

Forensic Accounting and Fraud Management in Nigerian Deposit Money Banks

Samson Oyewole OLABISI

Accounting Department, Faculty of Administration and Management Sciences, Adekunle Ajasin University, Akungba Akoko, Ondo State, Nigeria

Abstract

Despite the popularity of forensic accounting in Nigerian money-deposit-banks, fraud cases continue to increase. However, the objective of any sound fraud management in any industries should be to minimize, if not eradicate, fraudulent activities. Fraud management lifecycle (FML) theory postulates that ensuring balance of forensic accounting efforts among all the stages of fraud management will minimize fraud. Consequently, the current work investigates if there is any statistically cogent disparity in the applicability of investigative accounting efforts among the FML stages in Nigerian money-deposit-banks. Primary data collected through questionnaire from 100 respondents were analysed using Friedman test and Kendall's W. The results of this study revealed that investigative accounting efforts were appreciably high in fraud deterrence, fraud identification, and fraud mitigation. However, they were low in fraud analysis, investigation of fraud and fraud prosecution. The study recommends that the low should be brought abreast with the high which will subsequently minimize, if not eradicate, cases of fraud in Nigerian money-deposit-banks.

Keywords: Investigative accounting, Fraud management, FML stages

1. Introduction

Despite the popularity of investigative accounting in Nigerian money-deposit-banks, fraud cases continue to be mounting (Gbegi & Adebisi, 2014; Eyisi & Agbaeze, 2014). However, the objective of any sound fraud management in any industries should be to minimise, if not eradicate, fraudulent activities.

The literature is replete with many studies on investigative accounting and fraud (Okoye & Gbegi, 2013; Imoniana, Antunes & Formigoni, 2013; Enofe, Okpako & Atube, 2013; Ijeoma, 2015; Gbegi & Adebisi, 2014; Modugu & Anyaduba, 2013; Enofe, Olorunnuho & Okporua, 2016; Enofe, Utomwen, & Danjuma, 2015; Jepkorir, 2014; Olukowade & Balogun, 2015; Onodi, Okafor, & Onyali, 2015; Osunwole, Adeleke & Henry, 2015; etc). All these contemporary studies just examine investigative accounting in connection with one or two stage(s) of fraud management. None of them examines investigative accounting in connection with the entire fraud-management-lifecycle stages (fraud analysis, fraud investigation, fraud deterrence, fraud detection, fraud mitigation, fraud prosecution). This current study addresses this important literature lacuna, and therefore proffers the pathway to solving the problem of research identified above (fraud cases continue to exacerbate in number and in sizes despite the popularity of forensic accounting in Nigerian money-deposit-banks).

This study raises the question of research that follows: Is there any significant disparity in the applicability of investigative accounting among the stages of fraud management in Nigerian money-deposit-banks? The research question raised above is informed by the position taken by

Wesley (2004) cited in Kirangu, Gikiri, and Iminza (2015) that synchronization and balancing of forensic accounting efforts in all the stages of fraud management lifecycle will serve to appreciably reduce fraud in most companies.

This study, in the main, generally investigates the impact of investigative accounting on management of fraud in Nigerian money-deposit-banks. Specifically, it examines whether there is a balance in the applicability of investigative accounting in all the stages of fraud management lifecycle (FML) in Nigerian money-deposit banks. This study tests the following hypothesis stated in the null form:

H₀: There is no statistically cogent disparity in the applicability of investigative accounting among the stages of FML in Nigerian money-deposit-banks.

This work is organized into five sections, beginning with introduction, showing the general overview of the study, literature review of concepts, methodology, analysis of data and discussion of results, conclusion and recommendations, limitation and future work.

2. Literature Review

This study reviews the literature under the subheadings of conceptual, theoretical and empirical reviews.

2.1 Conceptual Review

Forensic accounting and management of fraud are the two concepts that need clarification in this work. Different authorities have variously conceptualized forensic accounting. Ijeoma (2015) sees forensic accounting as an investigative style of accounting used in determining whether an individual or an organisation has engaged in any illegal financial activities; it is a rapidly growing field of accounting that describes the engagement that emanates from eventual disputes or litigations. According to Nunn and McGuire (2006), forensic accounting investigates financial transactions and company scenarios with a view to obtaining the basic facts of and developing a professional position regarding possible dubious act. They opine that court of law support, and investigative or fraud accounting are the two areas that make up the discipline of forensic accounting. Forensic accounting applies accounting know-how and inquisitive posture to issues in disputes, carried out within the purview of the rules of evidence (Arokiasamy & Cristal, 2009 cited in Enofe, Okpako & Atube, 2013). Crumbley (2006; p 6) cited in Okoye and Gbegi (2013) defines forensic accounting as: “accounting that is amenable to legal review with a view to having the highest level of assurance and encompassing the popular notation of having been arrived at in a scientific fashion.”

According to Bhatt & Bhatt (2016), tools used in forensic accounting assignment, besides the various techniques of auditing, include Benford’s Law, Theory of Relative Size Factor (RSF), Data Mining Techniques, Advanced Audit Techniques (AATs), Computer Assisted Audit Techniques (CAATs), and Ratio Analysis. Forensic accounting techniques tend to be cumbersome and its outputs are often used in government adjudication processes or in court reviews, hence a very high evidence standard must be maintained when forensic accounting engagements are made. Forensic accounting investigation/evaluations conduct interview with a view to obtaining an acceptance of guilt by the person(s) connected with fraud cases (Golden & Dyer, 2006 cited in Bhatt & Bhatt, 2016). They also make use of detailed document reviews, and data mining of entries in data bases (Clayton, 2006 cited in Bhatt & Bhatt, 2016).

Fraud management involves planning, organising, controlling and coordinating forensic accounting activities along the network nodes or stages of the fraud management lifecycle. While discussing fraud management, Abiola (2009) identifies some features of misappropriations that Nigerian money-deposit-banks should appreciate so as to minimize the incidences of fraud. A

feature is that fraud is increasing rapidly and is becoming a profitable venture. Another feature is that fraud involves misappropriation of assets and manipulation or distortion of data. The third feature is that misappropriation results from basic failures and insufficiencies of internal checks and internal audit guidelines. Nwankwo (1991) cited in Abiola (2009), while discussing dichotomy of frauds, suggests that: “management should develop positive dispositions towards protecting the properties of the banks and ascertaining that employee does not take advantage of the weakness in internal controls. Nwankwo (1991) said further that the cardinal principles of separation of duties to ensure that one employee does not initiate and complete an entry should be maintained. There should also be dual control of strategic areas such as strong rooms and locks to security documents and accounts.” There should be full compliance with established protocols so as to achieve the goal of management of fraud (Ekechi, 1990 cited in Abiola, 2009).

According to Abiola (2009), the chief executive officer has a major responsibility for controlling and managing misappropriation in the money deposit institutions because the latter need to clearly specify and explain their leadership responsibilities to them. The Apex Bank in Nigeria (CBN) plays significant responsibility in assisting money-deposit-banks control misappropriation through its instruments of fiscal and monetary policies. The apex bank in Nigeria (CBN) requires that money deposit institutions should make allowances for loss through misappropriations from their gross profits. This policy safeguards the depositors’ valuables since depositors’ valuables will be misappropriated when there is an occurrence of fraud.

Sujatha and Gomez (2015) opine that fraud management involves a whole gamut of activities. These include early warnings and alarms, telltale symptoms and patterns of various types of fraud, profiles of users and activities, fraud detection, prevention, and avoidance, minimizing false alarms and avoiding customer dissatisfaction, estimating losses, risk analysis, surveillance and monitoring. Others are security (of computers, data, networks, and physical facilities), data and records management, collection of evidence, report summaries, data visualization, links to management information systems, and control actions (such as prosecution, employee education, ethics programs, hotlines, and cooperation with partners and law enforcement agencies).

2.2 Theoretical Review

Fraud-management lifecycle (FML) theory underpins this study. FML theory was propounded by Wesley (2004). FML theory postulates that imbalance and lack of synchronization in the application of investigative accounting among the stages of FML account for the continued occurrence of misappropriations and financial infidelities in organisations. According to Wesley (2004) cited in Kiragu, Gikiri, and Iminza (2015), FML consists of eight stages: deterrence, prevention, detection, mitigation, analysis, policy, investigation and prosecution. Each of these stages is an aggregate consisting of interrelated, interdependent and independent actions. These activities can, but do not necessarily, occur in a sequential or linear flow.

The point that this lifecycle is a network distinguishes it from other lifecycles. The theory indicates that the last stage, prosecution is the culmination of all the successes and failures in the management of fraud’s lifecycle. Failures exist because the fraud culprits were not caught and successes because the fraud perpetrators were apprehended, and the cases taken to court. The prosecution stage entails asset retrieval, criminal redress, and conviction with its accompanying discouraging value. The fact that the theory vividly shows the levels of management of fraud risk in a flow manner underscores its significance. The theory stresses the technicalities on how to curb fraud and assumes uniform cultural, legal, and technological applications in the administration of fraud.

According to Wesley (2004) cited in Kiragu, Gikiri, and Iminza (2015), IT contributes significantly throughout the FML. Every stage in the FML derives gain from the effective use of IT resources (ITRs). ITRs are frequently germane to whether forensic accounting activities will

succeed or fail in the individual FML nodes. Every node, succinctly put, resides on a foundation of IT.

2.3 Empirical Review

Enofe, Utomwen and Danjuma (2015) employ regression to analyse primary facts retrieved using structured questionnaire to investigate the function performed by forensic accounting in mitigating financial crimes. The study finding reveals that there is a need for forensic accountants in the Nigerian banking system to be more meticulous. However, Kiragu, Gikiri & Iminza (2015) employ ANOVA and regression to fathom the impact of operational governance on occupational fraud risk in commercial banks in Kenya using a positivism research paradigm and a design of descriptive analysis. The study findings showed that the correlation between concurrent fraud risk and operational governance in Kenya commercial banks is positive but weak. This suggests that operational fraud risk tacitly increases as operational governance intensifies in Kenya commercial banks.

Idolor (2010) identifies the common types of misappropriations in deposit money banks (DMBs) that are frequently perpetrated in the industry, the underlying causes, level of staff involvement, consequences and possible means of ameliorating the problem. The work showed that respondents did not view unofficial borrowing and forex malpractice as forms of misappropriation in the DMBs since they were common and industry wide practice. It also revealed that there was an equal quantum of staff participation in initiating and executing fraud, with the concealment of fraud coming last in their agenda. The aforementioned study aligns with the current study in that it concerns the last stage of FML (that is, prosecution). In contrast, Enofe, Okpako and Atube (2013) employ OLS regression and chi-square to investigate the impact of investigative accounting on detection of misappropriation in firms listed in Nigeria. The work shows that the introduction of forensic accounting services to firms listed in Nigeria curbs misappropriation activities.

Ijeoma (2015) employs Kruskal-Wallis test, mean rank and percentage distribution to analyse primary facts of information retrieved in evaluating the application of investigative accounting tools and methods in curbing creative accounting. The study shows that the tools and methods of investigative accountants are very effective in curtailing the problem of creative accounting and the skill of investigative accountants has improved over the years. The study also finds that the work of investigative accountant has lent credence to corporate report.

Onodi, Okafor and Onyali (2015) analyse mixed facts of information using percentages, mean score, frequency tables, regression analysis and Z-test to investigate the relationship of forensic investigation methods in company-wide misappropriation deterrence in DMBs in Nigeria. The work showed that the relationship between investigative techniques and company-wide misappropriation deterrence is significant. The work also showed that the skills investigative accountants are normally needed in the prosecution of fraud, but most auditors and accountants in Nigeria are deficient in the technicalities of investigative accounting.

3 Data and Methods

This study espouses post-positivist worldview. The strategy of inquiry employed is non-experimental. The research method adopted is survey for it allows the collection of information for both independent and dependent variables using questionnaire. This study makes use of five-point scale questionnaire to retrieve primary facts of information from management staff of quoted deposit money banks in Nigeria. This current study adapts the sampling technique employed in Abiola and Oyewole (2013).

Although Abiola and Oyewole (2013) randomly selected 10 banks, this current study purposively selects 12 banks and distributes copies of questionnaire to 120 respondents as shown in table 1. Out of the 120 copies of questionnaire distributed, the complete ones analysed by this study are just 100. This selection of twelve out of 21 quoted deposit money banks in Nigeria amounts to 57%. Sample size of 120 respondents seems adequate for this study as Saunders and Thornhill (2003) cited in Modugu and Anyaduba (2013) suggest that a minimum number of thirty (30) for statistical analyses provides a useful rule of thumb.

This study employs non-parametric statistical test, apart from testing for the reliability of data collection instrument before and after factor analysis. The questionnaire was pilot tested to ensure its validity and reliability. Specifically, this study employs Kendall's W and Friedman tests to examine the hypothesis that there is no statistically significant difference in the application of forensic accounting among all the stages of fraud management lifecycle.

Table 1: Study Sample Size

S/N	Name of Banks	Sample Selected	Number Selected
1	Access Bank Plc	BM.OM.HHR.HIC.HFOREX	(2X5) = 10
2	Diamond Bank Plc	BM.OM.HHR.HIC.HFOREX	(2X5) = 10
3	Eco Bank Plc	BM.OM.HHR.HIC.HFOREX	(2X5) = 10
4	Fidelity Bank Plc	BM.OM.HHR.HIC.HFOREX	(2X5) = 10
5	First Bank of Nigeria Plc	BM.OM.HHR.HIC.HFOREX	(2X5) = 10
6	First City Monument Bank Plc	BM.OM.HHR.HIC.HFOREX	(2X5) = 10
7	Guaranty Trust Bank Plc	BM.OM.HHR.HIC.HFOREX	(2X5) = 10
8	Skye Bank Plc	BM.OM.HHR.HIC.HFOREX	(2X5) = 10
9	Stanbic IBTC Bank Nigeria Ltd	BM.OM.HHR.HIC.HFOREX	(2X5) = 10
10	United Bank for Africa Plc	BM.OM.HHR.HIC.HFOREX	(2X5) = 10
11	Union Bank Plc	BM.OM.HHR.HIC.HFOREX	(2X5) = 10
12	Unity Bank Plc	BM.OM.HHR.HIC.HFOREX	(2X5) = 10
Total			120

Source: Adapted from Abiola and Oyewole (2013)

4. Data Analysis and Discussions of Findings

Table 2 presents the results of reliability test conducted. As disclosed in the table, reliability of forensic accounting constructs improves from 0.758 to 0.852. The result indicates that the retained forensic accounting construct measures have high internal consistency, as 0.852 Cronbach's coefficient is well above the threshold of 0.8.

Table 2: Reliability of Drivers of Forensic Accounting

Analysis Scale Item	Before Factor Analysis		After Factor	
	Item No.	Cronbach's	Item No.	Cronbach's
Forensic accounting environment	38	0.758	35	0.852

Source: Author's Computation, 2021

Table 3: Friedman Test Mean Ranks

	Mean Ranks
Mean fraud deterrence	5.21
Mean fraud detection	4.80
Mean fraud investigation	2.34
Mean fraud mitigation, fraud prevention and fraud policy	4.97
Mean fraud prosecution	2.11
Mean fraud analysis	1.56

Source: Author's computation, 2021

Table 4: Friedman Test Statistics

N	100
Chi-square	404.144
Df	5
Asymp. Sig.	.000

Source: Author's computation, 2021

From the mean ranks in table 3, fraud deterrence is having the highest value of 5.21, while fraud analysis is having the least value of 1.56. This implies that there are differences in the application of forensic accounting techniques among all the stages of fraud management lifecycle. From the test statistics in table 4, the differences are statistically significant with asymptotic significance of 0.000 which is less than $\alpha = 0.05$. With 5 degrees of freedom, the Friedman computed chi-square is 404.144, which is greater than chi-square tabulated. Hence, the null hypothesis (which states that there is no statistically significant difference in the application of forensic accounting among the stages of FML in Nigerian money-deposit-banks) of this study is rejected.

Table 5: Kendall's W Mean Ranks

	Mean Rank
Mean fraud deterrence	5.21
Mean fraud detection	4.80
Mean fraud investigation	2.34
Mean fraud mitigation, fraud prevention and fraud policy	4.97
Mean fraud prosecution	2.11
Mean fraud analysis	1.56

Source: Author's computation, 2021

Table 6: Kendall's W Test Statistics

N	100
Kendall's W (Kendall's Coefficient of Concordance)	0.808
Chi-Square	404.144
Df	5
Asymp. Sig.	0.000

Source: Author's computation, 2021

Kendall's W test, apart from reconfirming the Friedman test results, shows the level of agreement in the opinions of respondents. Kendall's Coefficient of Concordance of 0.808 disclosed in table 6 reveals that the hierarchy of agreement in the perceptions of respondents is very high.

5. Conclusion and Recommendations

The results of this work reveal that the application of forensic accounting among all the stages of fraud management lifecycle in Nigerian money-deposit-banks is statistically significantly different. Forensic accounting efforts are appreciably high in fraud deterrence, detection of fraud, and fraud mitigation. However, they are appreciably low in fraud analysis, investigation of fraud and fraud prosecution. These findings imply that no balance (equality of the means) in the application of forensic accounting exists in all the levels of management of fraud lifecycle in Nigerian money-deposit-banks. The implication of this imbalance, according to management of fraud lifecycle theory, postulated is that fraud cases in the Nigerian money-deposit-banks despite the popularity of investigative accounting in misappropriation and risk management in these banks.

From the findings and implication of the results, this study recommends that: Nigerian money-deposit-banks should maintain the status quo in fraud deterrence, detection of fraud, and fraud mitigation, that is, they should continue to maintain high forensic accounting activities in fraud deterrence, detection of fraud, as well as fraud mitigation. At the same time, they should intensify forensic accounting efforts in fraud analysis, investigation of fraud and fraud prosecution. Summarily, they should ensure balance in the application of forensic accounting in all the hierarchies of management of fraud lifecycle.

This current study only considers money-deposit-banks; other financial institutions are excluded, particularly agricultural banks, microfinance banks, development banks and cooperative societies. Further studies can include the institutions of finance that were excluded to have more generalized findings. In addition, the current study has not examined whether ensuring balance in the use of investigative accounting among the stages of fraud management lifecycle actually minimizes fraud or not, other studies may investigate the impact of ensuring balance on fraud minimization.

References

- Abiola, I. (2009). An assessment of fraud and its management in Nigerian commercial banks, *European Journal of Social Sciences*, 10(4), 628 – 640.
- Abiola, I. & Oyewole, A. T. (2013). Evaluation of the effect of monitoring and control activities on fraud detection in selected Nigerian commercial banks, *Research Journal of Finance and Accounting*, 4(6), 57-63.
- Bhatt, P. R. & Bhatt, S. K. (2016). Emerging trends in finance: Forensic accounting – Watch dog or sniffer dog, *Tactful Management Research Journal*, 3(4), 105 – 109.
- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (Third edition). London: Sage Publication Ltd.
- Enofe, A. O., Okpako, P. O. & Atube, E. N. (2013). The impact of forensic accounting on fraud detection, *European Journal of Business and Management*, 5(26), 61 – 72.
- Enofe, A. O., Olorunnuho, M. S. & Okporua, A. D. (2016). Forensic accounting and fraudulent financial reporting in Nigeria, *Journal of Accounting and Finance Management*, 2(1), 21 – 34.

- Enofe, A. O., Utomwen, O. A. & Danjuma, E. J. (2015). The role of forensic accounting in mitigating financial crimes, *International Journal of Advanced Academic Research*, 2(1), 1 – 25.
- Eyisi, A. S. & Agbaeze E. K. (2014). The impact of forensic auditors in corporate governance, *International Journal of Development and Sustainability*, 3(2), 404 – 417.
- Gbegi, D. O. & Adebisi, J. F. (2014). Forensic accounting skills and techniques in fraud investigation in the Nigerian public sector, *Mediterranean Journal of Social Sciences*, 5(3), 243 – 252.
- Idolor, E. J. (2010). Bank frauds in Nigeria: Underlying causes, effects and possible remedies, *Journal of Accounting, Economics, Finance and Banking Research*, 6(6), 62 – 80.
- Idowu, A. A., Muturi, W. & Ngumi, P. (2015). Financial innovation and fraud risks in Deposit Money Banks of Nigeria, *EPRA International Journal of Economic and Business Review*, 3(12), 56 – 66.
- Ijeoma, N. B. (2015). Empirical analysis on the use of forensic accounting techniques in curbing creative accounting, *International Journal of Economics, Commerce and Management*, 3(1), 1 – 15.
- Imoniana, J. O., Antunes, M. T. P. & Formigoni, H. (2013). The forensic accounting and corporate fraud, *JISTEM – Journal of Information Systems and Technology Management, Brazil*, 10(1), 119 – 144.
- Jepkorir, S. M. (2014). Determinants of fraud control measures in commercial banks: A Survey of selected commercial banks in Nakuru town, Kenya, *International Journal of Science and Research*, 3(10), 2178 – 2183.
- Kiragu, D. N., Gikiri, W. L. & Iminza, N. W. (2015). Operational governance and occupational fraud risk in commercial banks in Kenya: A positivism approach, *European Journal of Business Management*, 2(1), 401- 423.
- Modugu, K. P. & Anyaduba, J. O. (2013). Forensic accounting and financial fraud in Nigeria: An empirical approach, *International Journal of Business and Social Science*, 4(7), 281 – 289.
- Nunn, L. & McGuire, B. L. (2006). Forensic accountants: Financial investigators, *Journal of Business & Economics Research*, 4(2), 1 – 6.
- Odelabu, A. T., Muturi, W. & Nasieku, T. (2016). Forensic accountant's responsibility competency: A panacea to narrowing audit expectation gap among Nigerian money deposit banks, *European Journal of Business, Economics and Accountancy*, 4(2), 20 – 36.
- Okoye, E. I. & Gbegi, D. O. (2013). Forensic accounting: A tool for fraud detection and prevention in the public sector (A study of selected ministries in Kogi state). *International Journal of Academic Research in Business and Social Sciences*, 3(3), 1 – 19.
- Olukowade, E. & Balogun, E. (2015). Relevance of forensic accounting in detection and prevention of fraud in Nigeria, *Historical Research Letter*, 23(1), 17 – 25.
- Onodi, B. E., Okafor, T. G. & Onyali, C. I. (2015). The impact of forensic investigative method on corporate fraud deterrence in banks in Nigeria, *European Journal of Accounting, Auditing and Finance Research*, 3(4), 69- 85.
- Osunwole, O. O., Adeleke, K. M. & Henry, P. K. (2015). Forensic accounting: An antidote to fraud in Nigerian money deposit banks, *International Journal in Management and Social Science*, 3(4), 619 – 629.
- Sujatha, B. K. & Gomez, M. S. S. (2015). Fraud detection and forensic accounting, *International Journal of Science and Research*, 4(4), 3366 – 3369.

