Effect of Forensic Accounting on the Financial Performance of Commercial Banks on Nigeria

Odelabu Adedire Temitope
Jomo Kenyatta University of Agriculture and Technology (JKUAT). Email:- richtop0007@gmail.com

Abstract

The current study was on the effects of forensic accounting on the performance of commercial bank in Nigeria. Fraudulent activities in a commercial bank setting may have a negative effect on the viability, performance, sustainability and reputation of commercial banks. This study was conducted through explanatory research design which required the analysis of how a set of independent variables affect the dependent variable. The target populations comprised of all 609 forensic managers, their staff and internal control managers and their staff. For the purpose of this study, sampling frame of 21 commercial banks was taken. A sample of 61 respondents was used which was spread proportionately across 6 stratum. The stratum included Forensic Managers, Forensic Assistant Manager, Internal Audit Manager, Internal Audit assistant manager, forensic staff and internal audit staff. The study used primary data that was collected through self-administered questionnaires. The findings indicated that forensic investigation and forensic litigation was statistically significant in explaining changes in financial performance of commercial banks. The findings of this study were crucial in the formulating study conclusions. However, the study also took into account the expectations of the study. It was possible to conclude from the study findings that forensic investigation and forensic litigation were statistically significant in explaining changes in financial performance of commercial banks in Nigeria. It was also possible to conclude that use of forensic financial information influenced and improved performance of commercial banks in Nigeria. The unique contribution of this paper is that it clearly addresses the effects of forensic accounting on the performance of commercial bank in Nigeria, upon which majority of commercial banks in a developing economy ought to adapt to mitigate financial irregularities.

Key Words: Forensic Accounting, financial performance, financial information

1. Background and Research Gap

Fraudulent activities in a commercial bank setting may have a negative effect on the viability, performance, sustainability and reputation of commercial banks. Frauds in Nigerian commercial banks have presented a perennial problem to the commercial banking management and regulators alike. The occurrence of fraudulent activities in the commercial banking sector has been documented in various instances. For example, in recent years, the volume and frequency of fraudulent practices in Nigerian banks have been on the increase. According to the Nigeria Deposit Insurance Corporation (NDIC), the level of reported fraud in Nigerian banks rose from N804m in 1990 to N3,199m in 1998. Furthermore, the proportion of actual/expected loss to the amount involved in fraud rose from 3 per cent in 1990 to 22 per cent in 1998. Perhaps one of the highest fraud ever reported in any particular year by a Nigerian bank occurred in 1998 when United Bank for Africa plc wrote off N786m on account of fraud (Uche, 2001).

Managing Director, Nigeria Deposit Insurance Corporation (NDIC), Alhaji Umaru Ibrahim said - in 2012 alone, deposit money banks reported a total of 3,380 cases of attempted fraud and forgeries involving N18.04 billion to the corporation, a total loss of N4.5 billion was recorded during the year under review (2012). This represents a 43.7 per cent rise compared to 2,352 cases in 2011. Subsequently, in the first quarter of 2013, 983 cases of attempted fraud involving N7.80 billion was reported, while the actual loss for the quarter was N2.05 billion. Ibrahim said, cyber-related fraud instances accounted for 341 cases resulting in an actual loss of N75 million in the first quarter of 2013 (NDIC,2013).

Banking fraud is a problem to various stakeholders. First, it diminishes the profitability of a bank and this may lead to reduced firm value arising out of low dividends to shareholders. In the extreme case, it may threaten the going concern of the commercial bank and this may impact negatively on shareholder wealth. The depositors may be negatively affected by bank fraud especially if it leads to a bank run. This may lead to huge losses on customer deposits. As a result of Banking fraud, some staff in the industry have either been dismissed, or have their appointment terminated or prematurely retired. This means that some experienced hands in the sectors are lost due to their involvement in frauds and forgeries. The employees may be affected by losing their job in case of winding up or liquidation of a bank due to fraud.

Down turn in the Economy as a whole, both the political and economic situation declined from bad to worse with naira witnessing an unprecedented devaluation of 1,300% within five years. As at December 2008 and
January 2009 the naira exchange rate with the stood between #149 to #150 per $1. Devil then found job as idle hands were meant to engage in one kind of fraud or the other while “419, cocaine pushing, billion naira bank frauds”, becoming regular features of our newspaper, Television and Radio headlines. (Ulokings finance eco and jobs 2009)

Research on fraud in commercial banks has received a lot of scholarly attention. A thread of studies (Akindele, 2011); (Chi-Chi and Ebimobowei, 2012), Famous and Okoeguale,(2012), (Odi 2013) , have focused on the impact of fraud on commercial banks performance while another thread has focused on the factors influencing or exacerbating the occurrence of fraud (Idowu,2009), (Nwaige,2006), (Ovuakporie,1994), (Ogunleye,2010). However, none of these studies have offered Forensic accounting as a solution to banking performance. This study argues that forensic accounting may have a role to play in banking performance. Therefore, the gap that this study wishes to address is the effect of forensic accounting on the performance of commercial banking Nigeria.

1.2 Research Objectives
The main objective of this study was to investigate the effect of forensic accounting on the financial performance of commercial banks in Nigeria

1.3 Research Hypothesis
Hypothesis 1:

Null (Ho): Forensic investigation does not have a positive effect on commercial bank performance

HA: Forensic investigation has a positive effect on commercial bank performance in Nigeria

Hypothesis 2:

Null (Ho): Forensic litigation does not have a positive effect on commercial bank performance

HA: Forensic litigation has a positive effect on commercial bank performance in Nigeria

2. Theoretical Framework
2.1 Fraud Management Lifecycle

Effective management of the Fraud Management Lifecycle starts with a common understanding or definition of the stages in the lifecycle. Without this awareness and understanding, fraud management professionals are unlikely to communicate effectively with each other, with their peers in other industries, and within their respective businesses. The terms “lifecycle stage” and “stage” throughout this study are used as a reference to a set of activities. Unlike a traditional linear lifecycle, a network lifecycle’s stages are not necessarily linked sequentially, where activities in one stage are completed and then the functioning is passed on to the next stage in the chain. To the contrary, a network lifecycle facilitates simultaneous and sequential actions within each of the lifecycle stages or network nodes. The Fraud Management Lifecycle is, therefore, a network lifecycle where each node in the network, each stage in the lifecycle, is an aggregated entity that is made up of interrelated, interdependent, and independent actions, functions, and operations. These activities can, but do not necessarily, occur in a sequential or linear flow.

2.2 Agency theory

Agency theory addresses the Agency issue in which one party (the principal) delegates work to another (the agent), who performs that work (Jensen &Meckling, 1976). There is an agency relationship when the actions of one individual affect both his welfare and that of another person in an explicit or implicit contractual relationship. The individual who undertakes the actions is the agent and the person whose welfare (utility), measured in monetary terms, is affected by the agent's actions is called the principal (Akaranga, 2010).

The typical case of agency relationship is the one that exists between an employer (the principal) and his employee (the agent). In an agency relationship, the principal wants the agent to act in the principal's interest. However, the agent is expected to have his own interest and consequently, he may not act in the principal's best interests. An agency relationship is a contract under which one or more persons (the principal), engage another person (the agent) to perform some service on their behalf which involves delegating some decision making
2.3 Fraud Preventative Theory

This thesis began by evidence of forensic accounting services as essential for effective in the performance of Commercial Banks. Forensic accounting services were also discussed as particularly important in the present technologically advanced yet fragile economic conditions. Intentions are the best predictor of any planned behavior and understanding the antecedents of intentions provides practical insights into the behavior (Ajzen and Fishbein 1980). Therefore Fraud preventative theory was proposed to curb the behavioural intention of any individual to fraud.

According to Goosen, Pampallis, Van der Merwe and Mduli (1999), a bank owes a duty to its customers to keep accurate records of all the transactions effected against the account in question. Thus, a bank statement serves a vital role in meeting the bank’s accountability to its clients, and is a fundamental aspect of modern banking. Goosen et al. (1999:221) state that the role of a bank account statement, which is of the utmost importance to a bank, is that it serves as an audit trail showing in detail the various transactions effected against the account. The bank statement is a form of accounting record. This view is reflected in the total sample, which views a bank account statement as a detailed record of all transactions in a bank account. These transactions reflect money going into an account (credit transaction) or out of an account (debit transaction). In effect, a bank statement serves as evidence of the transactions against a bank account, a fact that is addressed by Section 236 of the Criminal Procedure Act 51 of 1977, which deals with the proof of entries in bankers’ books. Section 236 of Act 51 of 1977 allows the production of a bank statement to be prima facie proof of the transactions reflected therein. Section 28 of the Civil Proceedings Evidence Act 25 of 1965 contains similar provisions relating to civil legal proceedings.

Pheiffer (1998:34) defines financial investigation as investigations in which, on behalf of law enforcement, financial expertise is used in order to gather, check, refine, process and analyse financial information. According to Tuffey (2002), financial investigation is the investigation of an individual or corporation through their financial affairs. Willemse (2004) is of the view that financial investigation is the identification and documentation of the movement of money during the course of and after a crime. It establishes the link between where the money comes from, who gets it, when it was received, and where it was stored or deposited. This can provide proof of unlawful activity such as money laundering, racketeering, corruption and terrorist financing, as well as identify and trace assets for asset forfeiture purposes, in effect addressing the proceeds of unlawful activity.

According to Akintoye (2008), forensic litigation support in commercial banks provides assistance of a nature in a matter involving existing or pending litigation or represents the factual presentation of economic issue related to existing or pending litigation. It deals primarily with issues related to the qualification of economic damages sustained by parties involved in legal disputes and can assist in resolving dispute and can assist in resolving disputes, even before reaching or getting to the court room. A good example of litigation support assignment would be calculating the economic loss resulting from breach of contract.

According to Carrier (2003), the study attempt to analysis digital forensic as the use of scientifically derived and proven methods toward the preservation, collection, validation, identification, analysis, interpretation, documentation and presentation of digital evidence derived from digital sources for the purpose of facilitating or furthering the reconstruction of events found to be criminal, or helping to anticipate unauthorized actions shown to be disruptive to planned operations. This definition covers the broad aspects of digital forensics from data acquisition to legal actions. Abrecht (2010) conducted a study on Fraud and Forensic Accounting in a Digital Environment. The study differs from the present study in various ways;- it employed a literature review methodology/desk while the present study uses a field survey methodology. Another difference is that the study did not cover the effect of forensic ICT in financial performance of commercial banks in Nigeria

Moorthi, Seetharaman, Mohamed, Gopalan and San(2011) evaluates the role of information technology and how it affects internal audit process in the organization. The study also stresses on the global trend of adopting IT system (software/ hardware) in producing a more controlled environment in delivering the auditing process. However, the study did not examine the effect of forensic ICT on financial performance of commercial banks in Nigeria. In addition, the study used information and data of gathered from various sources of secondary data. Sources of secondary data include journal articles published in magazines and downloaded from the Internet
Websites including Emerald and EBSCO Host Research Databases. The current study uses field survey methodology.

3. Methodology
This study was conducted through explanatory research design which required the analysis of how a set of independent variables affect the dependent variable. The target populations comprised of all 609 forensic managers, their staff and internal control managers and their staff. For the purpose of this study, sampling frame of 21 commercial banks was taken. A sample of 61 respondents was used which was spread proportionately across stratum. The stratum included Forensic Managers, Forensic Assistant Manager, Internal Audit Manager, Internal Audit assistant manager, forensic staff and internal audit staff. The study used primary data that was collected through self-administered questionnaires. According to Gall, Gall and Borg, (2007) a questionnaire is a method of data collection in which respondents provide written answers to written questions. The questionnaire was preferred because it is easier to administer, analyze and economical in terms of time and money. The questionnaire comprised of closed ended questions and statements. Data was analyzed by use of statistical package for social sciences (SPSS).

The output of OLS consists of an $R^2$ squared, F statistic and regression coefficients. Lomax (2007); Tabachnick, Barbara and Fidell (2007); Wichura (2007) assert that a high $F$ statistic indicates that the null hypothesis of lack of joint fit is rejected. Everitt, (2002); Nagelkerke, (1992); Glantz and Slinker, (1990) asserts that the coefficient of determination $R^2$ is used in the context of statistical models whose main purpose is the prediction of future outcomes on the basis of other related information. It therefore indicates the proportion of variability in a data set that is accounted for by the statistical model. It also provides a measure of how well future outcomes are likely to be predicted by the model.

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \varepsilon$$

Where $Y$ = Financial Performance of a commercial banks
$\alpha$ = constant (intercept)
$\beta$ = slope (gradient) showing rate dependent variable is changing for each unit change of the independent variable.
$X_1$ = Forensic Investigation
$X_2$ = Forensic Litigation
$\varepsilon$ = Error/disturbance

4. Results and Findings
4.1 Descriptive Results
This study sought to establish the effect of forensic accounting on the performance of commercial bank in Nigeria. The study findings in Table 1 indicated that the banks profitability and performance had improved tremendously in Nigeria as the statements on banks performance attracted mean score of 4.1 which indicates that majority of the respondents agreed that the bank profitability had increased over the last 5 years, the bank profitability had surpassed the budgets, the bank profitability had surpassed the industry average and the bank profitability was expected to improve in the next ten years.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The bank profitability has grown due to forensic accounting</td>
<td>1</td>
<td>5</td>
<td>3.67</td>
<td>1.191</td>
</tr>
<tr>
<td>The bank profitability has increased over the last 5 years</td>
<td>3</td>
<td>5</td>
<td>4.35</td>
<td>0.729</td>
</tr>
<tr>
<td>The bank profitability has surpassed the budgets</td>
<td>2</td>
<td>5</td>
<td>4.31</td>
<td>0.829</td>
</tr>
<tr>
<td>The bank profitability has surpassed the industry average</td>
<td>3</td>
<td>5</td>
<td>4.1</td>
<td>0.805</td>
</tr>
<tr>
<td>The bank profitability is expected to improve in the next ten years</td>
<td>3</td>
<td>5</td>
<td>4.19</td>
<td>0.762</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td></td>
<td></td>
<td><strong>4.124</strong></td>
<td><strong>0.8632</strong></td>
</tr>
</tbody>
</table>
The study sought to determine the effect of forensic investigations on financial performance of commercial banks in Nigeria. The study findings indicate that forensic investigations influenced the financial performance of commercial banks. This was evidenced by a mean score of 3.984 which indicates that majority of the respondents agreed with the statements regarding forensic investigation and financial performance of commercial banks in Nigeria. The findings indicate that the respondents agreed that the forensic accountants in commercial banks were involved in investigating managerial frauds, non-managerial employees frauds, customer related frauds and investigating misuse of financial and non-financial resources. Table 2 presents the results.

### Table 2: Forensic Investigation and Performance

<table>
<thead>
<tr>
<th>Statement</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>The forensic accountants in this bank have been involved in investigating managerial frauds</td>
<td>2</td>
<td>5</td>
<td>3.92</td>
<td>0.919</td>
</tr>
<tr>
<td>The forensic accountants in this bank have been involved in investigating non-managerial employees frauds</td>
<td>2</td>
<td>5</td>
<td>3.92</td>
<td>0.846</td>
</tr>
<tr>
<td>The forensic accountants in this bank have been involved in investigating customers related frauds</td>
<td>2</td>
<td>5</td>
<td>3.81</td>
<td>0.96</td>
</tr>
<tr>
<td>The forensic accountants in this bank have been involved in investigating misuse of non financial resources</td>
<td>3</td>
<td>5</td>
<td>4.25</td>
<td>0.758</td>
</tr>
<tr>
<td>The forensic accountants in this bank have been involved in investigating misuse of financial resources</td>
<td>2</td>
<td>5</td>
<td>4.02</td>
<td>0.838</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td></td>
<td></td>
<td><strong>3.984</strong></td>
<td><strong>0.8642</strong></td>
</tr>
</tbody>
</table>

The second objective of the study sought to establish the effect of forensic litigations on financial performance of commercial banks in Nigeria. The study findings in Table 3 revealed that financial litigations influenced banks performance with a mean of 4.058 which indicates that majority of the respondents agreed that forensic litigations affected the performance of commercial banks in Nigeria. The findings indicated that the forensic accountants in commercial banks were involved in designing and implementing internal control procedures, evaluating the adequacy of internal control systems, developing corporate compliance programs, reviewing the opposing expert's reports on damages and the strengths and weaknesses of the positions taken and assisting in securing documentation necessary to support or rebut a claim.

### Table 3: Forensic Litigations

<table>
<thead>
<tr>
<th>Statement</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>The forensic accountants in this bank have been involved in designing and implementing internal control procedures</td>
<td>3</td>
<td>5</td>
<td>4.29</td>
<td>0.771</td>
</tr>
<tr>
<td>The forensic accountants in this bank have been involved in Evaluating the adequacy of internal control systems</td>
<td>2</td>
<td>5</td>
<td>3.96</td>
<td>0.967</td>
</tr>
<tr>
<td>The forensic accountants in this bank have been involved in Developing corporate compliance programs</td>
<td>3</td>
<td>5</td>
<td>4.23</td>
<td>0.831</td>
</tr>
<tr>
<td>The forensic accountants in this bank have been involved in Reviewing the opposing expert's reports on damages and the strengths and weaknesses of the positions taken</td>
<td>2</td>
<td>5</td>
<td>3.98</td>
<td>0.838</td>
</tr>
<tr>
<td>The forensic accountants in this bank have been involved in Assisting in securing documentation necessary to support or rebut a claim.</td>
<td>1</td>
<td>5</td>
<td>3.83</td>
<td>1.117</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td></td>
<td></td>
<td><strong>4.058</strong></td>
<td><strong>0.9048</strong></td>
</tr>
</tbody>
</table>

### 4.2 Inferential Statistics: Overall Model and Hypothesis Testing

In order to establish the statistical significance of the independent variables on the dependent variable (performance) regression analysis was employed. Table 4 shows that the coefficient of determination also called the R square are 42.9%. This means that the combined effect of the predictor variables (forensic investigation, forensic litigation) explains 42.9% of the variations in financial performance of commercial banks in Nigeria. The correlation coefficient of 65.5% indicates that the combined effect of the predictor variables have a strong and positive correlation with financial performance. This also meant that a change in the drivers of performance has a strong and a positive effect on financial performance of commercial banks in Nigeria.
Table 4: Regression Model Fitness

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>0.655</td>
</tr>
<tr>
<td>R Square</td>
<td>0.429</td>
</tr>
<tr>
<td>Std. Error of the Estimate</td>
<td>0.47976</td>
</tr>
</tbody>
</table>

Analysis of variance (ANOVA) on Table 5 shows that the combined effect of forensic investigation and forensic litigation was statistically significant in explaining changes in financial performance of commercial banks. This is demonstrated by a p value of 0.000 which is less than the acceptance critical value of 0.05.

Table 5: Analysis of Variance (ANOVA)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>7.772</td>
<td>5</td>
<td>3.886</td>
<td>16.833</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>10.358</td>
<td>42</td>
<td>0.230</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>18.130</td>
<td>47</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.2.1 Hypothesis Testing

Hypothesis 1:

Null (Ho): Forensic investigation does not have a positive effect on commercial bank performance

HA: Forensic investigation has a positive effect on commercial bank performance in Nigeria

Hypothesis 2:

Null (Ho): Forensic litigation does not have a positive effect on commercial bank performance

HA: Forensic litigation has a positive effect on commercial bank performance in Nigeria

Table 6 displays the regression coefficients of the independent variables. The results reveal that forensic litigation and forensic litigation are statistically significant in explaining financial performance of commercial banks in Nigeria.

Table 6: Regression Coefficients

<table>
<thead>
<tr>
<th>Variable</th>
<th>Beta</th>
<th>Std. Error</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.610</td>
<td>0.837</td>
<td>-0.726</td>
<td>0.470</td>
</tr>
<tr>
<td>Forensic investigation</td>
<td>0.510</td>
<td>0.176</td>
<td>2.897</td>
<td>0.006</td>
</tr>
<tr>
<td>Forensic litigation</td>
<td>0.666</td>
<td>0.156</td>
<td>4.263</td>
<td>0.000</td>
</tr>
</tbody>
</table>

5. Conclusion and Recommendations

The findings of this study were crucial in the formulating study conclusions. However, the study also took into account the expectations of the study. It was possible to conclude from the study findings that forensic investigation and forensic litigation were statistically significant in explaining changes in financial performance of commercial banks in Nigeria. It was also possible to conclude that use of forensic financial information influenced and improved performance of commercial banks in Nigeria. The study also concludes that use of forensic financial information has improved transparency in commercial banks hence managed to curb fraud thus increasing profitability.

The study recommends that the management of the commercial banks should emphasize and enhance use of forensic financial information as this will help in increasing the profitability. It is also recommended that the
management ensures that the bank adapts to new technological changes taking place in the world to ensure that they have a well-structured system to accommodate these changes.

References


Idowu, A (2009), An Assessment of fraud and its Management in Nigeria Commercial Banks, European Journal of Social Science, Volume 10, No.4


Odi N( 2013), Implications of Fraud on Commercial Banks Performance in Nigeria, International Journal of Business and Management; Vol. 8, No. 15; 2013 ISSN 1833-3850 E-ISSN 1833-8119 Published by Canadian Center of Science and Education 144


The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage: http://www.iiste.org

**CALL FOR JOURNAL PAPERS**

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

**Prospective authors of journals can find the submission instruction on the following page:** http://www.iiste.org/journals/ All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

**MORE RESOURCES**

Book publication information: http://www.iiste.org/book/

Recent conferences: http://www.iiste.org/conference/

**IISTE Knowledge Sharing Partners**

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar