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Forensic Accounting in Fraud Detection and Prevention. A Qualitative Investigation of Microfinance Institutions

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Despite authorities and governments' efforts in fraud prevention and investigation, new types of fraud emerge daily. In fact, the rise in global business scandals has heightened the need for forensic accounting, as financial fraud is the world's most severe economic threat. Forensic accounting combines accounting, auditing, and investigative skills to detect and prevent accounting fraud. Research on fraud investigations and forensic accounting has predominantly employed quantitative methods, with relatively few studies utilizing qualitative research approaches. Therefore, this study fills the gap and examined the role of forensic accounting in fraud detection and prevention of microfinance in Nigeria. A qualitative approach was employed using a sample of eighteen participants working in Nigerian microfinance firms. The results show that advanced technological skills in forensic accounting can enhance the integrity of microfinancing institutions in Nigeria, preventing fraud and gain investor and shareholder confidence. In addition, the results reveal that, the future of microfinance forensic accounting is expected to prioritize technological advancements like data analytics, machine learning, artificial intelligence, and blockchain in its procedures. By implication, forensic accounting is crucial for Nigerian microfinance institutions; management must recognize its importance in implementing proactive measures to prevent fraud.

Keywords: Forensic accounting, microfinance institutions, fraud, technology, Nigeria

JEL: M41, M42, N27

Globally, fraudulent and suspicious financial activities are increasing, posing a threat to businesses due to unethical and dishonest practices (Wijerathna and Perera, 2020). The rise in global business scandals has heightened the need for forensic accounting, as financial fraud is the world's most severe economic threat (Abdullahi and Mansor, 2018). The global collapses of Enron and WorldCom have increased the need for forensic accountants to develop systems and controls for fraud identification, prevention, and management (Popoola *et al.*, 2015). Between 2018 and 2019, 28 percent of global accounting/financial fraud cases occurred, resulting in approximately $42 billion in losses (Kaur *et al.*, 2023). These events have led to the implementation of various standards, rules, and regulations like US Sarbanes–Oxley Act (2002) enacted to prevent or eliminate such incidents.

New types of fraud occur daily despite firms and countries effort to prevent and investigate fraud (Grima *et al.*, 2016). According to Ehioghiren and Atu (2016), forensic accounting and anti–corruption

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practices manage financial crime risk and detect forgeries during audits. Indeed, because organisations generate a vast amount of financial data and become more complicated, combating fraud and crime using standard approaches becomes increasingly difficult. Nigerian accountants emphasize the importance of training and accreditation in combating fraud and crime (Okoye and Gbegi, 2013). Similarly, Sharma and Panigrahi (2013) suggest that data mining techniques like logistic models, neural networks, Bayesian belief networks, and decision trees can help manage and detect fraud.

Garner (2004) defines fraud as knowingly misrepresenting or concealing a material fact to deceive another into acting to their detriment. Fraud is defined as fraudulently manipulating others to gain income or commodities, making misleading suggestions, or concealing the facts to keep an edge over others (Kaur *et al.*, 2023). Accounting is crucial for detecting and preventing fraud, with both internal and external auditors playing a significant role in this process. However, auditors evaluate a firm's financial statements' compliance with accounting standards and relevant rules and regulations, and further detect fraud and draw attention.

Forensic accounting is a method that combines accounting, auditing, and investigation to detect and prevent accounting fraud, particularly in identifying unethical financial or economic activities due to increased fraud frequency (Okoye and Gbegi, 2013). It is the application of science and technology to uncover fraudulent accounting, finance, and business practices (Rezaee *et al.*, 2016). Forensic accountants are primarily responsible for investigating illegal activities such as fraud, corruption, money laundering, computer fraud, conversion, and theft. Management is responsible for preventing and detecting fraud within an organization, working closely with auditors and other members of the corporate governance and reporting ecosystem. However, forensic accounting was developed due to extant gaps in traditional accounting systems (Bierstaker *et al.*, 2006; Sahiti and Bektashi, 2015). Accounting, auditing, and investigative skills are employed to identify, prevent, and combat financial crimes, reduce corruption, and provide legal assistance (Mohd-Nassir *et al.*, 2016).

Forensic accounting solutions are widely recognized as the most effective method for detecting and preventing fraud (Kranacher, 2006), with Delarue (2020) emphasizing the importance of incorporating these techniques for effective fraud prevention and detection. The study explores the increasing importance of forensic accounting in fraud detection and prevention considering its rapid development. Several studies have examined forensic accounting in fraud detection and prevention (Ehioghiren and Atu, 2016; Okoye and Mbanugo, 2020; Okpako and Atube, 2013). However, limited studies have qualitatively examined this phenomenon with microfinance institutions. In addition, studies studied fraud investigations and forensic accounting in Nigeria adopted quantitative research method (Ahmadu *et al.*, 2013, Bassey, 2018, Chukwunedu and Okoye, 2011), indicating limited study in qualitative research. Hence, this study enhances the literature to examine the role of forensic accounting in fraud detection

and prevention and further investigates the challenges faced by microfinancing institutions on the evolving nature of fraud schemes.

We focus on microfinance institutions in Nigeria based on the below compelling reasons. First, Nigeria, Africa's largest economy with approximately $510 billion GDP faces financial fraud, especially in microfinance institutions, necessitating the development of effective fraud detection and prevention strategies like forensic accounting. Additionally, Nigeria's microfinance sector faces unique challenges due to limited resources and inadequate internal controls, increasing their vulnerability to fraud. Second, microfinancing institutions have emerged as essential catalysts for financial inclusion in Nigeria, offering microloans, savings, and insurance services to the economically vulnerable population (Samson *et al.*, 2013). However, the sector's rapid growth and decentralized operations have exposed it to various risks, including financial fraud (Samson *et al.*, 2013). Thus, forensic accounting, that has an investigative and preventive capabilities, plays a pivotal role in safeguarding the integrity of microfinancing operations (Bassey, 2018, Ikpe and Uwah, 2023).

This paper provides threefold significant contributions. Firstly, the study indicates that advanced technological skills in forensic accounting can enhance the integrity of Nigerian microfinancing institutions, prevent fraud, and boost investor and shareholder confidence. Therefore, we present fresh evidence into how forensic accounting contributes to fraud detection and prevention in the Nigerian microfinance institutions. Secondly, literature has studied fraud investigations and forensic accounting adopted quantitative research method, evidencing limited studies in qualitative research. Therefore, this study fills the gap and examined the role of forensic accounting in fraud detection and prevention of microfinance in Nigeria. Finally, our findings shed light on the field, guiding stakeholders, policymakers, and practitioners in adopting effective forensic accounting skills and strategies for fostering transparency, security, and sustainable growth within the microfinance sector in Nigeria.

The remaining sections of the article are structured as follows. The review of extant literature and theoretical underpinning are presented in section 2. The third section discusses the methodology employed in the study. The study results have been discussed in Section 4. Our paper concludes the paper with both theoretical and practical implications.

LITERATURE REVIEW

The increasing incidence of corporate scandals and organizational failures, primarily due to fraudulent management and public fund misappropriation, has highlighted the necessity of forensic accounting for business legitimacy and dependability (Izedonmi and Ibadin, 2012; Kaur *et al.*, 2023). Forensic accounting involves expert accounting in civil and criminal legal proceedings, analysing lost earnings,

income, assets, damages, internal controls review, fraud, and other legal system matters (Afriyie *et al.*, 2023). Forensic accounting involves a comprehensive understanding of accounting, auditing, and investigative skills to investigate theft and fraud, requiring a thorough understanding of evidence collection.

In this section, we explore the role of forensic accountants in fraud detection and prevention, focusing on fundamental principles like data analysis, evidence gathering, and fraud risk assessment.

Data Analytics and Financial Statement Analysis

Data analytics is a powerful tool for fraud detection. Microfinancing institutions collect vast amounts of data related to transactions, client profiles, and financial activities. By employing data analysis techniques, including anomaly detection and pattern recognition, forensic accountants with analytical skills can identify irregularities or suspicious trends that may indicate fraudulent activities (Hossain, 2023; Okoye, 2009). This includes unusual transaction patterns, discrepancies in client information, or unexpected changes in financial behaviour.

Financial statement analysis can identify inconsistencies or red flags that indicate potential fraud. Forensic accountants scrutinize balance sheets, income statements, and cash flow statements to detect discrepancies, unexplained fluctuations, or unusual transactions (Kranacher and Riley, 2019). This analysis can uncover issues like asset misappropriation, fictitious loans, or financial statement manipulation.

Assessment of Internal Control, Documentation and Audit Trails

Assessing the effectiveness of internal controls is essential in fraud detection. Forensic accountants review the internal control framework within microfinance institutions to identify weaknesses or gaps that may be exploited by fraudsters (Abei, 2021; Bassey, 2018; Ikpe and Uwah, 2023). Strengthening internal controls can deter fraud and ensure that any fraudulent activities are detected more easily. Additionally, maintaining comprehensive audit trails and documentation of financial transactions is also a fundamental in fraud detection practice (Abei, 2021; Kranacher and Riley, 2019). Every financial transaction should leave a trace, and these records can be highly valuable in reconstructing activities in case of suspected fraud (Abei, 2021). Regularly reviewing and reconciling these records can help identify discrepancies or missing information by the forensic accountant (Ogunode and Dada, 2022).

Whistle Blower Programs and Transaction Monitoring

Encouraging and rewarding a culture of reporting and transparency through whistle blower programs can be an effective means of fraud detection. Employees, clients, or other stakeholders who suspect fraudulent activities can report them anonymously, allowing for early intervention could be initiated by

the forensic accountants (Singleton and Singleton, 2010).

Continuous and regular monitoring of financial transactions is crucial for early fraud detection. Microfinance institutions can implement real-time transaction monitoring systems that flag unusual or high-risk transactions for further investigation. Such systems can help identify unauthorized withdrawals, forged signatures, or unusual account activity promptly (Akinbowale *et al.*, 2021).

Technology Enabled Solutions

Leveraging technology, such as fraud detection software and biometric authentication systems such as the two way identification and multi facet identification, can enhance fraud prevention and detection efforts (Aziz and Andriansyah, 2023). Biometric identification methods can also be used to reduce the risk of identity theft, while advanced software can identify fraudulent patterns and trends (Rodgers, 2020). The dynamic nature of fraud requires a multifaceted approach to detection within the microfinancing sector in Nigeria. Employing a combination of data analytics, financial statement analysis, transaction monitoring, internal controls assessment, and technology-enabled solutions is essential for staying ahead of increasingly sophisticated fraud schemes. Additionally, fostering a culture of vigilance and reporting through whistles blower programs can empower stakeholders to play an active role in fraud detection and prevention within microfinance.

Microfinancing in Nigeria

The Nigerian microfinancing sector has expanded significantly over the years, with hundreds of microfinance banks and institutions operating across the country. This section provides an overview of the sector's growth, regulatory framework, and its role in alleviating poverty and promoting economic development. The microfinancing sector in Nigeria faces a range of fraud risks, including loan fraud, identity theft, embezzlement, and insider fraud and these various forms of fraud that is prevalent in the sector, has had their impact on microfinancing institutions and their clients (Bassey, 2018; Samson *et al.*, 2013). In their survey research, Bassey (2018) highlighted that forensic accounting affected the management of fraud in microfinance institutions in Cross River State. The data were collected from both primary and secondary sources and was analysed using the ordinary least square technique. The study revealed that audit failures, over time, have prompted a paradigm shift in accounting. Forensic accounting is a critical tool for identifying, investigating, and preventing fraud in microfinancing (Bassey, 2018). This section discusses the fundamental principles of forensic accounting in fraudulent act in the microfinance spheres in Nigeria, including data analysis, evidence gathering, and fraud risk assessment. It also outlines the key roles of forensic accountants in fraud detection and prevention (Bassey, 2018; Chukwunedu and Okoye, 2011; Ikpe and Uwah, 2023; Ogunode and Dada, 2022). Forensic accounting

is an indispensable tool for detecting and investigating fraud in the microfinancing sector in Nigeria. However, this specialized field is not without its challenges and limitations, which can pose significant obstacles in the quest to uncover financial misconduct and protect the integrity of microfinance institutions. For the purpose of this study, we review and discuss the below challenges and limitations on fraud investigation as it affects microfinancing.

(1) Microfinance institutions in Nigeria often operate with limited financial and human resources (Abubakar *et al.*, 2015). Forensic accounting investigations can be resource-intensive, requiring specialized skills and technology (Bassey, 2018). The scarcity of resources can hinder the ability to conduct thorough and timely investigations.

(2) Microfinance institutions may not always have effective systems for reporting and documenting potential fraud incidents (Abubakar *et al.*, 2015). A lack of clear reporting mechanisms can result in underreporting or delayed reporting of fraud, hampering timely intervention.

(3) According to studies conducted by Abubakar *et al.* (2015) and Anyanwu (2004), Nigeria's regulatory environment for microfinance institutions may not always align with best practices in fraud prevention and investigation. Ambiguities or gaps in regulations can limit the authority and scope of forensic accountants in conducting thorough investigation. They further added that navigating the legal framework surrounding fraud investigations can be complex. Forensic accountants should ensure that their investigative procedures and evidence gathering comply with Nigerian laws and regulations. Legal hurdles can slow down the investigative procedure.

(4) The shortage of qualified forensic accountants in Nigeria is a notable challenge (Okoye, 2009). Expertise in forensic accounting techniques and methodologies is essential for effective fraud investigation (Bassey, 2018; Ogunode and Dada, 2022; Okoye, 2009). Addressing the skills gap through training and education is crucial for enhancing fraud detection and prevention.

(5) Microfinance institutions may struggle with data quality and availability (Tucker, 2001). Incomplete or inaccurate records can impede the investigation process. Additionally, some fraudsters take deliberate steps to manipulate or destroy financial data, making it challenging for forensic accountants to trace fraudulent activities.

(6) While technology can aid in fraud detection, it can also pose challenges (Chukwunedu and Okoye, 2011; Ikpe and Uwah, 2023). Fraudsters often adapt to technological advancements, becoming more sophisticated in concealing their activities. Keeping up with evolving fraud schemes and countermeasures is a constant challenge for forensic accountants (Chukwunedu and Okoye, 2011; Kranacher and Riley, 2019).

(7) Obtaining cooperation from all stakeholders, including employees, clients, and law enforcement agencies, is essential in fraud investigations. Resistance or lack of collaboration can hinder the progress

of investigations and limit the forensic accountant's access to critical information (Skalak *et al.*, 2011). Cultural factors and ethical considerations can impact fraud investigations. In some cases, individuals may be hesitant to report fraud due to fear of retaliation or cultural norms that discourage whistleblowing (Hwang *et al.*, 2008). This can hinder the timely discovery of fraud schemes.

Despite these challenges and limitations, forensic accounting remains an essential tool for addressing fraud in microfinancing in Nigeria (Bassey, 2018; Ikpe and Uwah, 2023; Kranacher and Riley, 2019). To mitigate these challenges, it is crucial for microfinance institutions to invest in training, technology, and internal controls, and for regulatory bodies to establish clear guidelines and support effective fraud investigation practices (Abubakar *et al.*, 2015; Ahmadu *et al.*, 2013). Additionally, fostering a culture of transparency and ethical behaviour can help address some of the cultural and ethical barriers that forensic accountants may encounter in their efforts to combat fraud in the microfinancing sector.

Fraud Triangle

Limited qualitative research gap exists in understanding the impact of forensic accounting on fraud detection and prevention, especially in microfinance institutions (Kaur *et al.*, 2023; Firmansyah *et al.*, 2024). Given this gap, the fraud triangle, comprising pressure, opportunity, and rationalisation, is a validated model used to comprehend the reasons behind individuals' fraudulent behaviour. The framework's selection helps researchers in organising qualitative insights, thereby tackling the complexities of fraud in microfinance institutions. The connection between dearth of qualitative studies on investigations into fraud and the adoption of the fraud triangle in this context is based on the need for a robust, established theoretical framework to guide forensic accounting research.

In 1950, criminologist Donald Cressey discovered the fraud triangle, consisting of a problem not shared, an opportunity capitalized on, and excuses used to justify their actions, which has been used in various studies on fraud (Homer, 2020). The fraud triangle, first proposed by Cressey in 1950 and later revisited by Schuchter and Levi (2016), is a widely recognized concept in fraud examination and forensic accounting. The fraud triangle model identifies three key elements: pressure, opportunity, and rationalisation, which contribute to fraudulent behavior. Pressure refers to the financial or personal pressure that drives an individual to commit fraud, often influenced by factors such as financial difficulties, addiction, or personal issues. The higher the pressure, the higher the likelihood of someone engaging in fraudulent activities. On the other hand, opportunity refers to the circumstances and access that enable someone to commit fraud without being detected (Kassem and Higson, 2012). Weak internal controls, lack of oversight, and limited checks and balances increase fraud opportunities, increasing the likelihood of individuals committing such crimes. Finally, rationalization is the psychological aspect of the fraud triangle, involving an individual's capacity to justify their fraudulent actions. Rationalization

helps individuals reconcile their fraudulent behavior with their personal values and ethics by presenting the fraud as temporary, repayable, or victimless. The fraud triangle posits that a lack of pressure, opportunity, or rationalization can significantly decrease the likelihood of fraudulent activities within an organization. Fraud prevention strategies aim to minimize opportunities for fraud while fostering an ethical culture that discourages rationalization.

METHODOLOGY

In this paper, we adopted qualitative research method considering its capability to capture the depth, complexity and context of our research (Ritchie and Lewis, 2003). Qualitative methods are being utilized by scholars to comprehend and interpret human experiences, behaviors, and phenomena, providing valuable insights to their respective fields (Ormston *et al.*, 2014; Ritchie and Lewis, 2003; Williams, 2007). Specifically, the study utilized a case study design to examine the fraud detection and prevention strategies employed by select microfinance institutions in Nigeria. In particular, we used semi-structured interview (Chang *et al.*, 2020; McAlearney, 2006), suitable to get clear explanation from participants recruited for the study. By conducting interviews with microfinance institutions, the research provided a comprehensive understanding of how these institutions manage fraud.

Population and Sampling

We selected Microfinance institutions, mostly positioned in West and South State in Nigeria. The sample included eighteen respondents including forensic accountants, chartered accountants, and internal control personnel from Microfinance institutions located in West and South State. The participants had extensive experience ranging between one to over fifteen years. Out of the eighteen respondents, eleven were males, and seven were females. Table 1 depicts a comprehensive profile of the participants.

A purposeful sample strategy was utilized to get data from participants. Creswell (2009) emphasized that an examiner intentionally selects individuals and a specific location to study the primary phenomenon.

Data Collection

The data were obtained qualitatively using semi-structured online interviews with the respondents of the selected companies. The interview questions were designed based on insights from the research questions and the theoretical framework of the fraud triangle, focusing on its three key components. The focus of the interview questions was based on the role of forensic accounting in fraud detection and prevention. The main questions were supported through a series of open-ended and followed-up questions. Respondents were able to freely expand questions and provide unique and interesting content

S No.	Gender	Age	Educational Background	Profession	Experience
1.	Male	Above 45	Postgraduate	Forensic accountant	Above 15 years
2.	Female	26-35 years	Undergraduate	Forensic accountant	11-15 years
3.	Female	36-45 years	Postgraduate	Internal control	Above 15 years
4.	Male	26-35 years	Graduate	Forensic accountant	11-15 years
5.	Female	36-45 years	Graduate	Forensic accountant	Above 15 years
6.	Female	26-35 years	Postgraduate	Forensic accountant	11-15 years
7.	Male	36-45 years	Postgraduate	Internal control	5-10 years
8.	Male	26-35 years	Postgraduate	Internal control	5-10 years
9.	Male	18-25 years	Graduate	Internal control	5-10 years
10.	Female	36-45 years	Graduate	Forensic accountant	11-15 years
11.	Male	36-45 years	Graduate	MF Employee	11-15 years
12.	Female	18-25 years	Graduate	Forensic accountant	5-10 years
13.	Male	26-35 years	Graduate	Internal control	5-10 years
14.	Male	26-35 years	Postgraduate	Internal control	5-10 years
15.	Male	26-35 years	Postgraduate	Internal control	5-10 years
16.	Male	26-35 years	Graduate	MF Employee	11-15 years
17.	Male	26-35 years	Graduate	Internal control	11-15 years
18.	Female	Above 45	Graduate	Chartered accountant	11-15 years

Source: Authors' presentation

Table 1. Participants' Profile

on forensic accounting, fraud detection and prevention. The questions asked to respondents are listed in Appendix-I. The official language in Nigeria is English, therefore, the interviews were conducted in English.

The interviews lasted for 30 to 45 minutes. The interviews took place through zoom with respondents where it was audio recorded with the permission of the respondents between January 2024 and March 2024. Due to the sensitivity of the study context, we assured interviewees confidentiality enticing them to freely share their experiences; their experiences would be utilized for research purposes and kept confidential and anonymized, thus there will be no risk to them or their firm.

Data analysis

First, we cleaned the data to identify and correct inaccuracies and inconsistencies from the dataset to ensure the quality of the data. In addition, the data screening approach supported our transcribing of interviews accurately, ensuring that non-verbal cues are noted, and removing irrelevant or off-topic segments from transcripts. After removing these, we processed coding to label and organize our data to identify different themes, patterns, and concepts. Our themes emerged inductively from the data, guiding the analysis with the support of fraud triangle. Specifically, the interviews were transcribed and analysed using NVivo 12.

RESULTS

In this section, we present and discuss the findings produced from our interviews based on the research key questions. Notably, eighteen respondents shared insights on staff fraud, forensic accounting detection and prevention and the shortcomings of forensic accounting.

From the results, the majority of respondents concurred that microfinance has assisted low-income individuals and SME founders in becoming successful and useful members of society, as well as contributing to the government's coffers through tax payments. These respondents further stated that credit employees are typically the ones who commit fraud, and that typically, credit staff members begin by relieving pressure from their lifestyle, which is consistent with the fraud triangle concept. These employees always mean to replace these monies before the end of the month, but if they cannot find one, they simply cover it up with another, causing it to collect to the point where it will be difficult to replace (R1, R3, R6, R7, R11, R13, and R16). However, other respondents expressed a different opinion, stating that data entry employees are always these credit staff's accomplices, and that fraud is never perpetrated by a single person, always there is an associate involved in every successful fraud (R2, R4, R5, R8, R9, R10, R12, R17, R18). The common types of fraud in microfinancing in Nigeria are loan disbursement related frauds and unauthorised savings withdrawal from clients' account as explained by all respondents.

Propositions

Here, we present the results of forensic accounting impact in fraud detection and prevention. The participants discussed the challenges faced by microfinance and its impact on growth, and the effectiveness of forensic accounting in reducing fraudulent activities by perpetrators. The study will present two propositions that align with the current realities in the microfinance sector of the economy. The propositions were formed based on data patterns and insights, grouped together to identify significant findings within the data.

-First Proposition

This proposition indicates that implementing fraud prevention measures, such as strong internal controls and employee training with competitive take-home packages in microfinance, leads to increased stability and customer trust.

The fraud triangle theory was utilized to explain why individuals commit fraud by evaluating the three elements of opportunity, incentive, and rationalization. Preventing fraud is crucial in Nigeria's microfinancing sector to maintain client trust and ensure financial sustainability for institutions serving underserved communities. Forensic accountants play a crucial role in implementing effective fraud prevention strategies (Okoye and Ndah, 2019; Okpako and Atube, 2013). Notably, we utilized two key

strategies aligning with Okoye and Ndah (2019) and Okpako and Atube (2013), and supported insights from some respondents.

(i) Strong Internal Control Measures

The fraud triangle theory emphasizes the importance of strong internal controls in preventing fraud, as they close gaps and make it harder for scams to continue. Forensic accountants have the ability to collaborate with microfinance institutions in order to detect and correct deficiencies in their control systems. This involves the implementation of segregation of duties, dual authorization procedures, and well-defined approval hierarchies. Enhanced internal controls have the ability to prevent and identify fraudulent acts.

(ii) Employee Training and Take-home Package

The fraud triangle theory emphasizes addressing employee pressure through comprehensive training and competitive salaries to combat fraud, increase awareness, and instil customer confidence. Forensic accountants can develop and deliver training programs to educate employees about fraud, thus eliminating any legitimate reasons for their involvement. In addition, they can develop awareness campaigns that highlight its commitment to fraud prevention, and the employee will also participate in the campaign.

-Second Proposition

This proposition indicates that, the challenges faced by microfinance institutions can be effectively minimized through forensic accounting, which could significantly reduce or eradicate fraud. R4 and R5 confirm that microfinance institutions encounter issues that require professional expertise to restore the confidence of both existing and prospective clients.

Microfinance faces two primary issues primarily elements such as incentive and rationalization leading to fraudulent actions by employees. Firstly, many microfinance institutions lack an ethical culture. Establishing a strong ethical culture is crucial in curbing fraud as emphasized by R4, R5, and R11. Forensic accountants can work with microfinance institutions to establish an ethical framework, promoting integrity, transparency, honesty, and empowering staff to report unusual behavior. Secondly, the challenge of not following due diligence in recruiting staff, is seen as another major setbacks in microfinance in Nigeria. R8, R9, R11, R12, and R14 explained that recruitment of employee procedure in microfinance institutions is mainly faulty. They stated that microfinance institutions typically prioritise hiring cheap personnel during recruitment exercises, and the training provided is not sufficiently extensive to adequately equip them for the job. Therefore, Forensic accountants can assist in designing and implementing employee due diligence processes, including verifying IDs, conducting credit checks, and

scrutinizing employee documentation, to prevent insider theft and fraudulent transactions.

Fraud	Order of Intent	Dimension	Aggregate
The reason why staff indulge in fraud and fraudulent activities. All respondents share same view on this	Incentive Opportunity Rationalisation	Maintaining a flamboyant lifestyle, External and internal pressure, negligence within the internal control system, corporate governance lapses.	Institutional reputation, Endorsement of a forensic investigation,
Impact of forensic accounting in the detection and prevention of fraud. Respondent's opinion varies here.	Unravel discrepancies in financial statement Highlight reoccurring transaction. Questions uncredited bank lodgements.	Red flagged all suspicious transaction.	Independence of the internal control system of the firm
Limitations of forensic accounting in fraud detection and prevention.	Investigative preparedness. Risk assessment	Ethical issues of the firm	Frequent audit,

Source: Authors' presentation

Table 2. Propositions Table

DISCUSSION

We aim to examine the impact of forensic accounting on fraud detection and prevention of microfinance firms in Nigeria. The findings evidence the below. First, we asked respondents how Nigerian forensic accountants are utilizing technology and data analytics to improve fraud detection and investigation within microfinance institutions. The results suggest that the use of innovative technologies and strategies can vary depending on the regulatory environment of the nation. However, Nigeria's political and environmental climate promotes the adoption of innovative technologies. In particular, Nigeria has experienced significant advancements in technology innovation, which have greatly enhanced the ability of forensic accountants to identify and investigate fraud within microfinance organizations. The integration of advanced data analytics, digital forensic tools, and machine learning algorithms has provided forensic accountants with more robust and efficient methods to detect fraudulent activities (Adebayo and Hassan, 2020; Onodi *et al.*, 2015). These technological innovations have not only improved the accuracy of fraud detection but have also expedited the investigative process, making it more cost-effective and reliable (Ademola, 2023).

Finally, we asked participants to share their insights into the future of forensic accounting in Nigeria, specifically within the context of microfinance, and how it is expected to evolve in response to emerging fraud challenges and technological advancement. Based on the insights, the future of microfinance

forensic accounting is expected to prioritize technological advancements like data analytics, machine learning, artificial intelligence, and blockchain in its procedures. These tools are anticipated to be used by forensic accountants to evaluate data more effectively and efficiently, spot anomalies, and spot possible fraud tendencies. For example, blockchain analysis tools are now essential for monitoring and tracing financial transactions on decentralised ledgers in microfinancing organisations in Nigeria.

Continuous training, professional growth, worldwide cooperation, and good risk management will enhance the future of forensic accounting. Forensic accountants in Nigeria require continuous professional development, particularly in cybersecurity, data analytics, and blockchain analysis, to ensure a skilled workforce for the future. In addition, international cooperation against transnational financial crimes involves adopting international standards for forensic accounting, learning from other countries' best practices, and participating in international partnerships. Finally, due to risk management, which promotes proactive monitoring and control systems, conducts regular and ongoing risk assessments, and develops and implements strategies to scare off potentially fraudulent activity, fraudulent activities and patterns in Nigerian microfinance institutions will decline.

CONCLUSION

As the microfinancing sector continues to expand, the adoption of forensic accounting practices will be indispensable in safeguarding the interests of both microfinance institutions and their clients. Therefore, this study examines the role of forensic accounting in fraud detecting and preventing in the Nigerian microfinancing sector. The paper utilized a primary qualitative methodology by employing structured open-ended interviews with 18 industry professionals in both private and public sectors. The findings show that, incorporating forensic accounting in Nigerian microfinance institutions is critical, leading to transformative role of forensic skills and methodologies in strengthening the sector against fraud risks. In addition, the study suggests that utilizing advanced data analytics and innovative technology can help microfinance institutions detect and prevent fraudulent activities and promoting a more trustworthy financial landscape. The study aims to improve understanding of forensic accounting and its evolution, crucial for maintaining the integrity and security of microfinance operations in Nigeria.

IMPLICATIONS

This paper examined the impact of forensic accounting on fraud detection and prevention of microfinancing institutions in Nigeria. The incorporation of forensic accounting in microfinance institutions within Nigeria, holds intense theoretical implications to existing literature. First, many studies on fraud investigations and forensic accounting adopted quantitative research methods (Ahmadu *et al.*,

2013; Bassey, 2018; Chukwunedu and Okoye, 2011), indicating limited studies employing qualitative research. Therefore, this study fills the gap and examined the effects of forensic accounting on fraud detection and prevention of microfinance in Nigeria by adopting qualitative interview-based method. We contribute to the existing literature by highlighting that forensic accountants can develop proactive identification of any irregularities and mitigating financial risks. Second, the study theoretically emphasizes the significant role of technology-driven forensic practices in enhancing the resilience of Nigerian microfinance systems. The integration of cutting-edge forensic techniques with conventional accounting principles has become essential as financial landscapes change in order to verify the security and integrity of microfinance operations. Finally, we propose emergent robust anti-fraud instruments, which will foster sustainable growth in Nigeria's microfinance sector. The strategic roadmap for combating fraud in Nigeria's microfinance sector includes four key phases:

(1) Strengthening Internal Controls. To reduce fraud, implement internal controls like duties segregation, dual authorization, and regular audits, provide employee training on fraud awareness, and offer competitive salaries.

(2) Cultivating an Ethical Culture: The proposed strategy involves establishing a robust ethical framework, fostering integrity and transparency, and fostering whistleblowing to curb the rationalization of fraud.

(3) Enhancing Recruitment and Due Diligence: Revising recruitment processes with rigorous vetting and comprehensive employee orientation to ensure trustworthy hiring and reduce insider fraud.

(4) Continuous Monitoring and Evaluation: Regularly assess and update anti-fraud measures, ensuring they remain effective against evolving fraud tactics.

Our findings provide significant practical implications. Firstly, forensic skills empower financial practitioners to proactively identify and impede fraudulent transactions and activities, thus the integrity of microfinance operations is safeguarded. Therefore, firms should integrate forensic accounting considering its substantial impact in Nigerian microfinance institutions. Secondly, it is imperative that management acknowledge the significance of adopting proactive measures to avoid fraud by utilising forensic accounting procedures. Managers should devise strategies to establish resilient internal control systems and policies against fraud by comprehending the significance of forensic accounting in identifying and averting fraudulent activities. Third, accountants should invest and acquire skills in advanced data analytics to enhance team proficiency in forensic accounting. Proper resource allocation ensures the company has the necessary knowledge and resources to detect and prevent fraud. Fourth, firms should conduct regular risk assessments to detect potential fraud within their businesses, collaborating with forensic accountants to analyze past data, industry trends, and internal control flaws. This enables managers to concentrate their resources on areas with the highest risk, thereby enhancing

their efforts in detecting and preventing fraud. Finally, managers should foster cooperation and communication among departments to detect and prevent fraud, promoting openness and responsibility to ensure timely identification and resolution of potential issues.

LIMITATIONS AND FUTURE DIRECTIONS

We acknowledge the limitations of our research. First, we focused on microfinance institutions in Nigeria. Hence, our findings cannot be generalized to all firms in Nigeria. Secondly, the study overlooked the evolving nature of fraud tactics, the capacities of different institutions, and potential challenges in accessing comprehensive and timely data. Finally, further research can explore the use of forensic accounting in fraud detection and prevention, particularly in developed countries.

We call for further studies to examine the effect of forensic accounting in fraud detection and prevention by considering other sectors including the manufacturing. Further research could address the changing nature of fraud techniques by conducting a longitudinal study that monitors changes in fraud methods over time, allowing for the discovery of developing patterns and novel tactics. Furthermore, comparative studies could be done to assess different institutions' capacities for detecting and preventing fraud, highlighting best practices and areas for improvement. To address the constraints of accessing comprehensive and timely data, researchers could form collaborations with institutions for real-time data sharing or develop creative data collection methods that ensure broader and more current datasets, thereby increasing the reliability and usefulness of the findings.

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Appendix-I

Interview Questions

Section 1: Forensic Accounting understanding

1. Could you explain your understanding of forensic accounting and its role in the detection and prevention of fraud?
2. How does forensic accounting contrast from traditional accounting practices based on your experience within microfinance institutions in Nigeria?
3. How could you define the relevance of forensic accounting in microfinance institutions context in Nigeria?

Section 2: Practices of Fraud Detection and Prevention in Microfinance institutions in Nigeria

4. What are the types of fraudulent happenings that are most predominant in Nigerian microfinance institutions and what group of employees are usually involved?
5. How does your institution assess and managed fraud risks?
6. Can you explain the present tools or methods your institution used in detecting and preventing fraud?
7. Have your firm had any instance of fraud where forensic accounting played a significant role in resolving the issue? Can you elaborate?

Section 3: Forensic Accounting Techniques and Tools and challenges

8. How has your firm's internal control been able to help in detecting fraud?
9. Which forensic accounting methods are most commonly used in detecting fraud within your firm?
10. How do you think the Nigerian forensic accountants are utilizing technology and data analytics to improve fraud detection and investigation within microfinance institutions?
11. Is there any existing specific software or digital tools that your firm uses for forensic accounting purposes?
12. How could you assess the effectiveness of these tools in uncovering and preventing fraudulent activities?
13. Are there barriers, either regulatory or operational, that pose a limitation on the use of forensic accounting in microfinance institutions in Nigeria?
14. What is the kind of training or capacity building do you believe will be necessary to advance the use of forensic accounting for fraud prevention in microfinance institutions?
15. What is the role play by government regulations and policies in the promotion or hindering forensic accounting practices in your firm?
16. How can you ensure ethical standards are being maintained in conducting forensic accounting investigations?
17. What recommendations could you make on the future of technology and the use of forensic accounting in microfinance institutions, how it is expected to evolve in response to emerging fraud challenges and technological advancement in Nigeria?