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Fraud in Nigerian Banking Sector

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Abstract
The study examined fraud in the Nigerian banking sector. Ex-post facto research design was adopted for the study. Data for the period 2006-2015 were collected from Nigeria Deposit Insurance Corporation (NDIC) annual reports. Data relating to fraud, bank profit, bank assets and bank deposits were collected. Descriptive analysis and Ordinary Least Square (OLS) method of regression analysis were used for the data analysis. It was discovered that fraud has negative but insignificant relationship with bank profit amongst others. This implies that even though as bank fraud increases, bank profit increases, but the amount of fund involved in fraud does not significantly affect bank profit. We recommend amongst others that banks should include the amount involved in fraud in their financial statements and entrench good corporate governance (Fraud Box Model) as the key to lock the fraud -risk factors as contained in fraud diamond.

Keywords: Fraud, Nigeria, Banking Sector, Bank profit, Bank Assets Bank Deposits

Introduction
Fraud is a pandemic socio-economic disease, as it traverses both public and private sectors of the economy as well as developing and developed nations of the world. Abiola in Gbegi and Adebisi (2014) described fraud as being endemic and gradually becoming a way of life in Nigeria, cutting across all starter of the polity (from the president down to the councilors). The spate of fraud and corruption in Nigeria is so alarming such that no sector of the economy is free from fraudulent activities. Nigeria was the 136th out of 174 countries ranked by Transparency International corruption Perspective Index 2014, scoring 27 percent. Worthy of note is her score of 25 and 27 percent in 2013 and 2012 respectively; showing inconsistency in the fight against corruption. In West Africa, she achieved the ‘prestigious’ 3rd most corrupt nation after Guinea and Guinea Bissau (Ejike, 2014).

Kasmu (2009) states that no money is entirely free; every naira and kobo has its legal use and misuse as any amount will impact negatively on where it would have been legally used (in an
organisation or a nation). Unless where impossible, individual, corporate body and interested government organs may seek redress using different institutions like police and the law court. No sector of the economy is shielded from fraud. The financial sector of the economy seems to be one of the beautiful brides for fraud and fraudulent practice in Nigeria. This might not be unconnected with the volume of transactions in cash and the object of trade-cash which is enormous hence very attractive to fraudsters. Banking industry in an economy is so strategic that virtually everyone is a stakeholder. Banks, amongst other roles, help in capital formation by mobilizing savings and channeling them into investments and financing capital projects (Olukotun, Ademola, Olusegun & Olorunfemi, 2013).

Frauds occur in banks. Owolabi (2010) opines that bank frauds have far reaching consequences to the stakeholders and the nation’s economy at large. There has been large scale fraud in Nigerian banks which at various times, among other factors, have resulted in bank distress. A banking system that is in crisis cannot carry out its intermediation role effectively as there will be credit crunch in which case there is halt to new lending. There may be low capital adequacy ratio of the bank or short fall of liquidity. Owolabi (2010) traced most crises in banks over the world to fraud, which in some occasions, have resulted in bank failure. Bank fraud brings untold hardship to shareholders, employees, customers and family members when bank failures result from the act. Odi (2013) acknowledges that fraud in banks shakes the foundation and credibility of most banks in Nigeria, resulting to some of the banks being distressed. It is in recognition of these seemingly serious assertions on impact of fraud on banks that this study is designed to investigate the effects of fraud on Nigerian banking sector.

**Statement of the Problem**

Fraud is a universal problem as no nation is free from it; though developing countries and their various states suffer it more. The corrupt and fraudulent events witnessed daily across the nation have continued to betray every good intention and selfless effort made by true patriotic Nigerians toward restoring economic glory of Nigeria as was in the 80’s when the United States Dollar had unreserved respect for the Naira in the international market (Okoye, 2016). The incidences and magnitude of fraud are increasing (Okoye & Gbegi, 2013). The above view was collaborated by Modugu and Anyaduba (2013), Gbegi and Adebisi (2014), and Okoye and Akamobi (2009). Imoniana, Antunes and Formigoni (2013) did not only acknowledge the endemic and escalating nature of fraud but re-echoed the description by KPMG (2009) that described fraud as an industry not just for fraudsters; academics study it, Investigators investigate it, lawyers litigate on it, and conference goers debate on it. However, the industry is built on managing the consequences of fraud rather than on preventing fraud. What a shabby and shallow foundation!

Owolabi (2010) disclosed that Dictionary of Economics and Commerce revealed that 200 banks failed in England between 1815 and 1850; a period of 35 years. Among the reasons attributable to that was fraud. Nwankwo in Uchenna and Agbo (2013) traced the history of bank failure in Nigeria to 1930s which brought about crisis of confidence in Nigerian banking industry when all indigenous banks collapsed except one- the National Bank. Similar incidence repeated during the banking ‘boom and crash’ of the late 40’s when all but four indigenous banks were liquidated. Furthermore, between 1952 and 1954 16 out of 21 indigenous banks failed. Also, in late 1990s, 26 failed banks were liquidated while others were restructured, acquired or sold outright. In all these periods, Nwankwo (2005) asserted that fraud played a prominent role. These bank failures
led to significant financial loss to depositors, loss of confidence by the banking public, and cast doubt on the ability of Nigerians in managing banking business as the primary objective of banking-safe keeping of money seemed threatened. Government in reaction to these developments set up the Paton Commission of Inquiry in 1948 with the outcome leading to first banking regulation in 1952 and establishment of CBN in 1958. The bank reform of 1986 (Structural Adjustment Programme, SAP) lead to proliferation of banks and boom till late 1990’s (Olukotun, et al, 2013).

In 2005, there was another reform in Nigerian banking sector to avert imminent collapse. The 2005 reform was characterized largely by mergers and acquisitions of many banks to the extent that only 25 banks emerged out of 89 after the exercise. Notwithstanding the above measures, the threat of fraud has continued. For instance, according to Nigerian Deposit Insurance Corporation (NDIC) annual report, (2010), 1,532 cases of fraud were reported involving 21.29 billion naira with expected actual loss of 11.69 billion naira. Also, in 2011, 2,352 cases of fraud were reported involving 28.4 billion naira with expected actual loss of 4.071 billion naira. This represents a 53.5 percent increase. In 2014, there were 10,612 reported cases of fraud as against 3,786 in 2013 with involvement of 25.61 billion naira and 21.80 billion naira respectively. This represents about 17.5 percent increase in amount involved. The expected actual loss for 2014 was 6.19 billion naira as against 5.76 billion naira in 2013, representing an increase of about 7.5 percent.

In 2009, Central Bank of Nigeria while employing the services of Forensic Accountants in five commercial banks, uncovered fraud. As a result, the Chief Executive Officer of Oceanic Bank was prosecuted by Economic and Financial Crimes Commission (EFCC) and was sentenced by the court on conviction to 18 months in prison (Dada, Owolabi & Okwu, 2013).

It has been observed that reported cases of bank fraud have been on the increase, but its impact on the Nigerian banking sector is of great concern (NDIC report, 2015). There has been studies on the impact of fraud on Nigerian banks by scholars like Kanu and Okoroafor (2013), Aruomoaghe and Ikyume (2013), Owolabi (2010), Uche and Agbo (2013), Ikpefan (2006) and Odi (2013). While most of them looked at it from the number and classes of staff involved, others were looked at the relationship of the fraud with dividend, credit mobilization and so on. With respect to credit mobilization, Kanu and Okoroafor (2013) and Ikpefan (2006) discovered significant relationship between bank deposit and fraud while Uche and Agbo (2013) found that the percentage of mobilized fund lost to fraud was high between 2001-2006 but reduced between 2006-2011. Odi (2013) and Ademoye (2012) on their study of the impact of fraud on bank performance found devastating impact of fraud on bank performance with Inaya and Isito (2016) have gone ahead to find that fraud have negative social impact on fraud. On bank staff involvement on fraud, Owolabi (2010) discovered that bank executives were involved in over 70 percent of the frauds in bank while the study by Idolor’s (2010) revealed that bank staff do not see un-official borrowing and foreign exchange malpractices as a form of bank fraud. In view of the above studies, we want to look at the impact of fraud on bank profit, its assets and liabilities.

Objectives of the Study
The main objective of the study is to ascertain the effect of fraud on Nigerian banking sector. However, the specific objectives are to:
1. Ascertain the effect of fraud on profit in Nigeria banking industry.
2. Evaluate the effect of fraud on assets in Nigeria banking industry.
3. Determine the effect of fraud on bank deposits in Nigeria banking industry.

Research Questions
The following research questions were used in the study:
1. To what extent do frauds in Nigeria Banks affect bank profits?
2. To what extent do frauds in Nigeria Banks affect bank assets?
3. To what extent do frauds in Nigeria Banks affect bank deposits?

Research Hypotheses
The following hypotheses were formulated for the study:
Ho1. Frauds do not significantly affect profits in Nigerian banking industry.
Ho2. There is no significant effect of fraud on assets in Nigerian banking industry.
Ho3. Frauds do not significantly affect deposits in Nigerian banking industry.

Scope of the Study
This study ascertained the effect of fraud on banking industry with specific emphasis on bank profits, bank assets and bank deposits. This covered the period 2006-2015; that is, 10 years post bank consolidation and reform in Nigeria.

Review of Related Literature
The review of related literature was done under the following sub-headings: Conceptual Review, Theoretical Framework, Empirical Review and Summary of Literature Review/ Research Gap.

Conceptual Review
The Concept of Fraud
Fraud can be defined as a predetermined as well as planned tricky process or device usually undertaken by a person or a group of persons with the sole aim of cheating another person or organisation to gain ill-gotten advantage which would not have accrued in the absence of such deceptive procedure (Nwaze, 2012). Similarly, American Institute of Certified Public Accountants (AICPA, 2002) describes fraud as a broad legal concept and auditors do not make a legal determination of whether fraud has occurred. Rather, the auditor’s interest relates to acts that result in a material misstatement of the financial statements. The primary factor that distinguishes fraud from error is whether the underlying action that resulted in a misstatement of the financial statement is intentional or unintentional. For purposes of the statement, fraud is an intentional act that results in material misstatement in financial statements that are subject of audit. Explicit from the above description are: fraud is an intentional act and it is legal in nature; as such, auditors do not make legal determination of fraud.
Oxford Advanced Learner’s Dictionary defines fraud as the crime of deceiving somebody in order to get money or goods illegally. Furthermore, the Economic and Financial Crime Commission (EFCC) Act (2004) defines fraud as illegal act that violates existing legislation and these include any form of fraud, narcotic drug, trafficking, money laundering, embezzlement, bribery, looting and any form of corrupt malpractices and child labour, illegal oil bunkering and illegal mining, tax evasion, foreign exchange malpractices including counterfeiting currency, theft of intellectual
property and piracy, open market abuse, dumping of toxic wastes and prohibited good, etc. The EFCC definition of fraud is all encompassing as it gives operational definition of fraud in corporate organisations and beyond.

Meigs, Larsan and Meigs (1977) see fraud as misrepresentation by a person of a material fact, known by that person to be untrue or made with reckless indifference as to whether the fact is true, with the intention of deceiving the other party and with the result that the other party is injured. A similar view was expressed by Adeniji (2012) when he describes it as an intentional act by one or more individuals among management, employees, or third parties, which result in a misrepresentation of financial statement. It involves manipulation, falsification or alteration of records or documents; misappropriation of assets; suppression or omission of the effect of transactions from records or documents; recording of transactions without substances and manipulation of accounting policies. Fraud Awareness (n.d) puts forward many definitions of fraud which include: Fraud is the use of deception, false suggestions, suppression of the truth, or other unfair means which is believed and relied upon to deprive another of property or money, resulting in a loss to the party that believed and relied upon such. Fraud is an illegal act characterized by deceit, concealment or violation of trust committed by individuals and organisations to obtain money or service, avoid payment or loss of services or to secure personal or business advantage. It is an intentional deception perpetrated by individuals or organisations, either internal or external to the organisation, which could benefit themselves, others or the organisation or which could inflict harm to others or the organisation, including falsifying financial or other records to cover up the theft of money or other assets.

From the above, one could infer that fraud involves a misrepresentation of a material fact, made knowingly and with the intent to deceive; reliance on such misrepresentation by the victim results in injury or damage from such reliance. Financial fraud could therefore be defined as intentional misstatement of facts (falsification or fabrication) with the intention to benefit or conceal shoddy deals such that reliance on the information may be misleading resulting eventually in loss to users.

Andi (2012) opines that fraud is not an accounting problem or an internal control problem; it is a human problem. Not even the strongest system of controls can eliminate all risk of organisations being defrauded by employees who are sufficiently motivated to find loopholes, ways to override controls, or opportunities for collusions. In as much as most accountants are familiar with methods for identifying manipulated accounting data, effective fighting of fraud involves going further and understanding the human elements involved. The human element was partly explained in the concept fraud triangle or fraud diamond. The fraud triangle was described by Whittington and Pany (2010) as fraud risk factors comprising; some type of incentive or pressure, an opportunity to commit the fraud and the attitude that allows the individual to rationalize. Onibudo in Idolor (2010) reiterated the general consensus amongst criminologists that fraud is caused by three elements called “WOE”. This means that for any fraud to occur there must be a will, an opportunity and exit or escape route. This implies that the human element must be willing, may be under pressure, detects existing opportunity that makes it possible for the crime, decides to utilize the opportunity, after putting into consideration his escape route to safety and attempting to justify his action by rationalization. Fraud diamond has in addition to the three elements in fraud triangle the individual’s capabilities. This means, the individual must possess the ability or capacity to commit fraud for it to occur.
Classifications of Fraud

Fraud may be classified into two: (a) According to the nature of the fraudsters and (b) Method employed in carrying out the fraud. On the basis of nature of fraudsters, fraud may be categorized into three viz; internal, external and mixed frauds. Fraud committed by the members of the employee and directors of the organisation is referred to as internal fraud. External fraud is committed by individuals outside the organisation. In mixed fraud, outsiders collude with the employees and the directors of the organization. However, in methods employed in carrying out fraud, fraud could be classified into asset misappropriation, corruption and fraudulent misstatement. Furthermore, Ojo (2008) classified the causes of fraud and forgeries in banks as; generic factors comprising institutional or endogenous factors and environmental or exogenous (social) factors. In the same vein, Crumbley in Osisioma (2012) presented the 3ms of financial reporting fraud which includes: a) Manipulation, falsification or alteration of accounting records or supporting documents from which financial statements are prepared; b) Misrepresentation in or intentional omission from the financial statements of events, transactions, or other significant information; c) Intentional misapplication of accounting principles relating to amounts, classification, manner of presentation, or disclosure.

Other various approaches to classification of bank frauds exist: Nwaze (2006) classified bank fraud into executive fraud and others. Owolabi (2010) have common fraud, executive/corporate fraud and computer aided fraud. However, frauds in banks can be classified as (a) Advanced Fee Fraud (“419”), (b) Cheque Kiting, (c) Account Opening Fraud, (d) Letter of Credit Fraud, (e) Money Transfer Fraud, (f) Loan Fraud, (g) Counterfeit Financial Instruments, (h) Cheque Fraud, (i) Money Laundering Fraud, (j) Clearing Fraud, (k) Telex Fraud, (L) Computer Fraud and (m) Management Fraud (Bank Administrative Institute) in (Aruomoaghe & Ikyume, 2013). These different approaches have helped to show different areas and segments in the industry one might expect fraud to occur.

In most cases, auditors are primarily concerned about two types of fraud – misappropriation of assets and consequent misstatements arising from that. This is a cover up involving the alteration of the accounting records to disguise the theft and misstatement arising from fraudulent financial reporting (Millichamp & Taylor, 2012).

Fraud and Nigerian Banking Industry

There is no gainsaying that fraud of different classifications and dimensions occur in the Nigerian banking industry. The increasing rate of fraud poses threat to the growth and stability of individual financial institutions and the industry at large (Nwankwo, 2005). This was collaborated by Odi (2013) where he asserts that fraud in banks has shaken the foundation and credibility of most banks in Nigeria, resulting in some of them being distressed.

Fraud and Bank Assets

Fraud in banks either results in loss of assets or manipulation of financial statements. Asset loss reduces the value of assets and if recorded, the financial statement will show a true and fair view. In manipulation, the financial statements do not show a true and fair view as manipulation implies that there may be falsification, fabrication or intentional change of accounting policy to
attain a desired goal. Similar opinion was shared by Aguolu (2008) where he expresses the view that manipulation and error in financial statements cannot show a true and fair view unless they are corrected.

Assets which are resources acquired by banks as a result of previous activities which are expected to generate use of which is expected inflow of income must be guided by providing physical security or otherwise. However, assets cannot be completely shielded from determined fraudster but the incidences of fraud and its effect could be reduced to an insignificant level.

**Fraud and Bank Profit and Mobilized Credits**

Fraud in banks reduces bank profit where profit exists, as profits are declared after expenses and losses. It reduces the amount of profit available for distribution to shareholders and or retention as earnings. Fraud increases bank losses. It exerts impact on bank asset, credit mobilization, and liabilities. Where bank frauds are severe, it may not be absorbed by the period’s profit, thus absorbed by the equity capital of the bank, compromising the banks health and the ability to extend loans and advances to perceived profitable ventures. Mobilized funds which hitherto would have been used in various bank transactions could be lost to fraud. Similarly, money that would have been used in settlement of liabilities could also be lost to fraud. Maturing obligations may not be met thus, in severe cases might result in bank distress. For instance, Uchenna and Agbo (2013) analysed the amount of money lost to fraud in relation to the amount mobilized by banks as contained in CBN and NDIC annual reports for 2001-2011. It revealed that deposit money banks lost more than they mobilized between the years 2001-2004 while in 2005 banks lost more than half of the amount mobilized to fraud (55.2%). Subsequent years, the losses to fraud were less than one percent. In all, total mobilized deposit for the period were ₦50,668.01 billion while the average loss to fraud stood at 46.13 percent. The above revelation shows the extent fraud could affect bank performance in Nigeria.

**Theoretical frame work**

There are many theories that relate to fraud. These include: Fraud Triangle theory, Fraud diamond theory, Differential association theory, theory of Work place Deviance, theory of Hyper motivation, Anomie theory of fraud, the American Dream theory, the Potato Chips theory, the Rotten Apple theory, A tip of iceberg theory, theory of low Hanging Fruit, Addition by Subtraction theory, the Socio Ecology theory, the Social Control theory, Differential Opportunity theory, Cognitive theory and so on. We discussed three of theories considered most relevant to our work and latter anchored this research on the theory of work place deviance.

**Theory of Fraud Triangle**

Cressey (1971) postulated the theory of fraud triangle. He observed that fraud is likely to occur given a combination of three factors; namely- Pressure (Motivation), Opportunity and Rationalization. Pressure here refers to needs or desires that have to be satisfied. It could be divided into financial pressure, vices, work-related pressure and other pressures (Adeniji, 2012). Opportunity to commit fraud, conceal the fraud or avoid being punished forms the second element of the fraud triangle. The third element is rationalization which entails giving unnecessary explanation(s) to justify one’s involvement in fraud. There exists pressure,
motivation or compulsion on the fraudster who identifies opportunity which he utilizes and tries to justify his actions by unnecessary rationalization.

**Theory of Fraud Diamond**
Kanu and Okorafor (2013) stated that Wolfe and Hermerson in 2004 postulated the fraud diamond theory. Fraud diamond added a fourth dimension to fraud triangle where it states that an individual’s capability, personality trait and abilities can play a major role in determination of fraud occurrence. Despite the existence of opportunity, with pressure and rationalization as attracting forces to it, individual’s trait and ability to recognize the opportunity and perpetrate the fraud were other essential factors for fraud to occur.

**Theory of Work Place Deviance**
Comer (1985) put forward this theory in addition to others namely; differential opportunity, theory of concealment, and theory of minimum and general collusion. He believes that fraud is a deviant behaviour. Deviance theory postulates that employees steal primarily as a result of the conditions of the work place. It adds that a lower rate of employee theft is a by-product of management responsiveness to the employee’s affairs. The fraud is akin to paying back evil for evil as employees pay back assumed injustice with fraudulent activities. Work place conditions bring to fore the issue of corporate governance. Banks being institutions where the object of trade is money requires good management, internal control, updated equipment, adequate remuneration and high security. Good management is essential good and bad conducts within a corporate organisation is infectious. This implies that bad attitude (like fraud) as well as good conducts by supervisors and top management in corporate organisations could be easily emulated.

The nature of banking business where the object of trade is money itself makes it special as much effort is made on fraud prevention. This is because fraud in banks affects the transactions directly, has psychological effects on the depositors as regards safety of their deposits. The ripple effect of reporting fraud in banks is the cause of under reporting of frauds in the industry. Good corporate governance becomes the key to lock the elements in fraud diamond such that they might be like a thought inside the box (Okoye, 2016). In view of the afore-mentioned, we anchored our work on this theory as good control of the work environment as contained in the theory would reduce the incidences of fraud where otherwise, fraud would escalate.

**Previous Studies**
Some literatures were reviewed as relates to fraud and bank performance in Nigeria. Kanu and Okoroafor (2013) reviewed various forms of fraudulent practices and their impact on bank deposits in Nigerian banks, for the period 1993-2010. They looked at the amount of bank funds lost to frauds and related it to total deposit liabilities of insured money banks in Nigeria. They used descriptive and inferential statistics in the study. It was revealed that there exist significant relationship between bank deposits and amount lost to fraud with fraudulent withdrawals constituting the bulk of the fraud. Similarly, Aruomoaghe and Ikyume (2013) examined fraud as a challenge to accurate financial reporting with focus on the banking sector. They adopted descriptive survey research. It was discovered that non accounting for fraud in the organisations financial statement do not reflect a true and fair view of such financial statement and may mislead the users of such financial statement.
Uchenna and Agbo (2013) evaluated the impact of fraud and fraudulent practices on the performance of banks in Nigeria, for the period 2001-2011. Twenty four deposit money banks in Nigeria were used for the study looking at the nature, magnitude and economic consequences of fraud in Nigeria. Pearson Product Moment Correlation was used to ascertain the relationship between the variables, while Multiple Regression Analysis was adopted for analysis of impact of fraud and fraudulent practices on performance of Nigerian banks. It was discovered that the percentage of mobilized funds lost to fraud was highest between 2001 and 2005 but there was significant decrease between 2006 and 2011. Furthermore, Owolabi (2010) reviewed the various forms of fraudulent practices, their impact and inducement for various forms of reform in the industry. He adopted Descriptive research design. He found out that Managers and Supervisors accounted for 485 (37%), Executive Officers/Accountants and Executive Assistants 431 (33.59%) totaling 916 out of 1283 employees involved in fraudulent act between 2002 and 2006. Odi (2013) evaluated the impact of fraud on performance of commercial banks in Nigeria, for the period 2001-2011. He took close look at relationship between ATM Fraud, Forged Cheque, Clearing Cheque Fraud, and bank performance using regression analysis for the analysis. The study found out that there is significant impact of fraud on the performance of commercial banks in Nigeria. In a similar vein, Inaya and Isito (2016) investigated the social impact of fraud on the Nigerian banking industry. Ex-post facto research design was adopted for the study. Data were collected from Nigerian Deposit Insurance Corporation and the commercial banks statement of accounts for the period 1990-2014. Ordinary Least Square (OLS) with its Best Linear Unbiased Estimate (BLUE) Property was used in analyzing the data. They discovered that banks in Nigeria thrive under high rate of fraud and fraud has negative social impact on the Nigerian banking industry. Ikpefan (2006) empirically tested if there is no significant relationship between deposits on one hand and the following explanatory variable-fraud, actual/expected loss and money laundering act for the period 1989-2004. OLS regression was used. The relationships were tested using correlation coefficient, t-test, f-test and standard error tests. The result showed negative relationship between money deposits in one hand and fraud and actual/expected loss and positive relationship between amount of deposits and money laundering act. Abdulrasheed, Babaita and Yinusa (2012) examined the problem of fraud and its implications for bank performance in Nigeria using empirical analysis. Data were collected from NDIC annual reports for the period 2004-2009. Parametric tables and Pearson Correlation were utilized for data analysis. It was discovered that banks recorded the highest cases of fraud in 2008. Hypothesis testing showed that there is a significant relationship between total amount involved in fraud cases and bank’s profit. Adediran and Olugbenga (2010) explored the impact of fraud on bank performance in Nigeria for the period 2000-2007. OLS regression was adopted for the analysis. Findings were that total reported cases of fraud, amount involved in the frauds and actual expected loss due to frauds had significant inverse relationship with commercial banks investment. Furthermore, Ademoye (2012) descriptively examined the nature, causes, effects, and remedy for bank frauds in Nigeria over the period 2000-2009. Ten banks with the highest number of fraud and forgeries cases were used for the study. Also, examined were the categories of bank staff involved in the fraud and forgeries. It was discovered that from 2003-2009, a period of 7 years, a total of 656 members of bank staff were involved in 2,440 cases of frauds and forgeries with core operating staff numbering 431 involved; that is 65.7 per cent. Equally noted was the devastating impact of fraud
on bank performance such that out of the 24 banks in 2009, only 13 were adjudged sound, one was marginal while 10 was rated unsound as against one unsound the previous year. Olatunji and Adekola (2014) assessed the nature, causes, effects, detection and preventive measures for bank frauds in Nigeria. Questionnaire adopted from Alleyne and Howard was served using convenience sampling to 100 respondents. Secondary data were collected from NDIC for the period 2002-2012. Simple percentage was used for analysis. It was concluded that in view of getting and amassing quick and sudden wealth, misplaced value judgment and prevailing harsh economic environment, big time fraud were on the increase with banks losing millions of naira on daily basis and fraudsters were busy devising new means for their nefarious acts. Yunsen, Song and Yutao (2011) explored corporate fraud and bank loans in China. It investigated the effect of corporate fraud on bank loans by investigating firms’ credit and information risks, thus extending research on the economic consequences of corporate fraud. It also examined banks’ lending behaviour after corporate fraud. Findings revealed that receiving punishment from regulators for corporate fraud can affect financing contract between a firm and its bank, as both the firm’s credit risk and information risk increase after punishment. Also, firms’ bank loan after punishment are not only significantly lower but were also less than non-fraudulent firms. The loan interest rates after punishment were not only higher than before but also higher than non fraudulent counterparts. Corporate fraud destabilizes the ‘performance- bank loan’ relationship. Furthermore, Sang (2012) examined the fraud control measures put in place and evaluate the effectiveness of the internal control measures on fraud occurrence in selected commercial banks in Nakuru town in Kenya. Descriptive research design was adopted and data were collected using structured questionnaire which was administered to stratified selected sample. Analysis of data was through descriptive and inferential statistics-chi-square and linear regression. It was discovered that periodic test had 33.3 percent while daily check and weekly tests had 24.4 percent each with monthly check having 29.5 percent. Internal control was discovered to be undermined by non adherence to dual control aspects (21.8 per cent). Afayi (2014) examined the effect of fraud on the performance of banking industry in the United States of America (USA). Banks as a whole was examined, give answers to why bank failed, examined how many banks have failed or what percentage of banks have failed in USA as a result of fraud, scrutinized the protective measures the banking industry have taken to prevent fraudulent practices and list any corrective action if need be. The study spanned from 2000-2014 in which about 523 banks have failed throughout USA. In method 1, the ratio of bank failure caused by fraud as opposed to other factors- out of 20 selected banks, 8 banks representing 40 percent failed due to fraudulent practices.

Summary of Literature Review/Research Gap
From various literatures that were reviewed, it became clear that there was no uniformity in the approaches as well as methodologies adopted in the studies so far. For instance, Kanu and Okoroafor (2013) reviewed impact of fraud on deposits, Aruonoaghe and Ikyume (2013) examined fraud as a challenge to accurate financial reporting in Nigerian banks, while Uchenna and Agbo (2013), Afayi (2014) and Odi (2013) evaluated the impact of fraud and fraudulent practices on bank performance, among others. While some adopted descriptive research design, others utilized ex-post facto research design and applied OLS for data analysis.
The above shows divergence in approach and methodology. Sequel to this, we evaluated the effect of fraud on Nigerian banking industry using an ex-post facto research design with specific interest on the effect of fraud on bank profits, assets and bank deposits. None of the works reviewed used these variables. The effect on bank deposits took the discussion on this topic beyond the usual realm. It has helped to fill a long standing gap in knowledge that incessant bank fraud is a de-motivator to depositors. The revelations in this area are indeed a motivation to bank managers who up until now believed that bank fraud has demoralizing effects on depositors. This contribution to knowledge will, no doubt, go a long way in relieving bank managers of a disturbing mental fixation on the effect of bank fraud on depositors in Nigeria.

Methodology
We adopted ex-post facto research design for the study. Secondary data were collected from NDIC annual reports of various years. Since the data were available to public and can be verified and as such makes them less susceptible to manipulation, we consider the design appropriate for the work.

Population of Study
This comprises all banks listed on Nigerian Stock Exchange. There are 24 banks in all and they were all involved in the study.

Data were analysed using descriptive and OLS methods of data analysis. Descriptive method was used because it helped to bring out the characteristics of the data as regards the topic. OLS was also appropriate for the study as it was a relationship study. Fraud data were regressed against bank profits, bank assets and bank deposits. Regression equation was formed in line with the following popular regression function: \( Y = a + bx \), where,

\( Y \) = dependent variable, \( a \) = a constant, \( b \) = coefficient of independent variable and \( x \) = the independent variable.

This was modified in line with the hypotheses. The models were used to determine the relationship between bank fraud and bank profit, bank assets and liabilities and bank deposits.
Data Presentation and Analysis

Data Presentation

Table 1: Data on reported fraud cases, amount involved, expected loss, bank profits, deposits and bank assets.

<table>
<thead>
<tr>
<th>Year</th>
<th>No of Reported fraud Cases</th>
<th>Amount of Fund involved in Fraud Nb</th>
<th>Expected Actual loss Nb</th>
<th>Profit Before Tax Nb</th>
<th>Bank Deposit Nb</th>
<th>Bank Assets Nb</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>1,193</td>
<td>4.83</td>
<td>2.77</td>
<td>610.12</td>
<td>3412.3</td>
<td>8140</td>
</tr>
<tr>
<td>2007</td>
<td>1533</td>
<td>10.1</td>
<td>2.87</td>
<td>619.96</td>
<td>5357.2</td>
<td>13011.6</td>
</tr>
<tr>
<td>2008</td>
<td>2007</td>
<td>53.52</td>
<td>17.54</td>
<td>658.1</td>
<td>8702</td>
<td>19261</td>
</tr>
<tr>
<td>2009</td>
<td>1764</td>
<td>41.27</td>
<td>7.55</td>
<td>-1370</td>
<td>9989.8</td>
<td>17522.9</td>
</tr>
<tr>
<td>2010</td>
<td>1532</td>
<td>21.29</td>
<td>11.68</td>
<td>607.34</td>
<td>10837.1</td>
<td>18661.3</td>
</tr>
<tr>
<td>2011</td>
<td>2352</td>
<td>28.4</td>
<td>4.07</td>
<td>-6.71</td>
<td>12330</td>
<td>21891.6</td>
</tr>
<tr>
<td>2012</td>
<td>3380</td>
<td>17.97</td>
<td>4.52</td>
<td>525.34</td>
<td>14386</td>
<td>24584.7</td>
</tr>
<tr>
<td>2013</td>
<td>3786</td>
<td>21.8</td>
<td>5.76</td>
<td>539.97</td>
<td>16771.6</td>
<td>23169</td>
</tr>
<tr>
<td>2014</td>
<td>10612</td>
<td>25.61</td>
<td>6.19</td>
<td>601.2</td>
<td>17996</td>
<td>26233</td>
</tr>
<tr>
<td>2015</td>
<td>12279</td>
<td>18.02</td>
<td>3.17</td>
<td>588.86</td>
<td>17486.7</td>
<td>26589.8</td>
</tr>
</tbody>
</table>


Data Analysis

We used descriptive and OLS regression for analysis of data with the aid of Statistical Package for Social Sciences (SPSS).

Descriptive Analysis

A cursory look at the data in table 1 above reveals a progressive increase in cases of fraud from 2006-2008 with a drop in 2009. From 2010, fraud cases maintained a steady increase to 2015. For instance, in 2013, a total of 3786 cases of fraud were reported with an increase of 406 cases over 2012 cases of 3380; a 10.7 percent increase. Fraud cases of 10612 occurred in 2014 showing an increase of 6826 representing 180 percent increase over that in 2013. In 2015, it moved to 12279 cases an increase of 1667 cases, a 15.7 percent increase.

Test of Hypotheses

The hypotheses were tested using OLS regression analysis.

Test of hypothesis one

H_{01}: Frauds do not significantly affect profit in Nigerian banking industry.

Table 2: Regression result of the effect of fraud on bank profits.
Coefficients(a)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>B</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>788.147</td>
<td>393.416</td>
<td>2.003</td>
<td>.080</td>
</tr>
<tr>
<td></td>
<td>-18.563</td>
<td>14.149</td>
<td>-.421</td>
<td>-.1826</td>
</tr>
</tbody>
</table>

a Dependent Variable: profit
R² = 0.177, Adjusted R² = 0.074
Source: Authors’ Computation, 2018.

Table 2 above shows the OLS regression result of the effect of fraud on bank profit with coefficient of -0.42 and probability of 0.23. This implies that there exists a negative and insignificant relationship between fraud and bank profit. In order words, an increase in fraud will bring about a reduction in bank profit. The profit coefficient of -0.42 means that every percentage increase in fraud, will bring about 0.42 percent decrease in bank profit. The adjusted R² value of 0.07 implies that fraud account for 7 percent of changes in bank profit while other variable account for 93 percent. The probability figure of 0.23 is higher than 0.05 showing that the effect is insignificant which implies that the null hypothesis which states that frauds do not significantly affect profit in Nigerian banking industry should be accepted.

Test of Hypothesis Two
Ho2: There is no significant effect of fraud on assets in Nigerian banking industry.
Table 3: Regression result of the effect of fraud on bank assets

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>B</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>17153.8</td>
<td>3915.30</td>
<td>4.381</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td>81</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>113.365</td>
<td>140.810</td>
<td>.274</td>
<td>.805</td>
</tr>
</tbody>
</table>

a Dependent Variable: assets
R² = .075, Adjusted R² = 0.041
Source: Authors’ Computation, 2018.

The result from table 3 above reveals a positive but insignificant relationship between fraud and bank assets. The coefficient of 0.27 suggests that every percentage increase in debt is accompanied by 0.27 percent increase in bank assets. Adjusted R² value of 0.04 implies that fraud account for 4 percent change in bank assets. The probability figure of 0.44 is higher than 0.05 and
is therefore not significant. This implies acceptance of the null hypothesis which states that there is no significant effect of fraud on assets in Nigerian banking industry.

**Test of hypothesis three**

H$_0$: Frauds do not significantly affect deposits in Nigerian banking industry.

<table>
<thead>
<tr>
<th>Table 4: Regression result of the effect of fraud on bank deposits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

*a Dependent Variable: deposits
R$^2$ = .016, Adjusted R$^2$ = 0.107
Source: Authors’ Computation, 2018.

The result in table 4 above shows a positive relationship between fraud and bank deposits. For every percentage increase in fraud, there will be an accompanying 0.12 percent increase in bank deposits as evidenced by the deposit coefficient of 0.127. Furthermore, the adjusted R$^2$ value of 0.107 implies that 10.7 percent changes in bank deposits is attributable to bank fraud. However, the above is insignificant owing to the probability value of 0.726 which is higher than 0.05. Therefore, the null hypothesis which states that frauds do not significantly affect deposits in Nigerian banking industry is accepted.

**Discussion of Findings**

From the descriptive analysis, it was discovered that the number of fraud cases increased progressively over most of the years of study. This can be attributed to increased bank products most of which were electronically based. The above view was affirmed by NDIC annual report (2011), which stated that increase in cases were due to Automated Teller Machine (ATM), ATM transactions, internet banking, fraudulent transfer/withdrawals through insider facilitations and suppression of customer deposit. Similar report was raised in 2015, where it was reported that total loss sustained to internet banking was₦857 million representing 27 percent of the total loss in the industry for the year. ATM/card related fraud increased from 7,181 in 2014 to 8,039 cases in 2015, that is 11 percent increase. The above may not be unconnected to hacking of bank websites, unsolicited text messages to unsuspecting bank customers claiming to be in a position to help them solve framed up problems, on release of some vital secret bank details.

From hypothesis one it was discovered that there exist a negative but insignificant relationship between fraud and bank profits. The above finding was in line with the apriori expectation that fraud is expected to have a negative effect on bank profit. The finding is in agreement with the findings of Adediran and Olugbenga (2010). This could be because fraud erodes profit and profit potentials of banks by depletion of bank resources. It is also expected to be of insignificant amount in that it is expected that banks should have adequate measures in place to prevent the
occurrence of fraud. The social implication of occurrence of fraud in banks has led to under reporting of fraud cases in Nigerian banking industry. This might be responsible for the insignificant level of reported cases of fraud in Nigerian banking industry. However, in contrast, Abdulrasheed, et al (2012) and Odi (2013) found significant impact of fraud on bank performance. Similarly, Inyia and Isito (2016) discovered that banks thrive under high rate of fraud and this has negative social impact on Nigerian banking industry. Although, the number of reported cases of fraud was increasing, measures put in place have facilitated early detection, hence absence of accompanying increase in amount of losses.

In hypothesis two, there was a positive but insignificant relationship between fraud and bank assets. This implies that as bank assets increased, bank fraud also increased. The insignificant level depicts that the increase in assets are far more than the increase in the fraud. The amount involved in fraud must be large before it can affect asset. This is because fraud increases losses and decreases profit as losses are discharged from profit before encroaching on the assets of the organisation.

Hypothesis three reveals a positive relationship between fraud and bank deposits, although the positive level was insignificant. The positive relationship is in agreement with the findings of Kanu and Okoroafor (2013), Uchenna and Agbo (2013) and Ikpefan (2006). As the amount of bank deposits increases, fraud also increases. Ordinarily, increase in bank fraud should discourage depositors but this appears not to be so. The high level of use of temporary staff for marketing as well as ATM might be accountable for that. The increasing number of ATM and internet fraud, managing the risk and the effects on the banks should be the major challenge facing banks in fraud management in recent time. This is true because fraud prevention will enable banks meet the credit mobilization function thus contributing meaningfully to economic growth through provision of fund to investors.

Conclusion and Recommendations
Fraud has adverse effects on Nigerian banking industry. Specifically, it was discovered that fraud has negative but insignificant relationship with bank profits. Again, the study found a positive but insignificant relationship between fraud and bank assets. Lastly, the study established a positive though insignificant relationship between fraud and bank deposits.

In view of the above findings, the following recommendations were made:
1. Banks should introduce more stringent measures in their staff recruitment exercise to reduce engagement of unscrupulous staff with high tendency of insider collusion and fraud that tend to reduce bank profits.
2. The fraud box model as developed by Okoye (2016), which concerns corporate governance in determining fraud-risk factors in banks, should be put in place by all bank management. Regulatory authorities like Federal Ministry of Finance, CBN and NDIC should ensure compliance to relevant statutes and good corporate governance. This will help reduce abuses and fraud.
3. Banks should introduce more internal control measures to contain risks associated with increasing volume of deposits.
4. Nigerian legal system should make provision for speedy dispensation of justice in respect to fraudulent activities. A separate court to handle fraud and corruption cases should be set up.
With quick dispensation of justice, others will be deterred from committing fraud. This will help in checkmating the increasing rate of fraud in Nigerian banking industry.

Suggestions for Further Studies
1. Since fraud in this study is limited to the banking industry, a similar study should be conducted in other sectors of the Nigerian economy.
2. A comparative study on the effects of fraud in the banking industry in Nigeria and other countries of the world should be carried to establish a universal trend of fraud.

References


