Forensic Audit: A Tool for Fraud Detection and Prevention in Nigerian Banks

Bingilar Paymaster F. (PhD) and Light Opinion B.
Department of Accountancy, Niger Delta University, Amasoma, Bayelsa State, Nigeria
Department of Accountancy, Niger Delta University, Amasoma, Bayelsa State, Nigeria

Abstract
This study examines forensic audit as a tool for fraud detection and prevention in Nigerian banks. The study took a census of the 27 Deposit Money Banks (DMBs) listed on the Nigerian Stock Exchange (NSE) as at 31st December, 2019. The study used the secondary source to collect data from the Nigerian Deposit Insurance Corporations’ (NDICs) annual report of 2019. The study covered a period of ten (10) years spanning 2010-2019. Data generated were analyzed using charts, graphs, tables and regression. Our findings revealed that forensic audit has a significant negative effect on number of fraud cases, number of staff involved in bank fraud, and actual amount of bank losses through fraud in Nigerian DMBs. However, forensic auditing has insignificant impact on expected losses generated through fraud activities in the Nigerian banks. This study recommends that entity policy makers should educate staff on the implication of perpetrating fraud and the moral and economic hazard to the entity, the individual involve and economy as whole; employees should be rotated from time to time, this will enable entities discover where there are gap and loophole of fraud and Strong internal procedure should be put in place and should be constantly be updated to meet current trend.

Keywords: Forensic audit, fraud detection, fraud prevention, banking sector, Nigeria.

I. Introduction
The banking sector is one of the most controlled and regulated sectors in Nigeria. In spite of this, fraud has continued to rear its ugly head in the industry. Banks are the principal depositories of the public’s monetary savings, the nerve center of the payment system, the vessel endowed with the ability of money creation and allocation of financial resources and channels through which monetary and credit policies are implemented (Idolor, 2010; Akindele, 2011). Banks are institutions that involve in the business of financial intermediation and mobilization of deposit/savings from the surplus economic units to the deficit economic units (Aigienohuwa, Okoye & Uniamikogbo, 2017). Thus, the success of any monetary policy to a large extent, depends on the health of the banking institutions through which the policies are implemented (Adeyemo, 2012). Meaning whatever problems that militate against the proper functioning of the banking sector will invariably have multiplier effects on the other sectors of the economy. These significant roles played by the banks in the nations’ economic growth are responsible for the importance accorded the sector world over. Today, the very professionalism and ethics of banking appeared to have been grossly undermined in the banking sector. The banks over the years have lost substantial amount of their quality assets and integrity to the local and international communities, due to the activities of fraudsters in which majority of them were bank officials (The Association of Certified Fraud Examiners, 2014). According to NDIC (2014), the increase in expected/actual loss in fraud and forgeries was largely due to astronomical increase in the occurrence of web-based (online banking)/ATM and fraudulent transfer/withdrawal of deposit funds. A significant fraud case in an organization does not only undermine or shake up the financial stability of the company but, also ruins the company’s reputation, thereby posing a threat to stakeholders, shareholders’ and other investors. Inaya and Isito (2016), fraud is a global phenomenon that has been in existence for long and keeps increasing by the day. Fraud is an activity that takes place in a social setting and has got severe consequences in the economy, corporations, and individuals (Silverstone & Sheetz, 2007). Silverstone and Sheetz (2007) observed that fraud is an opportunistic infection that burst forth when greed meets possibilities of deception. Ratliff (1996) defines fraud as a sequence of activities perpetrated to obtain money, property or services, to avoid payment for services or to secure personal or business advantages. Fraud has currently become a norm in most organizations and due to its widespread, conventional auditing and investigations have failed to prevent and detect it, thus its multiplier adverse consequences on individuals, organizations and the society at large (Aigienohuwa et al, 2017). Fraud is a subject that has received a lot of attention in Nigeria and at the global level (Oyejide, 2008) which internal and external auditors are supposed to guard against through their periodic audits. However, auditors can only check
for the compliance of a company’s books to Generally Accepted Accounting Practices (GAAP), auditing standards, and company policies. Globally, there are increasing occurrences of fraud in corporate organizations and this has adversely affected the firms’ bottom line due to its none detection and prevention by statutory audit. These high spates of fraudulent activities perpetrated by management of organizations which cannot be detected nor prevented by statutory auditors which eventually led to the collapse of many high profile companies such as Enron, Tyco, WorldCom, Pamalat, Cadbury Nigeria, etc., necessitated the need for forensic audit for an enhanced control system. Fraud is a universal problem as no nation is immune from its continued existence and it has been identified as a major threat to the growth and development of the banking sector in Nigeria and the world at large. However, whether the use of forensic auditors would help in detecting and preventing fraud with a view to enhancing investors’ confidence in the annual reports of banks in Nigeria remains unknown. This is the knowledge gap that drives this study.

II. Literature Review

Concept of Forensic Audit
Forensic is as old as history but its usage got little attention in the past. Webster dictionary defines forensic as belonging to; used in, or suitable to courts of jurisdiction or to public discussions and debate. Forensic audit is seen as summarizing and adapting investigative auditing, criminology, litigation services, and financial skills to uncovering fraud (Enofe, Omagbon, & Ehioghi, 2015). The growing demand for forensic audit service is becoming prominent because of the increasing fraudulent practices in businesses and government agencies around the world in recent time. The increasing complexity of fraud requires that forensic auditing be included in the tools required to successfully investigate and prosecute cases of fraud and those involved in fraudulent practices (Njanike, Dube, & Mashayanye, 2009). Often, quoted in fraud scandals that almost swallow the corporate world are cases of Enron, Arthur Anderson, and WorldCom. These cases have, therefore, brought forensic auditing to limelight (Enofe, et al, 2015). Also, the failure of statutory audit to prevent, detect, and reduce the wrongful, fraudulent, or corrupt use of corporation’s financial and non-financial assets and the increase in corporate crime brought about the need for professional accountants and legal practitioners to find ways of fighting this perceived threat called fraud which is digging deep into the business world and which has also put pressure on the professional accountants and legal practitioners in exposing this evil frame in the business world, using forensic audit. Forensic audit and forensic accounting are concepts interchangeably used. While Arokiasamy and Cristal (2009) described forensic audit as the application of financial skills and investigative ability within the context of rule of evidence to examine unsettled issues, Linquistn and Bologna (1987) affirmed that forensic accounting is a discipline that is made up of fraud knowledge, financial expertise and a sound knowledge and understanding of business reality and the working of the legal system.

The Institute of Forensic Accountants (IFA) of Nigeria depicts forensic auditing as the specialty of accounting that describes forensic auditor/accountant’s engagement resulting from anticipated dispute or litigation. Mohd and Mazni (2008) defined forensic auditing as an activity that consists of gathering, verifying, processing, analyzing, and reporting on data in order to obtain facts and evidence in a predefined context in the area of legal/financial disputes and/or irregularities and giving preventive advice. Albrecht and Albrecht (2001) define forensic auditing as the utilization of specialized investigative skills in carrying out an enquiry conducted in such a manner that the outcome will have application to the court of law. This is in line with the definition of Messier (2000) which states that forensic auditors are fraud examiners employed by corporations, government agencies public accounting firm and are trained by Association of Certified Fraud Examiners (ACFE) on areas which cover, fraudulent financial transactions, legal elements of fraud investigation, criminology and ethics. Forensic auditing or accounting is that aspect of accounting that provides analysis suitable to the court which will form the basis for discussion, debate and ultimate dispute resolution (Wallace, 1991). Forensic auditors therefore, are experts in financial matters who are trained in detecting, investigating and deterring fraud and white-collar crimes which are to be presented to court for legal action or to the public for discussions and debate. Akenbor and Irunke (2014) argue that the importance of forensic auditing cannot be undermined as a result of global persistent perpetration of fraud in various organizations. Hence, forensic audit may be one of the most effective and efficient way to detect, reduce and prevent fraud.

2.2 Forensic Audit in Fraud Prevention and Detection

Fraud is a generic category of criminal conduct that involves the use of dishonest or deceitful means in order to obtain some unjust advantage or gain over another (Okoye, Maimako, Jugu, & Jat, 2017). When fraud is discovered within an institution, the initial response is “how could that have happened”, and if audited statements were issued, the question asked will be “why didn’t the auditor have a clue”? These raised the question of whose responsibility it is to detect and prevent fraud. The cost of fraud to business organizations today is mounting and it’s of concern to the professionals. Forensic audit plays a very essential role in the
business organizations. It facilitates the prevention, detection and investigation of fraud and other economic crimes in the economy. Areas covered by forensic audit include: (i) The limitation of an economic crime awareness program with a view to highlighting the existence of potential risks and the need for economic crime (fraud) prevention strategies in each institution; (ii) A review of the criminal justice system as it pertains to economic crimes in financial institutions and of all the relevant registration with a view to identifying any material deficiencies and reporting appropriately thereon; (iii) The development of necessary policies and guidelines, including an appropriate risk assessment models for audit and other purposes. Modugu and Anyaduba (2013), one of the effective tools used by forensic auditors in fraud detection and money laundering is the net worth method. The net-worth technique is good in demonstrating the income of the suspect by using financial analysis to determine the increase in his or her wealth. This is usually done by showing the year-to-year increase in the wealth of the individual. Through this tool, it can be shown that fraudsters, money launderers, and corrupt bank officials spent money that can be traced to their legitimate income.

Transaction monitoring is another area where forensic accounts can assist both the institution and law enforcement agencies to detect or prevent fraudulent practices. Two basic ways to conduct transaction monitoring to ensure that fraud and other financial crimes are not perpetrated are the use of anti-money laundering (AML) software used by various institutions using data mining tool and reports generated by the accounting system which can be queried by the forensic accountant using query type analysis of spreadsheets. These can effectively assist to deal with tracking complex transaction that some of these fraudsters and sophisticated money launderers employ.

**Measurement of Fraud**

The mechanisms considered appropriate to measure fraud as used in this study are: Expected loss and total amount lost to fraud in banks. Frequency of fraud occurrences and staff involvement in fraud and forgeries. They are explained below:

**Expected Loss and Total Amount Lost to Fraud in Banks**

Expected loss is the sum of the values of all possible losses, each multiplied by the probability of that loss occurring. In the banking sector, expected loss could arise from lending activities of banks or fraudulent acts perpetuated by the staff of the banks. The expected loss on a loan and fraudulent activities of staff varies over time for a number of reasons.

Bank failures are as old as banking industry itself. Despite the significant roles banks play in economic development, its failures are becoming well pronounced. The Dictionary of Economics and Commerce confirmed that 200 banks failed in England between 1815 and 1850 just a period of 35 years. One of the reasons adduced for this failure is fraud (Owolabi, 2010). The problem of fraud in the banking industry is not limited to any economy, nation, continent or an environment; it is a general phenomenon. The origin of bank failure in Nigeria can be traced to the 1930s bank failure and crises.

Frauds are perpetrated in corporate organization such as banks and non-banks mostly by staff of these organizations (Enofe, et al, 2015). Fraud is one of the evils irrespective of peoples’ status, age, ethnicity, religion and organization affiliation consciously and unconsciously indulged in through varying methods, approaches and tactics. Fraud is a social malady which keeps the perpetrators enriched and elevated in the society in the temporal period it occurs while it causes pains, frustration, losses and economic retrogression to the victims, be it individual, corporate bodies and the nations at large (Ogbeide, 2018). Fraud is a calculative attempt by an unsuspected party to deceive another for either financial gain or moral gain. Idolor (2010) notes that behavior which engenders fraud is a sort of evil purpose on the part of the perpetrator(s) to the disadvantage of a third party, in this case the victim of the fraud.

According to NDIC report (2014), the proportion of banks actual/expected loss to the amount involved in fraud rose from 3 percent in 1990 to 22 percent in 1998. Perhaps the highest fraud ever reported in any particular year by a Nigerian bank occurred in 1998 when United Bank for Africa Plc wrote off an amount of N786m on account of fraud. The expected/actual loss increased by N1.24 billion or 27.4% from N4.52 billion in 2012 to N5.76 billion in 2013. The highest expected/actual loss of N2.5 billion occurred in the first quarter ended March 2013, which represented 47.4% of the total industry expected/actual loss. The increase in the number of fraud cases was due to rising fraud cases through Automated Teller Machine (ATM), Internet Banking and suppression of customers’ deposits. The major types of frauds as reported by DMBs included ATM fraud, fraudulent transfers/withdrawals, internet banking fraud, cash suppression, unauthorized credits, fraudulent conversion of Cheques, diversion of customer deposits and presentation of forged Cheques, etc. From the above, the first hypothesis of this study is presumed as follows:
2.3 Review of Theory

The Fraud Diamond Theory was adopted in this study because it is the theory that deals with the capacity or traits of person(s) or staff with the requisite skills to implement the details of fraud in an organization. Hence, the most appropriate theory for this study. This theory is explained below:

Fraud Diamond Theory

The Fraud Diamond Theory (FDT) which is an extended version of the Fraud Triangle Theory was propounded by Wolfe and Hermanson in 2004. Wolf and Hermanson (2004) introduced the fraud diamond model where they presented another view of the determinants of fraud. The model adds a fourth variable “capability” to the three-factor theory of ‘fraud triangle’ propounded by Donald Cressey in 1950 which is; pressure, opportunity and rationalization. This theory believes that the presence of pressure, opportunity and rationalization alone cannot lead to fraud except the person/employee has the capacity to commit that fraud. They opined that opportunity opens the doorway to fraud, and that pressure and rationalization can draw a person towards fraud. It therefore shows that, for fraud to occur in any organization, including the banks, these three elements must first be present. Pressure, which is a significant financial need or problem, is frequently what causes the act of fraud. Opportunity facilitates the ability to commit fraud, while rationalization connotes the justification of the fraud as consistent with the employees’/fraudsters’ personal code of ethics (Okoye et al, 2017).

However, Wolfe and Hermanson (2004) opined that for fraud to be committed, the person must have the capacity to recognize the open doorway as an opportunity and take advantage of it by walking through it (Okoye et al, 2017). Capacity is the possession of relevant traits or skills and ability to turn such opportunity to a reality. Hence, capacity connotes understanding of the internal control system and its lapses that could be exploited in planning and implementation of the fraud. Wolf and Hermanson believed that many frauds would not have occurred without the right person with right capabilities implementing the details of the fraud. They also suggested four observation traits for committing fraud as: (i) authoritative position in the organization; (ii) capacity to understand and exploit the organization’s systems of accounting and internal control; (iii) confidence that they will not be detected, or if caught, they will get out of it easily; and (iv) capability to deal with the stress created within and otherwise be a good person when he or she commits bad act.

With the additional element presented in the fraud diamond theory affecting individuals’ decision to commit fraud, the organization and auditors need to better understand employees’ individual traits and abilities in order to assess the risk of fraudulent behaviors. In addition, better systems of checks and balances should be implemented and monitored to proactively minimize risks and losses resulting from fraudulent activities in the workplace. It is therefore, pertinent to note that for the capability of those who engaged in fraud and other form of atrocities to be detected and prevented, the services of a trained and experienced investigator like the forensic auditor is required to forestall incidences of fraud in the Nigerian banking sector.

2.4 Review of Empirical Literature

Bassey (2018) examined the effect of forensic accounting on the management of fraud in microfinance institutions in Cross River State. The study adopted a survey research design. Data were collected from both primary and secondary sources and analyzed using the ordinary least square technique. The regression results showed that the estimated coefficients of the regression parameter are all negative signs. The implication of these signs was that the active engagement of forensic investigation and litigation support reduces fraud in the selected microfinance banks in Calabar. The study recommends that management of micro finance banks in Calabar should develop more interest in forensic accounting for monitoring and investigating suspected culprits in fraud cases.

Aigienohuwa, Okoye, and Uniamikogbo (2017) examined the effectiveness of forensic accounting and fraud mitigation in the Nigerian banking industry. The primary source of data was adopted using the 5- Likert scale questionnaires as the research instrument for data generation from respondents. The findings revealed that forensic accounting aside from significantly reducing fraud in the banking industry, has helped to improve considerably the internal control system of banks. It was recommended that the regulatory agencies and shareholders should strictly enforce forensic accounting of banks and ensure that both internal control and internal audit staff embrace this emerging trend.

Raymond, Nkiru, and Jane (2016) investigated the impact of forensic auditing in combating fraudulent activities in order to ensure good corporate governance practice in Nigerian banking sector using the t-test statistical techniques with the aid of SPSS version 20.0. The survey method was adopted and data were collected through the use of questionnaire. Sample size of fifty-five (55) respondents from the commercial banks in Awka, Anambra state was used. The study revealed that forensic accounting is an effective tool for addressing financial crimes in the banking system. The study further stated that forensic audit is necessitated in ensuring corporate governance in corporate organizations. It was recommended among others that the apex bank should
engage the services of forensic accountants to compliment efforts of other professionals in reducing fraudulent activities in order to ensure corporate governance in financial sector.

Ogutu and Solomon (2016) examined the application of forensic auditing skills in the mitigation of fraud with particular reference to the accounting firms in Nakuru County, Kenya. The Descriptive survey research design was adopted for the study. The sample size of the study consists of 25 accounting firms to which questionnaire were administered to generate data. The primary source of data collection method was used using the responses from the 25 respondents from the 25 accounting firms. The OLS regression was used in analyzing the data collected from the primary source.

Findings from the study showed that forensic accountants should have auditing skills, investigative skills, fraud skills as well legal skills. The study recommends that training and adoption of scientific forensic accounting skills by accounting firms and internal auditors is essential to ensure efficient mitigation against fraud.

Enofe, Omagbon, and Ehigiator (2015) examined the impact of forensic audit on corporate fraud in Nigeria. The study employed the survey method. The study employed the use of questionnaires which was judgmentally distributed to persons knowledgeable in the field of accounting and auditing with a view to harvesting data. Data gathered were analyzed using the Ordinary Least Square (OLS) regression technique. The study findings showed that forensic audit was adjudged to be an efficient and effective tool against corporate fraud. Also, frequent utilization of forensic audit services will significantly help in the detection, prevention as well as reduction of incidences of fraud in businesses. The findings suggested that forensic audit be made statutory for business organizations.

Adeniyi (2014) investigated the effect of forensic auditing on financial fraud in Nigerian DMBs. The cross sectional survey design was adopted for the study. The population comprised the staff of banks and audit firms in Abeokuta, Ogun State. The purposive sampling technique was used for the administration of questionnaire. The OLS regression analysis was used in analyzing the data. Findings from the study showed that forensic audit has significant effect on financial fraud control in Nigerian DMBs and that forensic audit report significantly enhances court adjudication on financial fraud in Nigeria. The study concludes that the application of forensic audit to tackle financial fraud in Nigerian DMBs is still at the infant stage. The findings further suggested that organizations should have a strong internal control system in place to reduce the occurrence of fraud.

Akenbor and Oghoghomeh (2013) examined forensic auditing and financial crime in Nigerian banks. The population of the study consists of twenty-three (23) employees from the recapitalized banks in Port-Harcourt, the Rivers state capital. A 5-point Likert-Scale questionnaire was the major instrument used for data collection. Data generated were analyzed using frequencies and percentages. The Pearson Product Moment Correlation Co-efficient was used to statistically test formulated hypotheses. The findings revealed that the proactive approach to forensic auditing helps in minimizing the risk of financial crimes in Nigerian banks. The study recommends that forensic audit department should be created in Nigerian banks to initiate internal measures for fighting financial crimes; forensic auditing courses should be introduced in Nigerian higher institutions of learning to provide the necessary skills and knowledge on forensic auditing; forensic audit reports of banks should be made public.

III. Methodology

In this chapter, we (researchers) will be discussing the research design, sample and sampling techniques, method of data collection, ratio analysis, method of data analysis techniques, reasons for using regression analysis and model specification.

3.1 Research Design
This refers to structure, plan and strategy that we intend to use in order to obtain the reliable information and answers to the research questions stated in chapter one of the research above. The design of this research work involves the use of secondary data (descriptive analysis) also known as the ex post facto (after-the-fact) research design, with this approach the researcher does not possess the power in any way to influence the variables under investigation.

3.2 Sampling and Sample Techniques
This study adopts the ex-post facto research design with an extensive reliance on secondary data generated from the NDIC reports of 31st December 2019 of 27 Deposit, Money banks (DMBs) listed on the Nigerian Stock Exchange as at 31st December 2019.
3.3 Data Analysis Techniques

The researcher choose to represent the data collected in tables of frequency, using simple percentage (ratios) method of analysis, thus the statistical method used for testing the hypotheses is the multiple linear regression model, which capture five (5) variables comprising of dependent and independent. The statistical tool used is the Statistical Package for social science (SPSS). Data generated from the NDIC reports of 2019.

3.4 Model Specification

The above variables will tested using regression analysis with the help e-view 9.0 the model is stated as follows:

\[ \text{FA} = f(X, \text{FO}, \text{TS}, \text{SF}) \]

The econometric model is expressed thus: \[ FA = \beta_0 + \beta_1X + \beta_2\text{FO} + \beta_3\text{TS} + \beta_4\text{SF} + \varepsilon \]

Where:
- \(\text{FA}\) = forensic auditing
- \(X\) = expected loss of banks
- \(\text{FO}\) = fraud occurrence
- \(\text{TS}\) = total amount lost to fraud
- \(\text{SF}\) = staff involvement in fraud
- \(\beta_1 - \beta_4\) are the coefficient of the parameter estimate.
- \(\varepsilon\) is the error term.

IV. Data Presentation and Analysis

The channels and instruments through which the reported frauds and forgeries were perpetrated are presented in Table one, ATM card-related fraud had the highest frequency, accounting for 49.78% of fraud cases followed by Web based internet banking frauds with 21.02%. However, the value of losses was higher in web-based internet banking frauds against ATM card-related fraud. The increasing use of financial technology channels (like mobile transfers, ATM transfers etc.) was attributed to a rise in frauds and forgeries cases via these channels. It is imperative that DMBs continually upgrade their cyber security platforms in conjunction with continuous consumer education and sensitization to prevent loss of funds and build depositor confidence.

Descriptive Statistics (Table one)

<table>
<thead>
<tr>
<th></th>
<th>FA</th>
<th>X</th>
<th>FO</th>
<th>TS</th>
<th>SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>714.2281</td>
<td>4.887000</td>
<td>4.578000</td>
<td>3.699000</td>
<td>2.811000</td>
</tr>
<tr>
<td>Median</td>
<td>860.2170</td>
<td>5.315000</td>
<td>4.725000</td>
<td>3.750000</td>
<td>2.935000</td>
</tr>
<tr>
<td>Maximum</td>
<td>921.9075</td>
<td>5.350000</td>
<td>4.770000</td>
<td>4.180000</td>
<td>2.960000</td>
</tr>
<tr>
<td>Minimum</td>
<td>231.0000</td>
<td>3.940000</td>
<td>4.090000</td>
<td>3.380000</td>
<td>2.360000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>273.3939</td>
<td>0.598703</td>
<td>0.249524</td>
<td>0.598703</td>
<td>0.598703</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.934781</td>
<td>-0.607023</td>
<td>-0.134465</td>
<td>-0.607023</td>
<td>-0.607023</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>2.033252</td>
<td>1.566639</td>
<td>2.507052</td>
<td>0.000000</td>
<td>0.000000</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>1.845778</td>
<td>0.219336</td>
<td>1.201800</td>
<td>0.219336</td>
<td>1.201800</td>
</tr>
<tr>
<td>Probability</td>
<td>0.397396</td>
<td>0.496690</td>
<td>0.858791</td>
<td>0.219336</td>
<td>0.219336</td>
</tr>
<tr>
<td>Sum</td>
<td>714.2281</td>
<td>48.870000</td>
<td>45.780000</td>
<td>36.990000</td>
<td>28.110000</td>
</tr>
<tr>
<td>Sum Sq. Dev.</td>
<td>672698.0</td>
<td>0.560360</td>
<td>0.147079</td>
<td>0.219336</td>
<td>0.219336</td>
</tr>
</tbody>
</table>

Source: Authors Computations via e-views.

Table one above showed the summary of the descriptive statistics of the study variables. The table showed that FA (dependent variable), X, FO, TS and SF (independent variable) which has the mean value of: 714.2281, 4.887000, 4.578000, 3.699000 and 2.811000 respectively. FA has the highest value while FT has the lowest value. The maximum values of FA (dependent variable), X, FO, TS and SF (independent variable) as shown in table one above are: 921.9075, 5.350000, 4.770000, 4.180000 and 2.960000 respectively. FA has the highest value while FT has the lowest value. The minimum values of FA (dependent variable), X, FO, TS and SF (independent variable) as shown in table one above are: 231.0000, 3.940000, 4.090000, 3.380000 and 2.360000 respectively. Table one above also showed the standard deviation of FA, X, FO, TS and SF, which are 273.3939, 0.598703, 0.249524, 0.598703 and 0.598703 respectively. From the listed values FA is most dispersed while SF is the least dispersed. Furthermore the Jarque-Bera statistics and the associated probability values showed that FA, X, FO, TS and SF has a probability values which are greater than 5% respectively, which means that the variables are normally distributed.
Multiple regression result

Dependent Variable: FA
Method: Least Squares
Date: 08/14/21   Time: 15:09
Sample: 2010 2019
Included observations: 10

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>172.0222</td>
<td>51.60216</td>
<td>3.333623</td>
<td>0.0207</td>
</tr>
<tr>
<td>FO</td>
<td>72.74057</td>
<td>59.52049</td>
<td>1.222110</td>
<td>0.2761</td>
</tr>
<tr>
<td>TS</td>
<td>379.5036</td>
<td>82.10536</td>
<td>4.622153</td>
<td>0.0057</td>
</tr>
<tr>
<td>SF</td>
<td>394.5094</td>
<td>165.6652</td>
<td>2.381366</td>
<td>0.0631</td>
</tr>
<tr>
<td>C</td>
<td>-2972.200</td>
<td>161.8387</td>
<td>-18.36520</td>
<td>0.0000</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.997867</td>
<td></td>
<td></td>
<td>714.2281</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.996161</td>
<td>S.D. dependent var</td>
<td>273.3939</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>16.93900</td>
<td>Akaike info criterion</td>
<td>8.809367</td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>1434.648</td>
<td>Schwarz criterion</td>
<td>8.955259</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-39.01983</td>
<td>Hannan-Quinn criter.</td>
<td>8.637999</td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td>584.8677</td>
<td>Durbin-Watson stat</td>
<td>0.637197</td>
<td></td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000001</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors Computations via e-views.

The regression result above showed that the coefficient of determination (R-squared) value of 0.99 approximately which indicates that 99% of changes in the dependent variable are accounted for by the combined effect of fluctuation in the independent variables. In the same vein the adjusted R- squared value of 0.99% approximately, indicates that the model used is appropriate and good fit to be used in testing our hypotheses for the study. This also indicate that there is high confidence level for acceptance of the goodness of fit for the model under study. Probability value of the F-statistic 0.000001 above showed that our model is statistically significant at 5%.

In summary, the regression output used in examining forensic audit; a tool for fraud detection and prevention in Nigerian banks indicated strong significant relationship between the explanatory variables and response variable, therefore the null hypotheses for the study are rejected. We can therefore confidently say base on the regression output that forensic audit, is really a tool for fraud detection and prevention in Nigeria MDBs.

Hypothesis testing

In this section, our null hypotheses for the study is been tested.

Hypothesis one:

H01: Forensic auditing has no significant effect on expected loss of banks in Nigerian banks

The decision is based on 5% significant level, which means the null hypothesis should be accepted if the calculated p-value is greater than 5%, otherwise reject. From table two above X (has a coefficient of 172.0222, and statistical value of 0.0207 which is within the 5% significant level. Therefore we can conclude forensic auditing has a significant effect on expected loss of banks to fraud in Nigerian banks, therefore we reject our null hypothesis for our study.

Hypothesis two:

H02: Forensic auditing has no significant effect on the occurrence of fraud in Nigerian banks

The decision is based on 5% significant level, which means the null hypothesis should be accepted if the calculated p-value is greater than 5%, otherwise reject. From table two above FO (has a coefficient of 72.74057, and statistical value of 0.2761 which is greater than the 5% significant level. Therefore we can conclude forensic auditing has no significant effect on occurrence of fraud in Nigerian banks, therefore we accept our null hypothesis for our study.

Hypothesis three:

H03: Forensic auditing has no significant effect on total amount lost to fraud in Nigerian banks
The decision is based on 5% significant level, which means the null hypothesis should be accepted if the calculated p-value is greater than 5%, otherwise reject. From table two above TS (has a coefficient of 379.5036, and statistical value of 0.0057 which is within the 5% significant level. Therefore we can conclude forensic auditing has a significant effect on total amount lost to fraud in Nigerian banks, therefore we reject our null hypothesis for our study.

Hypothesis four:
H04: Forensic auditing has no significant effect on staff involvement in fraud in Nigerian banks

The decision is based on 10% significant level, which means the null hypothesis should be accepted if the calculated p-value is greater than 10%, otherwise reject. From table two above SF (has a coefficient of 394.5094, and statistical value of 0.0631 which is within the 10% significant level. Therefore we can conclude forensic auditing has a significant effect on staff involvement in fraud in Nigerian banks, therefore we reject our null hypothesis for our study.

V. Conclusion And Recommendations

In this chapter we will be summarizing the finding of this study, drawing conclusion and making recommendations.

5.1 Summary of finding

We examined forensic audit as a tool for fraud detection and prevention in Nigerian banks with secondary data extracted from 27 deposit money banks (DMBs) from the Nigerian deposit insurance corporations’ (NDICs) annual report of 2019 with data ranging from 2010 to 2019, using regression with the help of e-view. The researchers carried out the study due the different scholars view on this topic and also, as a result of rising fraud rate in Nigeria banking sector, that if not tame, will affect the entire economy.

This study will be of significant values to key stakeholders such as internal (stakeholders and employees) and the same time it will also be of significant values to the external stakeholders such: the government, creditors, and prospective investors to mention but a few.

Our findings revealed that:

Fraud occurrence (FO) and staff involvement in fraud (SF) is above the 5% significant level, however all other explanatory variables are within the 5% significant level, on the average forensic audit; a tool for fraud detection and prevention in Nigerian banks has a significant impact and role in detecting and preventing fraud

5.2 Conclusion and Recommendations

Based on the research findings regarding forensic audit; a tool for fraud detection and prevention in Nigerian banks, we therefore recommended that:

i. Entity policy makers should educate staff on the implication of perpetrating fraud and the moral and economic hazard to the entity, the individual involve and economy as whole;

ii. Employees should be rotated from time to time, this will enable entities discover where there are gap and loophole of fraud;

iii. Strong internal procedure should be put in place and should be constantly be updated to meet current trend.

References:


