

## **Exploring the Applicability of Forensic Accounting in Improving the Quality of the Financial Statements of Listed Deposit Money Banks in Nigeria**

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### **Abstract**

*This paper explored the applicability of forensic accounting in improving the quality of the financial statements of listed Deposit Money Banks in Nigeria. A survey was conducted through the administration of a questionnaire to a sample of 230 respondents which was composed of some members of the staff of the listed DMBs, the Big-4 Audit firms, the Nigeria Deposit Insurance Corporation (NDIC), the Economic and Financial Crimes Commission (EFCC) and members of the Institute of Forensic Accountants of Nigeria. The study employed descriptive statistics and bivariate regression analysis to analyze the data. The hypothesis tested showed that the forensic accounting application could improve the quality of the listed DMBs' financial statements. The paper, therefore, recommended the immediate creation of forensic accounting departments in the DMBs under the control and supervision of the Boards' Audit Committees composed of persons knowledgeable in forensic accounting. Other recommendations include formalization, standardization and getting statutory/regulatory forensic accounting practice in Nigeria. While staff of forensic accounting departments of the DMBs should be fully involved in the annual audit exercise, also, the professional accounting (audit) firms should involve forensic accountants in designing audit plans and include them in the audit teams, particularly where there are higher risks of management fraud, in order to boost confidence in their audit reports. The overall implication of the study findings is that full scale forensic accounting application in the listed DMBs is possible and necessary to*

*complement the existing practice of internal audit/inspection to further improve the quality of the financial statements of the organizations.*

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**Keywords:** *Forensic accounting application, improving quality of financial statements, Listed DMBs*

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## **Introduction**

The business environment in general and the banking sector in particular have witnessed an increase in scrutiny due to heightened cases of fraud, corporate scandals and collapses, arising from unethical financial reporting and questionable corporate governance issues (Luke, 2013; Ozili, 2015). As a result of these, the traditional ways of monitoring corporate financial activities in particular are subjected to further scrutiny as regards their capabilities to rise up to the spate of corporate debacles. This development is not limited to the banking sector alone or to Nigeria as a nation in particular or to any environment; it is a global phenomenon with no exception to sector, industry or national boundaries.

In the history of banking in Nigeria, several efforts, through law and administrative measures, have been introduced to curb the rising trend of fraud and other forms of malpractice (including financial statement fraud) in the sector, but the situation seems to defy the means (Centre for Forensic Studies in Nigeria, 2010; Modugu and Ayanduba, 2013). The main objective of this paper is to explore the applicability of forensic accounting in the listed

Deposit Money Banks (DMBs) in Nigeria as to whether the practice can improve the quality of their financial statements to aid better economic decisions of the sectors' stakeholders. Financial statements, which are the main source of information for the decision making process of users often get distorted through either material errors or deliberate conjecture by preparers to deceive or mislead users by preparing and presenting materially distorted reports (Razaee, 2005; Ozili, 2015), which is also referred to as financial statement fraud (FSF).

Fraud and other forms of misconduct in banks are becoming more common and sophisticated and require effective means of response through preventive measures and analytical skills to investigate where they have already defied controls (CFS, 2010). One of the key challenges of the sector is FSF (Boyd, 2001) and raises serious questions as to whether the existing systems in the DMBs are effective in caging this malaise. This brings into consideration the applicability of forensic accounting as an antidote. Apart from utilizing the traditional investigative techniques, forensic accounting application can also use financial/forensic analytics,

computer/digital forensics, data mining and ratio analysis. These tools/techniques of forensic accounting can be used for prevention, deterrence, mitigation, investigation and documenting evidentiary materials for the prosecution of fraud and other forms of misconduct in organizations as well as tools for policy analysis and improving internal control structures, thus capable of taming the challenges of any sector.

One key challenge faced by the banking sector is the issue of financial statement fraud. Substantive literature suggests that fraud is the biggest challenge faced by the business world. In fact, fraud is the bane of the often cited cases of major corporate financial scandals and collapses in the opinion of Howard & Sheez (2006); Bhasin (2010); Ramaswamy (2010) and Wells (2013). Actually, a major reason to the collapse and demise of several banks in Nigeria are related to the quantum of fraud (CBN Report, 2009; Ogunleye, 2010; Owolabi, 2010).

Majority of fraud and other forms of malpractices witnessed in the banking sector which have resulted in the collapse, demise and raging cases still in various courts of law, according to the reports of CBN and NDIC, are matters of serious concern that are concealed or shadowed form reflecting in their financial reports. CFS (2010); John, (2013) and Modugu and Ayanduba (2013) were of the opinion

that such issues could be resolved by the application of forensic accounting.

Financial control departments/units of DMBs are supposed to monitor and review the efficiency and effectiveness with which all operational activities are undertaken (value for money audit) by ensuring that activities are carried out as intended and planned. However, such functions are not only covered posthumously, but performed by employees of the organizations (except where outsourced). Therefore, the employees and their reports could be vulnerable to management override, especially where the reports are indictment to the management who oversee these departments.

The study by Hansen et al. (2005) provided evidence that reliance on internal and external audits and other traditional accounting methods are insufficient to prevent and /or detect fraud. In the more developed economies, lawyers, attorneys, banks, insurance companies, the Police Force and other security agencies and even the public sector and the business community engage the services of forensic accountants, which indicate a shift in paradigm to the growing need of forensic accounting application (Bologna & Lindquist 1987).

External audit by its nature and role has left on its trail the widely known 'audit expectations gap' (Boyd, 2001). That it is not primarily directed to uncover fraud; except incidentally or

specifically engaged to do so. Additionally, external audit relies on 'sampling' to conduct its examination based on the effectiveness of the client's internal control system. This has gone to create a low level of confidence in the quality of the financial statements of the DMBs. The sheer volume of transactions in the DMBs on a daily basis, the complexities of operations and the sophistication in which fraud and fraudulent activities are executed, particularly that both internal and external audit functions have not successfully curtailed the challenge, require a search for a better procedure, which is to explore the applicability of forensic accounting as a solution..

Fraud, financial irregularities and misconduct are a serious challenge to all the stake holders of the banking sector. A major significance of the study is its main motivation: to add value to the substantive literature related to forensic accounting in the Nigerian banking sector, by exploring its applicability as a complement to the existing practice of internal audit/inspection functions in order to improve the quality of the listed DMBs' financial statements. Therefore, the study has tremendous value and significance to all the stakeholders of the sector.

Drawing from the above issues, the paper aimed to address and answer the following research questions: Can the application of forensic accounting in

the listed DMBs improve the quality of their financial statements?

The primary objective of the paper is to explore if the application of forensic accounting in the listed DMBs in Nigeria can improve the quality of their financial statements.

### **Literature Review**

**F**orensic accounting is a branch of accounting and accounting being a social science plays significant roles not only as a device for the market economic system but also serves as the language of business through which it communicates financial meanings and activities to various interested parties for their economic decisions.

As a prelude to the literature review, the conceptual framework of forensic accounting is looked at. This section also covers some empirical studies that were conducted in relation to forensic accounting application on improving the quality of financial statements and the theoretical framework which guided the study.

### **The Concept of Forensic Accounting**

**T**he word "forensic" has its genesis and derives its meaning from the Latin word 'forensis', which means "before the forum" (Andrews nd). Collins (2005) defined forensic as 'belonging to, used in, suitable to courts of judicature or to public debate or discussion. It is the use of science or technology to investigate and establish facts in criminal or civil court of law...

the art or study of formal debate or argumentation.

In the taxonomy of accounting literature, forensic accounting has no single definition. Its definition is changing to reflect its need, demand and changing response. Bhasin (2007), quoting Bologna & Lindquist (1994) defined it as “the application of financial skills, and an investigative mentality to unresolved issues conducted within the context of the rules of evidence. As an emerging discipline, it encompasses financial expertise, fraud knowledge and a sound knowledge and understanding of business reality and the working of legal system.” The American Institute of Certified Public Accountants (AICPA’s) Forensic and Litigation Services Committee (1987) defined it as, “forensic accounting may involve the application of special skills in accounting, auditing, finance, quantitative methods, the law and research. It also requires investigative skills to collect, analyze and evaluate financial evidence, as well as the ability to interpret and communicate findings. Forensic accounting encompasses litigation support, investigation and dispute resolution, and therefore, is the intersection between accounting, investigation and the law.”

Joshi (2003) defined forensic accounting as the application of specialized knowledge and specific skills to stumble up on evidence

relating to economic transactions. To Crumbly (2003), it is a merger of forensic science and accounting. Forensic science here means the application of the laws of nature to the laws of man.

Thus, modern-day forensic accounting employs financial knowledge and skills of mainstream accounting subjects in addition to investigative techniques to resolve matters that can be legally defensible within the law of evidence. It is used in the investigation of financial and business related issues, ranging from mundane family law (issues) and commercial/business related matters through to a check on criminal investigations, such as business, insurance and employee fraud to tax evasion matters, white color crimes, money laundering and even terrorism (particularly the financial angle) and other financial fraud (embezzlement, bribery, extortion, kickback/payoffs and skimming) according to Bologna & Lindquist (1995); Crumbly (2001, 2003, 2005); Coenen (2005) and Bhasin (2007, 2013).

To decipher from these definitions, from the auditor’s perspective, forensic accounting involves applying auditing methods, techniques and procedures to resolve legal issues. From a litigation or an attorney’s perspective, forensic accounting involves gathering, interpreting, summarizing and presenting in a clear, factual and succinct manner evidence

acceptable/admissible to court, which the forensic accountant may present as an expert witness (Howard & Sheetz, 2006; Dhar & Sarkar, 2010). From the perspective of a fraud investigator/examiner, it is the application of investigative and analytical skills to resolve financial/economic issues that meet the standards expected of a court of law (Hopwood et al., 2008). Therefore, the metrics of forensic accounting definitions is a collection of quality statements of accounting academics and practitioners, alike. However, there is a general consensus on the matter that forensic accounting does not only provide accounting analysis for legal matters and dispute resolution alone; it can be applied in a variety of settings, including review of internal controls, processes and procedural/operational setups, identify leakages and wastes, personnel auditing and general overhauling of organizational management, including corporate governance structures (Litvak, 2007; Bhasin, 2007, 2013).

### **Review of Empirical Studies**

**F**orensic accounting interchangeably called and also referred to as forensic auditing, forensic investigation, investigative accounting, forensic analytics, financial forensics and other similar connotations in the literature, has received a lot of scholarly attention worldwide. Significant research has been conducted on the concept of forensic accounting in general and to the

Nigerian banking sector in particular with a lot of emphasis on banking fraud, including FSF.

Adeyemi & Olowookere (2011) sought to establish the expectation gap in the financial statements between users' and the auditor's perception as to the quality of financial reports prepared by client management. The findings agree with the general belief that the responsibility for fraud prevention and detection, which play a significant role in the quality of financial reports, remains that of management. Oluwagbemiga (2010) sought to establish the role of auditors in fraud detection, prevention and reporting; the major conclusion of this study established that the use of forensic accounting techniques in organizations can narrow the audit expectations gap.

In order to determine if the practice of forensic accounting could boost confidence in the Auditors' reports, Luke (2013) conducted a study and its finding revealed that employing forensic accountants while conducting external audit could detect major audit risk areas, such as theft of cash and goods, intentional misstatement in financial reports through the understatement of costs and expresses and other misrepresentations made to external auditors. This finding concurs with that of Asare & Wright, 2004 and Okoye & Gbegi, 2013 and is in line with one of the objective of this study.

Ezeagba (2014) sought to establish the role of forensic accounting and quality assurance in financial reporting in selected commercial banks in Nigeria. The major findings of the study indicated that forensic accounting enhances the qualitative characteristics (relevance and faithful representation) of the financial reports of banks. The study by Modugu & Ayaduba (2013) empirically established that there was significant agreement amongst stakeholders on the effectiveness of forensic accounting in improving the quality of financial reporting, the status of corporate governance and internal control quality in Nigeria firms, including banks.

Okoye, & Gbegi (2013) made an evaluative assessment of forensic accountants' role in planning Management Fraud Risk Detection Procedures aimed at determining the relative merits of involving forensic accountants during the planning stage of developing an audit plan that would identify the management fraud risk factor.

Boyd, et al. (2001) conducted a study to determine the level of expectations by users of financial statements. The major conclusion of the study indicated that users' expectations went far beyond the statutory role of the external audit and, therefore, its functions. This view is very much consistent with the findings of both Sweeney (1997) and Porter & Gowthorpe (2004).

Ramaswamy (2005) conducted a study to establish the major causes of financial statement fraud. The main conclusion of the study was that, poor corporate governance and accounting failure were some of the reasons why fraud cases happened. And all this can be curtailed through the application of forensic accounting which continuously reviews and scrutinizes the financial and non-financial procedures of the organization. Ramazani & Refiire (2010) studied the perception of accountants on the prevention methods of financial and accounting fraud. The main conclusion of the study found that forensic accountants had a better perception of how to prevent different species of fraud.

### **Theoretical Framework**

The theories that have underpinning relevance and guided this study are the combination of the Stakeholder Theory and the Fraud Diamond Theory.

The stakeholder theory rests its arguments on the grounds that the firm/organization is a social entity and, therefore, is responsible and accountable to numerous interested parties not only the owners or those directly involved in its affairs. This proposition, is premised on the belief that organizational management and business ethics address morals and values in managing an organization based on the principle that employees, suppliers, creditors, financiers, trade

unions, governmental agencies and the general public are all interested in its affairs; as such, the decisions, objectives and operational guidelines of the firm/organization have to be both resource-based and market-based approaches to satisfy the interests of all the stakeholders. The stakeholder theory provides a further extension by creating a stakeholder value approach which is a management philosophy that regards the maximization of the interests of all an organization's stakeholders as its main objective.

On the other hand Wolf and Hermanson (2004) developed the fraud diamond theory which is an extension of Cressey's fraud triangle by the inclusion (addition) of 'capabilities' as the fourth variable. According to Wolf and Hermanson (2004), capabilities is the key to the commitment of fraud because even if all the other factors (motive/incentive/pressure, opportunity, rationalization/justification) are available, the fraudster must have the confidence (which they equate with capability) to commit the fraud.

This study has adopted the Fraud Diamond Theory to support the Stakeholder Theory (which gives consideration to the interests of all the stakeholders of the sector) because in each situation of fraud or misconduct existing in DMBs, the four elements tend to be present. In the first instance, for the applicability of forensic accounting, to be successful the various interests of all the stakeholders

need to be taken into account. Secondly, in every domain of the application of forensic accounting, all the four elements of the fraud diamond theory tend to exist; that is to say, in each situation of instituting prevention measures of fraud the factors play a dominant role. They also play a key role in detection and investigation where fraud has escaped instituted controls and in the review and assessment of internal control measures. The factors are also essential in the provision of forensic accounting reports to establish substantive evidence.

### **Methodology**

This section contains sections on the research design, population of the study and sample size and sampling technique. It further explains the source and method used for data collection, the study variables and model and data analysis and measurement techniques employed.

The paper is an exploratory one and the underlying premise of adopting this research design is based on the fact that it is best suited in investigating a problem/phenomenon that has not been clearly studied; but it is now anticipated to establish priorities, develop operational definitions and improve on the research approach. A cross-sectional survey research design was adopted, which employed a self-administered questionnaire to target respondents drawn from a sampled

population as the source of primary data generation.

The population had 775 members comprised from of the following 5 categories. These are:

- a) The 15 DMBs quoted on the floor of the Nigeria Stock Exchange (NSE) as at 31<sup>st</sup> December 2016.
- b) The 'big 4' audit firms that have forensic accounting departments.
- c) The investigative units of the EFCC in Abuja and Lagos.
- d) The relevant departments of NDIC (internal audit, finance/accounts, inspection/supervision and compliance).
- e) Members of the Institute of Forensic Accountants of Nigeria.

The sample size was determined based on the following criteria. For the 15 listed DMBs' 4 departments were considered relevant to respond to the research instrument with 3 members each from internal audit, inspection, compliance and finance department making 180 were used as sample.

The sample or respondents from the Big-4 audit firms' category were any 3 members of staff earlier described, in each forensic accounting department of the 4 firms.

The sample or respondents from EFCC were the 3 most senior personnel in the investigative/detective/operations units of the agency's offices in Abuja and Lagos.

Any three (3), members of NDIC's 4 departments, which formed the category's population.

As for IFAN with a population of 215 members as at 31<sup>st</sup> December, 2016, a modest 10% or 20 members as sample was considered for this category to cover representation in both private and public sectors, as well as those in forensic accounting consultancy service.

The decision to use a convenience sampling method for the categories was based on the assumption that they were in the class that might have a good idea of what forensic accounting entailed and the phenomena under investigation in particular (Effiong, 2013). Additionally, they belonged to the middle management (engine room) of these organizations, who form part and may have a say in the decision making process of the organizations (Raezee, 2003). Furthermore, it was considered more appropriate in this situation where the respondents were persons with busy schedules (to avoid poor response rate). Therefore, the total sample size was 230 respondents.

Primary source of data collection was survey method, which employed a self-administered questionnaire to target respondents. The research instrument was subjected to content validity by a professor of accounting who extensively conducted research in forensic accounting, two chartered accountants, who are also certified

forensic accountants working with the two firms in the sampled category (Big-4) and a former director in the investigative unit of EFCC in Lagos.

To establish the internal consistency of all the items in the questionnaire, a reliability test using Chronbach's alpha was conducted on the questions/statements. The result gave an alpha coefficient of 0.989, which means, there is stability and consistency of the items in the research instrument and further confirms non-bias (error free) of items and their consistent measurement (Tariq, 2009).

The Likert scale of 5 to 1 employed in generating the data and the subsequent assessment of all the responses by filtering each category of respondents, proved non-existence of outliers (and un-responded items). Therefore, this has not justified carrying out a diagnostic test on the issue.

Normality (robustness) tests of the Independent and Dependent Variables The robustness test was conducted in order to improve the validity of all the statistical inferences for the study. To check for data normality or the distribution pattern of the research data, the study employed skewness statistics, scatter graph, normal probability plot and a histogram of standardized residuals for this purpose (see Appendix 4). The skewness statistics of all the dependent variables are between -1.4 and -1.7.

Two types of variables were used for the purpose of the study. They are the Independent Variable and the Dependent Variable.

- a) The Independent Variable the application of forensic accounting denoted by AFA.
- b) The dependent is improving the quality of their financial statements (denoted by IQFS).

The data generated for this research were first analyzed using descriptive statistics, specifically, frequency distribution, percentage score, mean rating and standard deviation based on a 5 point Likert Scale, with a cut-off point of 3.0 i.e.  $5+4+3+2+1/5$ . Any mean that is equal to or above this indicates agreement with the statement and vise-versa. In addition, the Kruskal-Wallis ANOVA test was employed.

To test the hypothesis the section relating to the applicability of forensic accounting in DMBs, was regressed against the section on improving the quality of financial statements.

Thus:

$$IQFS = \beta_0 + \beta_1 AFA + \alpha$$

Where:

IQFS = improving the quality of financial statements

AFA = application of forensic accounting

$\beta_0 - \beta_i$  = are the regression model coefficients (parameters) and

$\alpha$  = error term as the stochastic error term

## Results and Discussion

The analysis of the responses from the questionnaire administered to the five (5) categories of respondents were based on the variables of the study.

### Response Rate

A total number of 230 copies of the Questionnaire were administered, out of which 194 (84%) were correctly filled and returned within the period granted for early response between administration and collection of the instrument.

### Descriptive analysis on Improving the Quality of the Financial Statements of the listed DMBs in Nigeria by the application of forensic accounting

The analysis of the questions/statements relating to the above, reveals the overall views and perceptions of all the 194 respondents from the 5 categories, regarding the statement that statutory (external) audit has limited scope or is not primarily concerned with prevention and/or detection of frauds, which leaves financial statements at the risk of impaired quality. 118 or 61% strongly agreed and 36 or 18% agreed with the assertion; 21 or 11% remained neutral and 9 and 10 disagreed and strongly disagreed, respectively. The result of this position could be based on the views that statutory (external ) audit relies on sampling and is conducted post-

transaction, unlike forensic accounting application, which makes detailed checking of events and transactions and is a continuous process that timely reviews issues. As an outcome of this, 118 or 61% of all shared this view by strongly agreeing to that, with 48 or 26% agreed, 14 or 7% undecided, while only 6 or 3% both disagreed and strongly disagreed.

The foregoing position could have relevance with the general perception that forensic accounting application is in a position to narrow the 'audit expectations gap', as it involves detailed review, vouching and attestation of all transactions and events as they take place. Majority (129 or 67%) strongly agreed, 23 or 12% agreed, 10 remained neutral and only 2 disagreed with the statement. To further buttress the view that forensic accounting application can narrow the 'audit expectations gap' and, therefore, improve the quality of the financial statements generated, 147 or 76% of all strongly agreed, 23 or 12% agreed with the statement. Only 14 were undecided and 6 and 4 disagreed and strongly disagreed with the same position.

Almost all the institutions agreed with the statements about improving the quality of the financial statements of the listed DMBs in Nigeria through the application of forensic accounting. As the responses from all the categories have the mean score of greater than the cut-off point of 3.0, it reveals that the

institutions under consideration support improving the quality of the financial statements of the DMBs. It also shows the standard deviations of the responses, which indicate that the institutions are not widely dispersed on improving the quality of the financial statements of the listed DMBs.

However, in order to measure whether there is any significant variation between the responses given by the respondents in the different institutions, the Kruskal Wallis Test carried gives its result as  $KW=2.761$  and P-value of 0.599. The result indicates that there is no significant difference among the responses of the

respondents across the institutions with regards to improving the quality of the financial statements of the DMBs.

### **Regression Result on the Application of Forensic Accounting on Improving the Quality of the Financial Statements of listed the DMBs in Nigeria**

To test the hypothesis, answer the research question and to achieve the study objective, the section on the applicability of forensic accounting in DMBs was regressed against the section on improving the quality of the financial statements of the DMBs. The regressions results are presented in table 1-3

**Table 1 Model Summary**

| Model | R    | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               |
|-------|------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
|       |      |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |
| 1     | .955 | .912     | .911              | .27268                     | .912              | 1987.814 | 1   | 192 | .000          |

**Table 2 ANOVA**

| Model | Sum of Squares | Df | Mean Square | F        | Sig. |
|-------|----------------|----|-------------|----------|------|
| 1     | 147.805        | 1  | 147.805     | 1987.814 | .000 |

|  |         |     |      |  |  |
|--|---------|-----|------|--|--|
|  | 14.276  | 192 | .074 |  |  |
|  | 162.081 | 193 |      |  |  |
|  |         |     |      |  |  |

**Table 3 Coefficients**

| Model                              | Unstandardized Coefficients |            | Standardized Coefficients | T      |
|------------------------------------|-----------------------------|------------|---------------------------|--------|
|                                    | B                           | Std. Error | Beta                      |        |
| 1 (Constant)                       | -.948                       | .121       |                           | -7.846 |
| Application of Forensic Accounting | 1.166                       | .026       | .955                      | 44.585 |

**Source:** Generated by the Researcher using SPSS 23.0 from Questionnaire Response.

Table 1 shows the value of  $R^2$  as 0.912, which is the multiple coefficient of determination that gives the proportion or percentage of the total variation in the dependent variable explained by the explanatory variable. Hence, it signifies that approximately 91% of total variation in improving the quality of the financial statements of the DMBs can be caused by the application of forensic accounting. Table 2 shows the F-Value of 1987.814 and its P-Value is 0.000 which means that the model is fit. Table C presents the regression result,

which indicates that the application of forensic accounting has a positive impact on improving the quality of financial statements of Nigerian DMBs and the impact is statistically significant at 5% with P-Value of 0.000. This implies that as the application of forensic accounting increases, improving the quality of the financial statements of the DMBs also increases. Thus, the null hypothesis is rejected and the alternative hypothesis, which states that the application of forensic accounting in listed DMBs in Nigeria may significantly improve the

quality of their financial statements, is accepted. This finding is consistent with the findings of Luke (2013) and Ezeagba (2014) but contradicts those of Oluwagbemiga (2010) and Adeyemi & Oluwookere (2011), who found that forensic accounting practice may not significantly improve the quality of financial statements.

In testing the hypothesis that is the application of forensic accounting in listed DMBs may not significantly improve the quality of their financial statement, model  $IQFS = B_0 + B_1AFA + a$ , was tested; that is, regressing the items on the applicability of forensic accounting in the DMBs) against the questions/statements on improving the quality of the financial statements of the DMBs.

The results, which show the value of  $R^2$  as 0.912, is the multiple Coefficient of determination that gives the proportion or percentage of the total variation in the dependent variable explained by the exploratory variable. Simply put, it implies that approximately 91% of the total variation in improving the quality of the financial statements of the DMBs can be caused by the application of forensic accounting. Further supporting this finding is the F-value (ANOVA result) of 1987.814 and its P-value of 0.000, which means the model tested is fit.

The regression results prove that the application of forensic accounting has a positive impact on improving the quality of the financial statements of the DMBs as the impact is statistically significant at 5% with P-value of 0.000. The implication of the finding shows that the more the application of forensic accounting increases, the more improvement and narrowing the 'audit expectations gap' in the DMBs also increases. With this outcome, the null hypothesis is rejected and the alternate hypothesis, which states that the application of forensic accounting in listed DMBs may significantly improve the quality of the financial statements of the DMBs, is obviously accepted.

This finding is additionally supported by the descriptive statistics, which shows the mean scores on all the items in the section have greater than the cut-off point of 3.0, indicating that the respondents (institutions) agreed with the statements about improving the quality of the financial statements of the DMBs through the application of forensic accounting.

In order to measure if there was variation between the responses given by the respondents from different categories, the Kruskal-Wallis test performed, which shows  $KW = 2.761$  at P-value of 0.599. This means there is no significant difference amongst the responses of the respondents across all the categories as regards to improving the quality of financial statements of

the DMBs through the application of forensic accounting; implying unanimous agreement among the participants that the application of forensic accounting in the DMBs will improve the quality of their financial statements.

### **Summary, Conclusion and Recommendations**

The major finding of the study, the inferences and conclusion drawn and recommendations proffered are:

### **Conclusion and Recommendations**

Based on the evidence established from the analysis of the data generated, the following, summarizes the findings of the study and the conclusion reached.

The study has established through testing the developed model via the study hypothesis and relative descriptive statistics that the application of forensic accounting in the listed DMBs in Nigeria can significantly improve the quality of their financial statements. This implies that the qualitative characteristics of financial reports of the DMBs (relevance and faithful representation) will be entrenched as the application will be able to detect and solve issues that may water-down the quality of DMBs' financial reports, thus improve the basis of making economic decisions by all stakeholders of the sector. The overall implication of the findings of the study provides evidence that forensic accounting application in

the listed DMBs in Nigeria will improve the quality of the financial statements of the DMBs and, therefore, be of benefit to the stakeholders.

On the basis of the findings of the study, the following recommendations are proffered.

- i) DMBs in Nigeria, should immediately institute/create forensic accounting departments to 'complement' the existing functions of internal audit/inspection, strictly with authority and power to carry out forensic accounting application functions of continuous review and monitoring of the daily operations, transactions and events (including non- financial activities) given the efficacy of the practice. In order to avoid complicity and conflict of duties, the reports and recommendations of the department should be addressed to the Audit Committees of the organizations' boards, which should have powers to oversee the operational functions and implementation of such.
- ii) The forensic accounting departments should be equipped with well trained and experienced personnel with knowledge in forensic accounting application. The departments need to also be equipped with up to date standard gadgets and necessary forensic accounting soft-ware as obtainable in most developed

- countries and some developing one like India, Malaysia and South Africa. Additionally, the personnel of the unit/department should be re-trained and exposed to the current developments in forensic accounting application techniques and software.
- iii) The audit committees of the boards of the DMBs should be composed of knowledgeable people in the concept of forensic accounting, so that they can guide and provide impetus to the forensic accounting functions. The committees should ensure the forensic accounting departments get fully involved in external audit functions to fortify the exercise, in addition to regular review of the internal control systems of the DMBs.
  - iv) As it is now, there are no standards or guiding operational policies for the application of forensic accounting. It, therefore, recommended that the Financial Reporting Council of Nigeria should commence the process of the recognition, standardization and getting statutory backing for institutionalization of forensic accounting application in all sectors, as a solution to the large scale financial and economic crimes pervading the country.
  - v) Also, professional bodies, academicians, practitioners and other shareholders should form a consortium to fashion out and recommend for the operational guidelines, monitoring and approval modalities of forensic accounting practice in Nigeria.
  - vi) Professional accounting (audit) firms should include forensic accountants when designing audit plans and also include them in the audit teams for more qualitative delivery of assignments. This will further boost confidence in the audit reports.

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## APPENDIX 1

### Tables of Various Analyses Contained in the Study ANOVA & Regression & Reliability Test Kruskal-Wallis Test

| Ranks                                        |          |     |           |
|----------------------------------------------|----------|-----|-----------|
|                                              | Category | N   | Mean Rank |
| Improving the Quality of Financial Statement | DMB      | 144 | 97.90     |
|                                              | BIG 4    | 12  | 88.67     |
|                                              | NDIC     | 12  | 110.25    |
|                                              | EFCC     | 6   | 69.08     |
|                                              | IFAN     | 20  | 100.78    |
|                                              | Total    | 194 |           |

#### Test Statistics<sup>a,b</sup>

|             |                                              |
|-------------|----------------------------------------------|
|             | Improving the Quality of Financial Statement |
| Chi-Square  | 2.761                                        |
| Df          | 4                                            |
| Asymp. Sig. | .599                                         |

a. Kruskal Wallis Test

b. Grouping Variable:  
Category

#### Cronbach's Alpha Reliability/Validity Test Reliability Statistics

|                  |            |
|------------------|------------|
| Cronbach's Alpha | N of Items |
| .989             | 14         |

**Normality (robustness) tests of the Independent and Dependent Variables**  
**Descriptive Statistics**

|                                                            | N         | Skewness  |            |
|------------------------------------------------------------|-----------|-----------|------------|
|                                                            | Statistic | Statistic | Std. Error |
| Applicability of forensic accounting                       | 194       | -2.056    | .175       |
| Taming the rising trend of frauds and fraudulent practices | 194       | -1.476    | .175       |
| Improving the quality of financial statements              | 194       | -1.772    | .175       |
| Improving the internal control mechanisms                  | 194       | -1.729    | .175       |
| Valid N (listwise)                                         | 194       |           |            |