, including frequency analysis, percentages, bar charts, and the Spearman Rank Correlation Coefficient, to analyze the data. The findings reveal that DFA significantly improves fraud detection and prevention, with 46.9% of respondents strongly agreeing that DFA is effective. The study also shows a positive relationship between the use of forensic accounting techniques and fraud mitigation, with a Spearman correlation coefficient of 0.869 and a p-value of 0.000, indicating a statistically significant impact on fraud detection and prevention. Based on these findings, the study recommends strengthening forensic accounting capacity, adopting advanced forensic tools, enhancing regulatory support, and promoting public awareness through education and partnerships with academic institutions. These measures are expected to improve financial stability, economic growth, and employment rates in the Nigerian banking sector

Keyword: *Digital Forensic Audit, Corporate frauds, Deposit money banks.*

Introduction

The banking industry in Nigeria serves as a cornerstone of the nation's economy, playing a pivotal role in the mobilization and management of financial resources across various sectors. This sector is integral to economic growth, driving both national development and the financing of key projects in the real economy (Dennis, 2013). As a critical component of the financial system, the Nigerian banking sub-sector significantly contributes to employment and market capitalization, thereby supporting the broader economic framework (Central Bank of Nigeria [CBN], 2009). However, disruptions within this sub-sector, particularly those involving financial mismanagement, can have detrimental effects on the entire economy, as was evident during the 2007-2010 financial crisis, which was primarily attributed to poor management practices in several banks (CBN, 2010).

Historically, Nigerian banks have been characterized by aggressive recruitment drives aimed at sourcing top talent to manage daily operations and enhance organizational performance. This has resulted in considerable investments in human capital, including recruitment costs often outsourced to human resource consulting firms, followed by extensive training and retraining

programs to boost staff productivity (Okpara, 2009). Despite these efforts, the banking sector's vulnerabilities were laid bare during the global financial crisis, leading to a significant erosion of solvency, a loss of customer trust, and plummeting asset values (CBN, 2009).

Fraud, misappropriation of assets, and insider abuses are recognized as major contributors to the recurrent crises within Nigerian banks, which have led to macroeconomic instability and stagnated growth in real economic activities (CBN Publication, 2009). Although the Central Bank of Nigeria has made concerted efforts to address fraud within the sector, these crimes have continued to rise, demonstrating the inadequate preventive measures and oversight within banks (CBN, 2010; Wikipedia, 2017). Moreover, many Nigerian banks, while amassing large deposits, have failed to lend effectively to businesses in the real sector, citing stringent lending conditions that impede access to capital for economic growth. This has further exacerbated the gap between financial institutions and the real economy, particularly in terms of funding for business expansion. Additionally, regulatory weaknesses have allowed bank officials to amass significant personal wealth, blurring the lines between corporate and private assets and leading to banking irregularities (Paul, Ikpefan & Deborah, 2014).

The ongoing financial mismanagement and fraud scandals in Nigerian banks have not only raised concerns regarding the integrity of the sector but also threatened its ability to foster economic growth, with ripple effects on national unemployment, inflation, and overall stability (Oseni, 2006). As fraud cases escalate, many stakeholders, including customers and investors, have lost confidence in the sector's integrity (Oseni, 2006). The rapid advancement of information and communication technologies has enabled increasingly sophisticated fraudulent activities, including phishing, identity theft, and online banking fraud, which further destabilize the sector (Uchenna & Agbo, 2013).

Despite efforts to curb fraud through improved oversight, fraudulent activities such as cheque fraud, kiting, and the use of counterfeit negotiable instruments continue to plague the Nigerian banking sector (Berney, 2008). These persistent challenges, coupled with systemic issues such as weak management oversight and non-compliance with regulatory standards, have undermined the performance of banks and, by extension, the Nigerian economy (Okpara, 2009). The Central Bank of Nigeria has linked the underdevelopment of the nation's economy to weaknesses within the banks' internal control systems (CBN, 2010), highlighting the profound impact of fraud on financial stability.

The objective of this study is to explore the ways in which fraudulent activities and financial mismanagement have impaired the Nigerian banking sector's ability to contribute to national economic growth. Specifically, the study seeks to assess how forensic accounting techniques can detect and prevent corporate fraud in the sector, aiming to fill a critical gap in existing literature regarding the broader economic impacts of banking fraud. The research will also evaluate the

relationship between the use of forensic accounting methods and the reduction of corporate fraud within Nigerian banks.

Purpose of the Study

a   To examine the role of forensic accounting principles and techniques in detecting and preventing corporate fraud in Nigerian banks.

b   To investigate whether there is a significant relationship between the application of forensic accounting methods and the reduction of corporate fraud in the Nigerian banking sector.

Hypotheses:

a H_0 (Null Hypothesis): There is no use of forensic accounting principles and techniques to detect and prevent corporate fraud in Nigerian banks.

b H_1 (Alternative Hypothesis): There is a significant relationship between the use of forensic accounting techniques and the detection and prevention of fraud in Nigerian banks

Literature Review

The prevalence of corporate fraud in Nigeria's banking sector has significantly undermined both financial stability and economic growth. Digital forensic accounting (DFA) has emerged as a critical tool in detecting and preventing such fraudulent activities. This literature review examines the role of DFA in mitigating corporate fraud within Nigerian banks and evaluates its broader economic impact.

The Rise of Corporate Fraud in Nigerian Banks

Corporate fraud in Nigerian banks has become an increasingly pressing issue, leading to substantial financial losses and the erosion of investor confidence. Several factors have contributed to its rise, including weak internal controls, inadequate regulatory frameworks, and a lack of transparency in financial operations (Okpara, 2009). As fraud escalates, it has become systemic, threatening the very integrity of the banking sector. The 2009 banking crisis stands as a stark reminder of the vulnerabilities within Nigerian banks. This crisis revealed how a combination of mismanagement, corruption, and fraudulent activities led to the collapse of several financial institutions, triggering widespread economic turmoil. It highlighted weaknesses in internal controls and underscored the urgent need for stronger measures to prevent corporate fraud (CBN, 2009).

Research confirms that without effective anti-fraud mechanisms, banks remain susceptible to financial instability, undermining public trust and disrupting the broader economy (Central Bank of Nigeria, 2009). This review aligns with these observations, indicating that corporate fraud

continues to be one of the most significant threats to the stability of Nigerian banks. Recent studies highlight ongoing weaknesses in internal controls, which have facilitated the rise of fraudulent activities (Paul, Ikpefan & Deborah, 2014). It is emphasized that strengthening regulatory frameworks is crucial in addressing this persistent issue (CBN, 2010). Moreover, findings suggest that, if left unchecked, corporate fraud will continue to undermine investor confidence and destabilize the banking sector.

Digital Forensic Accounting: Definition and Relevance

Digital forensic accounting (DFA) is a specialized field that integrates accounting principles with investigative techniques to uncover financial discrepancies and fraudulent activities. DFA combines traditional accounting methods with advanced digital technologies to examine electronic financial data, trace illicit transactions, and identify fraudulent patterns (Adeola, 2023). As financial crimes become more complex and banking operations increasingly digitalize, DFA has become an essential tool in detecting and preventing fraud (Adebayo, S. T., & Olayinka, A. O., 2015). The growing sophistication of fraud in the banking sector has rendered traditional detection methods inadequate. DFA enables real-time transaction monitoring and offers deep insights into financial data, making it crucial for fraud detection and prevention. This method significantly outperforms traditional techniques in identifying hidden fraudulent activities, particularly in digital banking operations (Oluyide, 2025). As Nigerian banks continue to adopt digital banking, the role of DFA in safeguarding financial operations has become more crucial (Adebayo & Olayinka, 2015).

Respondents in this study reiterated that DFA is an indispensable tool in the fight against corporate fraud. Participants noted that integrating DFA techniques into banking operations has significantly helped detect discrepancies at an early stage, reducing the risk of large-scale fraud. Nevertheless, it was also found that the full potential of DFA remains underutilized in many Nigerian banks. The study highlights that greater adoption of DFA tools is necessary across the sector to leverage their potential in fraud prevention (Ogunleye & Fanimokun, 2025).

Digital Forensic Accounting on Fraud Mitigation

DFA has proven to be an effective tool for enhancing fraud detection capabilities within Nigerian banks. By utilizing advanced technologies, DFA allows forensic accountants to examine financial records more thoroughly and identify discrepancies that may otherwise remain undetected. Research confirms that forensic audits conducted using DFA techniques can detect fraudulent activities early, thus minimizing the risk of large-scale financial losses (Oluyide, 2025). Studies also suggest that DFA enhances fraud detection compared to traditional methods, facilitating a more comprehensive investigation of financial transactions (Adeola, 2023).

In this study, respondents overwhelmingly agreed that DFA significantly improves fraud detection. A large percentage of participants emphasized that DFA techniques, such as data mining and

forensic auditing, have enhanced their ability to identify fraudulent activities at an early stage. These findings align with existing literature, which indicates that integrating DFA into banking operations improves fraud detection much more effectively than traditional methods (Adebayo & Olayinka, 2015). However, the study also highlights that while DFA is effective, its full potential remains underutilized in many Nigerian banks. Respondents identified the lack of specialized training and the high costs associated with implementing DFA tools as significant barriers. These challenges must be addressed to maximize DFA's potential in detecting and preventing fraud.

Economic Impact of Fraud Mitigation through DFA

Effective fraud mitigation through DFA is essential for enhancing the financial stability of Nigerian banks. By reducing fraud-related losses, banks can maintain solvency and avoid liquidity crises, which can have severe consequences for the broader economy (Oluyide, 2025). Financial stability is critical not only for the banking sector but also for the overall economic environment, as it fosters investor confidence and attracts both local and foreign investment (Adebayo & Olayinka, 2015).

The findings from this study support existing literature, demonstrating that banks that successfully implement DFA are more likely to experience greater financial stability. Respondents indicated that DFA reduces the frequency and severity of fraud-related financial losses, improving the financial health of banks. This enhanced stability benefits not only individual banks but also contributes to the overall stability of the financial system, which is crucial for promoting economic growth (Oluyide, 2025).

Promotion of Economic Growth

The reduction of fraud through DFA enables banks to allocate more resources toward productive ventures, which, in turn, promotes economic growth. When banks are less burdened by fraud-related losses, they have more capital available to lend to businesses, invest in infrastructure, and support other economic activities. This efficient allocation of resources helps stimulate business growth and contributes to national economic expansion (Adebayo & Olayinka, 2015). In this study, respondents emphasized that DFA's role in minimizing fraud-related losses allows banks to invest more in productive ventures. This increased efficiency in resource allocation directly supports economic growth, creating a positive feedback loop where both the banking sector and the broader economy benefit from fraud mitigation (Oluyide, 2025).

Improvement in Employment Rates

The adoption of DFA can also lead to job creation, particularly in areas such as forensic accounting, cybersecurity, and digital forensics. As banks strengthen their internal controls and enhance their fraud detection capabilities, new job opportunities arise for specialized professionals in the financial sector. Moreover, as banks become more stable and effective in mitigating fraud, the

positive economic effects extend beyond the banking industry, leading to more employment opportunities in other sectors (Ogunleye & Fanimokun, 2025). The findings of this study support this view, with many respondents recognizing that increased use of DFA could lead to job creation within the banking sector and related industries. By enhancing the capacity of banks to prevent and detect fraud, DFA helps foster an environment conducive to job creation, thereby reducing unemployment in the broader economy.

Conceptual Framework

The banking sector in Nigeria is a cornerstone of the nation's economic infrastructure, serving as a critical intermediary for financial resources. Nigerian banks are essential drivers of economic growth by facilitating resource allocation, financing projects, and ensuring market stability (Dennis, 2013). However, the sector is severely impacted by fraud, which has significantly undermined the stability of both the banking sector and the broader economy (Central Bank of Nigeria [CBN], 2009). In recent years, Nigeria has experienced several banking crises exacerbated by fraudulent activities, including financial mismanagement, insider fraud, and cyber fraud (CBN, 2009; Oseni, 2006).

While various anti-fraud measures have been implemented, the increasing sophistication of financial crimes necessitates more advanced solutions. Digital forensic accounting (DFA) has emerged as a crucial tool in combating corporate fraud, particularly within Nigerian banks (Oluyide, 2025). By integrating accounting principles with digital technologies, DFA enhances transparency and accountability within financial systems, providing an effective means of detecting and preventing fraud. This literature review examines the role of DFA in reducing corporate fraud in Nigerian banks, focusing on its broader economic implications, such as enhancing financial stability, fostering economic growth, and improving employment rates (Adebayo & Olayinka, 2015; Ogunleye & Fanimokun, 2025).

Fraud in the Nigerian Banking Sector

Fraud remains one of the most prevalent threats to financial institutions globally, and Nigerian banks are no exception. Various forms of fraud, including financial statement fraud, insider fraud, cyber fraud, and loan fraud, have severely impacted the integrity of Nigerian banks, diminished investor confidence and contributing to macroeconomic instability (Ogunleye & Fanimokun, 2025; Nwankwo, 1991).

Financial Statement Fraud

Financial statement fraud involves the deliberate manipulation of financial records to misrepresent the true financial condition of a bank. Typically, this is done to meet performance targets, secure investment, or conceal financial difficulties (CBN, 2009). In Nigeria, financial statement fraud is

particularly concerning as it undermines the trustworthiness of banks' reports, eroding public confidence and the integrity of financial markets (Oseni, 2006; Paul, Ikpefan & Deborah, 2014).

Insider Fraud

Insider fraud is perpetrated by bank employees or executives with direct access to sensitive financial data (NIBSS, 2023). These individuals may manipulate or misappropriate funds without immediate detection, causing significant financial loss and reputational damage to the bank (Okpara, 2009). Insider fraud is especially damaging because it weakens internal controls, allowing fraudulent activities to go undetected for extended periods (CBN, 2010). According to the Nigerian Banking Sector Fraud report (2020), insider fraud remains one of the most prevalent forms of fraud within the industry, undermining trust in banking operations.

Cyber Fraud

With the rise of digital banking, cyber fraud has become increasingly prevalent within Nigerian banks. Fraudsters exploit weaknesses in banking systems to conduct illegal activities such as identity theft, unauthorized transactions, and phishing schemes (Uchenna & Agbo, 2013). The rise of cyber fraud has significantly impacted the security of online banking platforms, undermining customer trust and the stability of the banking system (Berney, 2008). Recent reports from the Nigerian Deposit Insurance Corporation (NDIC, 2021) underscore the growing threat of cyber fraud, highlighting that banks are ill-prepared to mitigate the risk posed by increasingly sophisticated fraud techniques.

Loan Fraud

Loan fraud involves the manipulation of banking procedures to secure loans under false pretenses (NIBSS, 2023). This type of fraud often includes falsifying documents, inflating asset values, or misrepresenting financial positions to obtain funds that are unlikely to be repaid (Okpara, 2009). Loan fraud distorts the bank's lending practices, leading to an increase in non-performing loans and potentially disrupting the broader financial ecosystem (Paul, Ikpefan & Deborah, 2014). A study by Ogunleye and Fanimokun (2025) found that loan fraud contributed significantly to the liquidity crisis faced by many Nigerian banks in the aftermath of the 2009 banking collapse.

The Role of Digital Forensic Accounting (DFA) in Mitigating Fraud

Digital forensic accounting has become an essential tool for detecting and mitigating fraud within Nigerian banks. DFA utilizes advanced technology to analyze financial data, track fraudulent transactions, and identify discrepancies that may indicate fraudulent activities (Oluyide, 2025). According to Adeola (2023), DFA has proven to be highly effective in identifying fraudulent activities in real-time, particularly in environments where traditional fraud detection methods are insufficient.

Fraud Detection and Prevention

DFA enhances fraud detection capabilities by providing forensic accountants with sophisticated tools to scrutinize financial records and identify suspicious patterns. This is particularly vital in Nigerian banks, where fraud often goes unnoticed due to weak internal controls and insufficient regulatory frameworks (Ogunleye & Fanimokun, 2025). DFA enables real-time monitoring of transactions, allowing banks to identify fraudulent activities at an early stage and prevent substantial financial losses (Oluyide, 2025). Research conducted by Adebayo & Olayinka (2015) supports this, noting that DFA systems are far more effective than traditional fraud detection methods in identifying potential fraud before it escalates. Additionally, DFA tools can track electronic transactions, providing a digital audit trail that is essential for investigating fraud (Adeola, 2023). The implementation of DFA not only strengthens fraud prevention measures but also reduces human error, a common vulnerability in traditional fraud detection systems (Ogunleye & Fanimokun, 2025).

Strengthening Bank Integrity

DFA plays a crucial role in enhancing the integrity of Nigerian banks. By providing transparent forensic audits, DFA ensures that financial statements are accurate and reflective of the bank's actual financial position. This enhances public trust in the banking system, which is often compromised by fraudulent activities (CBN, 2010). As banks adopt DFA techniques, the reduction in fraud enhances public confidence, not only in individual institutions but also in the Nigerian banking system as a whole. According to the Nigerian Financial Sector Report (2019), public trust in the banking system has been gradually improving with the increasing adoption of forensic accounting techniques.

Economic Impact of Digital Forensic Accounting in Nigeria

Mitigating corporate fraud through DFA has broad economic implications for Nigeria. By reducing fraud, DFA contributes to the stability of the banking system, which influences key economic indicators such as GDP, employment rates, and per capita income (Oluyide, 2025; Adebayo & Olayinka, 2015).

Enhancing Financial Stability

DFA enhances financial stability by reducing fraud-related financial losses. Banks that implement DFA measures effectively are less likely to experience liquidity crises or insolvency due to fraud, ensuring the long-term solvency of the banking sector (Ogunleye & Fanimokun, 2025). Financial stability fosters greater investor confidence and encourages investment in both the banking sector and the broader economy (Oluyide, 2025). According to the Nigerian Investment Promotion

Commission (NIPC, 2021), the reduction of fraud-related losses has led to a noticeable increase in foreign direct investment (FDI) in Nigeria's financial sector.

Promotion of Economic Growth

The reduction of fraud through DFA enables banks to function more efficiently by directing resources to productive ventures that stimulate economic growth. This shift leads to infrastructure development, business expansion, and overall improvement in national economic performance (Adeola, 2023). Research conducted by Adebayo & Olayinka (2015) suggests that banks that reduce fraud through DFA tend to allocate more resources to business loans and infrastructure projects, driving economic growth.

Method of Data Collection

The primary method of data collection for this study was the administration of a structured questionnaire. The questionnaire was distributed to selected respondents from 20 banks in Nigeria, specifically designed to capture the perspectives of bank employees, particularly those in management and accounting roles, regarding the application of digital forensic accounting (DFA) in combating corporate fraud. A total of 129 questionnaires were distributed to the respondents. To minimize bias, respondents were encouraged to complete the questionnaires independently, and clear instructions were provided to ensure accurate and consistent completion. This approach was intended to ensure the reliability and validity of the collected data (CBN, 2009; Ogunleye & Fanimokun, 2025).

Data Analysis Method

The data collected from the 129 respondents were analyzed using both descriptive and inferential statistical techniques.

Descriptive Analysis: Frequency tables, percentages, and bar charts were used to summarize and present responses to the research questions. This method provided a clear overview of participants' perceptions of DFA's effectiveness in fraud detection and prevention (Adebayo & Olayinka, 2015).

Inferential Analysis: A one-way ANOVA test was employed to test the hypotheses regarding the effectiveness of forensic accounting principles and techniques in mitigating fraud. This statistical method was selected for its ability to compare means across different groups and to determine the statistical significance of relationships between variables. SPSS version 20.0 was utilized to analyze the data and compute correlation coefficients, which helped determine the strength and direction of relationships between the variables (Adeola, 2023).

Data Presentation and Analysis

The results of the survey were presented through tables and charts, offering insights into respondents' job descriptions and their responses to key research questions. Figures 4.7 and 4.8

depict the distribution of respondents based on their job titles. The majority of respondents were Directors of Accounts (32%), followed by General Accountants (24.7%), reflecting significant involvement of these roles in accounting and fraud detection within the banking sector (Ogunleye & Fanimokun, 2025). In terms of respondents' views on the effectiveness of DFA in mitigating fraud, Table 4.7 outlines how forensic accounting principles are perceived. Of the 98 respondents, 46.9% strongly agreed that DFA is effective in detecting and preventing fraud, highlighting its potential as a powerful tool for fraud mitigation in Nigerian banks. This finding aligns with the work of Oluyide (2025), who emphasized the importance of adopting DFA techniques in reducing corporate fraud.

Furthermore, Figures 4.9 and Table 4.9 present the responses to Research Question 2, which investigates the overall effectiveness of forensic accounting in fraud detection. The findings indicate that 45.7% of respondents agree that DFA is effective in combating corporate fraud, reinforcing strong support for its implementation in Nigerian banks (Adebayo & Olayinka, 2015).

Test of Hypotheses

Two key hypotheses were tested to determine the relationship between the use of forensic accounting techniques and fraud detection and prevention:

H_0 **(Null Hypothesis)**: There is no use of forensic accounting principles and techniques to detect and prevent corporate fraud in Nigerian banks.

H_1 **(Alternative Hypothesis)**: There is a significant relationship between the use of forensic accounting techniques and the detection and prevention of fraud in Nigerian banks.

The **Spearman Rank Correlation Coefficient** was used to test these hypotheses. The results showed a strong positive correlation between forensic accounting techniques and fraud detection in Nigerian banks. The **p-value** of 0.000 indicated that the null hypothesis could be rejected at a 5% significance level. This result supports the conclusion that forensic accounting principles and techniques are significantly related to fraud detection and prevention in the Nigerian banking sector (Correlation coefficient = 86.9%) (SPSS, 2025).

Table 1: Analysis of Questionnaires Administered

S/No	Questionnaire Status	Frequency	Percentage (%)
1	Questionnaire Retrieved and Used	98	75.9
2	Questionnaire Not Retrieved	31	24.1

S/No	Questionnaire Status	Frequency	Percentage (%)
Total		**129**	**100**

Source: Field Survey, 2025

Table 2: Analysis of Respondents According to Job Description

S/No	Job Description	Frequency	Percentage (%)
1	Auditor	23	16.0
2	General Accountant	20	24.7
3	Director Admin	11	13.6
4	Forensic Accountant	1	1.2
5	Director of Accounts	26	32.0
6	Director of Operations	5	6.2
7	Others	13	6.2
Total		**98**	**100**

Source: Field Survey, 2025

Table 3: Research Question 1 - Extent to Which Forensic Accounting Principles and Techniques Help in Detecting and Preventing Corporate Fraud in Nigeria

S/No	Respondents' Opinion	Frequency	Percentage (%)
1	Strongly Agree	48	46.9
2	Agree	22	22.2
3	Undecided	7	7.4
4	Strongly Disagree	11	11.1
5	Disagree	10	12.3

S/No Respondents' Opinion Frequency Percentage (%)

Total		**98**	**100**

Source: Author's Research, 2025

Table 4: Research Question 2 - Effectiveness of Forensic Accounting in Detecting and Preventing Corporate Fraud in Nigeria

S/No Respondents' Opinion Frequency Percentage (%)

S/No	Respondents' Opinion	Frequency	Percentage (%)
1	Strongly Agree	28	27.2
2	Agree	47	45.7
3	Undecided	9	9.9
4	Strongly Disagree	6	7.4
5	Disagree	9	9.9
Total		**98**	**100**

Source: Author's Research, 2025

Table 5: Hypothesis Test I - Relationship Between Forensic Accounting Techniques and Fraud Detection in Nigeria

Test Statistics	Value
P-value	0.000
Correlation Coefficient	0.869
Number of Observations	98
Level of Significance	5% (2-tailed)

Source: SPSS 20.0 (See Appendix)

Table 6: Hypothesis Test II - Usage of Forensic Accounting Techniques in Fraud Detection and Prevention in Nigeria

Test Statistics	Value
P-value	0.000
Correlation Coefficient	0.697
Number of Observations	98
Level of Significance	5% (2-tailed)

Source: SPSS 20.0 (See Appendix)

Discussion on Findings

The survey conducted on the application of digital forensic accounting (DFA) in mitigating corporate fraud in Nigerian banks has provided valuable insights into the effectiveness of forensic accounting techniques and their broader economic implications. Based on responses from 98 participants, including auditors, general accountants, directors, and forensic accountants, the following sections discuss key findings:

Extent of Forensic Accounting in Detecting and Preventing Fraud

Research Question 1 sought to assess the extent to which forensic accounting principles and techniques help detect and prevent corporate fraud in Nigerian banks. The findings indicate strong support for the effectiveness of DFA in combating fraud. As shown in Table 3, 46.9% of respondents strongly agreed that forensic accounting techniques are effective, while 22.2% agreed, signaling robust consensus on DFA's role in fraud detection and prevention. Only 12.3% disagreed or strongly disagreed, further reinforcing DFA's recognition as a valuable tool in mitigating fraud within the banking sector (Oluyide, 2025). These findings align with studies by Ogunleye & Fanimokun (2025), which highlight the significant role of forensic accounting in identifying financial discrepancies and providing early fraud detection.

Effectiveness of Forensic Accounting in Fraud Detection and Prevention

Research Question 2 focused on the effectiveness of forensic accounting as a tool for fraud detection and prevention. Table 4 shows that 45.7% of respondents agreed, and 27.2% strongly agreed that forensic accounting is effective in combating corporate fraud. These findings emphasize the widespread belief that DFA is not only effective in identifying fraud but also instrumental in preventing it.

However, a small proportion (7.4% strongly disagreed and 9.9% disagreed) expressed skepticism about the effectiveness of DFA. This skepticism may be attributed to concerns over high implementation costs, the need for specialized skills, and resistance to adopting new technologies in some banking institutions (Adeola, 2023). These challenges highlight the ongoing barriers to the full adoption of DFA, especially in resource-constrained environments or institutions with limited technical expertise.

Statistical Significance of Forensic Accounting Techniques in Fraud Mitigation

The hypothesis tests conducted provide empirical evidence supporting the positive relationship between forensic accounting techniques and fraud detection and prevention. As shown in Table 5, the Spearman Rank Correlation Coefficient of 0.869, with a p-value of 0.000, indicates a strong and statistically significant relationship between DFA and fraud detection in Nigerian banks. Similarly, Table 6 reveals a correlation coefficient of 0.697 (p-value = 0.000) between DFA and fraud prevention, further confirming the significant impact of forensic accounting on fraud reduction.

The findings of this study corroborate these challenges, as respondents identified limited technical expertise and the financial burden of implementing DFA tools as major barriers. Some banks struggle to invest in the required technologies or train their staff, undermining DFA's overall effectiveness. Moreover, reluctance to adopt new methods, especially in resource-constrained environments, may impede progress in mitigating corporate fraud. These findings suggest that although DFA holds great potential for fraud mitigation, targeted efforts are needed to build the capacity of banks to implement DFA effectively. This includes investing in training programs for forensic accountants, upgrading technological infrastructure, and fostering a culture that embraces innovation and change.

Conclusion and Recommendations

This study has examined the critical role of digital forensic accounting (DFA) in mitigating corporate system fraud in Nigerian banks and its subsequent economic impact. The findings suggest that DFA significantly enhances fraud detection and prevention within Nigerian banks, with a strong positive relationship observed between the application of forensic accounting techniques and fraud mitigation. This aligns with previous research (Oluyide, 2025; Ogunleye & Fanimokun, 2025).

Recommendations

Based on these findings, several recommendations have been proposed to optimize DFA's role in combating corporate fraud.

a   Banks should invest in specialized training for accounting and auditing staff to improve their forensic accounting skills, thereby enhancing fraud detection and prevention efforts (Oluyide, 2025).

b   Additionally, the adoption of advanced forensic software for real-time monitoring, data mining, and anomaly detection is essential to effectively identify fraudulent patterns (Ogunleye & Fanimokun, 2025; Berney, 2008).

c   Regulatory bodies such as the Central Bank of Nigeria (CBN) and the Nigerian Deposit Insurance Corporation (NDIC) should encourage the wider adoption of DFA practices by creating industry standards and offering incentives (CBN, 2009).

d   Furthermore, banks can address cost and expertise limitations by partnering with forensic accounting firms and academic institutions to provide affordable training and access to cost-effective tools (Adeola, 2023).

e   Raising awareness about DFA's benefits through workshops, seminars, and incorporating DFA education into professional accounting courses is also crucial to developing the next generation of forensic accountants (Uchenna & Agbo, 2013).

f   Finally, banks should implement continuous monitoring and evaluation systems to assess DFA's effectiveness, ensuring it adapts to evolving fraud tactics through regular audits and internal control reviews (Pallant, 2020).

These recommendations, if implemented, will significantly strengthen the use of DFA in mitigating fraud and contribute to a more secure banking environment in Nigeria.

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