



RELEVANCE OF FORENSIC ACCOUNTING PROFESSIONAL CERTIFICATIONS ON FRAUD REDUCTION IN NIGERIAN DEPOSIT MONEY BANKS

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Abstract

This study examines the relevance of forensic accounting professional certifications on fraud reduction in Nigerian deposit money banks. The study is based on ex post facto and survey research designs. Data was collected through primary and secondary sources. Analysis of secondary data was done using Ordinary Least Square (OLS) regression technique which further necessitated correction of the problem of autocorrelation via Generalized Least Square regression. Bootstrapping estimation procedure was also carried out to confirm the regression results from the tested hypothesis. Analysis of primary data was undertaken, using One-way ANOVA. The results from the findings based on the bootstrapping estimation method clearly suggest that increasing the engagement of forensic accountants' significantly reduces the incidence of fraud in deposit money banks in Nigeria. The results further reveal significance difference in practitioners' perceptions on the relevance of forensic accounting certification criteria to fraud reduction in Nigeria which successfully meets the body of knowledge, ethical code of conduct and protection of public interest conditions but fails to adequately fulfil the control of entry requirement. Consequently, the study recommends, among other policy options, more awareness campaign by professional bodies to educate regulatory authorities on constant utilisation of forensic accounting services.

(Key words: Certification, Deposit Money banks, Forensic Accounting, Fraud, Fraud Reduction)

INTRODUCTION

Banking sector is the life wire of any economy. However, the escalation of fraud in Nigerian banks for over a decade has led to loss of public confidence, and caused adverse effect on shareholders' wealth. This is a situation that requires improved statutory and regulatory frameworks to govern both the industry and the accounting practice.

Today, the integrity and functional roles of Nigerian banks have been impaired due to pervasive increase in fraud and other deviant behaviours. According to Ibor (2016), fraud not only incapacitates Nigerian banks' effective delivery of their economic functions, but also piles pressure on the nation's scarce foreign exchange resources with no visible economic benefits being transmitted to the productive sector and the general public.

The paradigm shift in the accounting profession has put a focus on the need for forensic accounting. Developed economies such as the United States, Australia, United Kingdom, among others, have witnessed rapid growth in the demand for this service which continues to create expanding opportunities and increasing professionalism of forensic accounting practice. The



current prominence of forensic accounting masks the fact that the discipline's emergence can be traced back to over 5000 years.

Forensic accounting is a new specialisation in the accounting profession. It involves the intellectual application of accounting, auditing and investigative expertise to collect, analyse and report financial information for the purpose of finding reliable evidence suitable for use at the law court or in administrative proceedings. Forensic accounting services are often provided in the areas of litigation support engagement, fraud investigation, expert witnessing, forensic expert consultation, dispute resolution and a host of other services using an intuition approach. Imoniana, Antunes and Formigon (2013) identify prominent areas of forensic accounting service to include economic damages calculations (whether suffered through tort or breach of contract), litigation support, business/employee fraud investigations, financial/securities frauds, business interruptions/business failures, computer forensics/discovery, discovery of hidden assets, professional negligence, and matrimonial disputes.

The field is undoubtedly attracting attention as a result of persistent occurrence of fraud but it remains inexplicable why it is under-utilised in the banking environment. There is also some debate in relation to the role of forensic accountants and questions relating to what qualifications, skills and experience they should hold (Chen & Akkeren, 2012). While developed economies such as United States, United Kingdom, Australia and others have been able to minimise the occurrence of financial fraud across all sectors, the menace is rather on the increase in Nigeria, despite the establishment of anti-corruption agencies such as the Independent Corrupt Practices and Other Related Offences Commission (ICPC) and the Economic and Financial Crimes Commission (EFCC).

Experts agree that the demand for forensic accounting is rapidly growing in developed economies, creating opportunities for large and medium-sized audit firms that are willing to start or expand their practice. In developing economies, particularly Nigeria, there is a serious imbalance between the demand for, and supply of, forensic accountants. There is intermittent regulatory and public pressure to step forth to the challenge. The response to this situation includes a dramatic increasing need for more forensic accountants as well as the expansion of the accounting curricula to improve the fraud detection skills of statutory auditors.

Nigeria has been bedevilled by corruption in all facets of her polity especially the economy with the banking sector as a major victim from the late 1980s till today (Dike, Ene & Ene, 2016). For instance, the Nigerian Deposit Insurance Corporation's (NDIC) annual report for various years revealed colossal fraud and forgeries in the banking sector running to billions of Naira. The contending issue is that despite the perception that there is a steady growth in the number of forensic accountants in the country, the rate of fraud in the bank sector continues to climb exponentially.

In an attempt to address this problem, prior empirical studies (Emeh & Obi, 2013; Enofe, Utomwen & Danjuma, 2015) report that effectiveness of forensic accounting and the presence (engagement) of forensic accountants can reduce the occurrence of fraud. The engagement of forensic



accountants by the Federal Government in 2009 to investigate the case of nine collapsed banks was noticeable. This led to the detection of about one trillion naira reportedly lost through different financial malpractices. It is perturbing to note that this intervention did not seem to have yielded any lasting positive result as fraud has continued to cripple the expected growth of banks prompting curiosity for further investigation.

It is worthy to state here that the demand for forensic accountants in Nigeria is not a subject for debate in the light of persistence in fraud and corruption. It is a question of how the growing need for forensic accounting in the banking industry can be fulfilled in order to forestall this ugly trend. Research on forensic accounting and fraud detection in banks has received a lot of scholarly attention. For instance, a thread of studies: Njanike, Dube & Mashayanye, 2009; Onuorah & Appah, 2012; Emeh & Obi, 2013; Adebisi, Matthew & Agbo, 2016; Dike et al, 2016; Agbaje & Adeniran, 2017; and Oseni, 2017 among others, focused on the effect of forensic accounting services on fraud detection in deposit money banks across African countries. However, little emphasis was paid on how the growing importance of forensic certification affects fraud detection in the banking environment.

Professionals seeking to acquire forensic accounting skills have agitated avenues to market and promote themselves as experts in the field through certification. Certification adds value to career advancement, improve career prospects, and enhance earning power among the holders (Robert, 2015). In the accounting industry, it is obvious that employers pay unflinching attention to specialisation and certification in order to differentiate expertise.

Although, some professional bodies such as the Association of National Accountants (ANAN), Institute of Chartered Accountants of Nigeria (ICAN), Institute of Forensic Accountants of Nigeria (IFAN), Institute of Certified Forensic Accountants (ICFA), Association of Certified Fraud Examiners (ACFE), International Institute of Certified Forensic Investigation Professionals (IICFIP) and others, are providing more forensic certifications in Nigeria, there is scanty research that has attempted to investigate the quality of forensic certifications or explored the attributes that are required to make a certification to be considered adequate. There is a need for more research in forensic accounting in order to advance the understanding of the current state of the industry in terms of its ability to fulfil the relevant conditions that are characteristic of a profession.

Due to the variety of services that forensic accountants render, a wide range of skills are required especially in the areas of litigation support engagement, fraud investigation, expert witnessing, forensic expert consultation among others. Commonalities that subsist between different descriptions of forensic accounting as a profession stem from these areas; all of which require a reasonable level of educational and professional expertise. However, there are scanty empirical evidence that clarify if forensic accountants in Nigeria satisfy four basic elements (body of knowledge, control of entry, ethical code of conduct and protection of public interest) of professions theory, which provide a useful framework for identifying the functions and attributes that contribute to forensic accounting professionalism.



This study attempts to probe further the findings of Chen and Akkeren (2012). Previous empirical studies focused exclusively on the perceptions of practitioners, academia, students and accountants, but this study presents fresh and distinctive evidence from practitioners in view of the fact that empirical evidence appears scanty on forensic accounting professional certification, especially in developing economies. This means that there is a major gap in the relevant literature in developing countries, particularly Nigeria.

The utilisation of forensic accounting is expected to impact greatly on fraud detection and safeguard the financial health of the banking industry of any economy. In fact, it is an important prerequisite for economic stability and growth. As a consequence, the assessment and improvement of banks' financial condition constitute a fundamental goal for regulators and investors. The study therefore contributes towards filling the gaps inherent in the deficiencies x-rayed above by establishing whether forensic accounting could be considered a profession capable of detecting and reducing persistent fraudulent activities in DMBs.

The primary objective of this study is to examine the relationship between forensic accounting professional certification and fraud detection in the Nigerian deposit money banks (DMBs). The study seeks to achieve the following specific objectives:

- i) To evaluate the extent of the relationship between the engagement of forensic accountants and fraud reduction in DMBs
- ii) To investigate if there is any difference in practitioners' perception on forensic accounting certification criteria and fraud reduction in DMBs

It is intended that this study will contribute to the development and strengthening of the forensic accounting practice in view of the pressing need to support the effort at reducing fraud in the banking industry in Nigeria.

LITERATURE REVIEW

Conceptual Review

Engagement of Forensic Accountants

The high increase in cases of fraud and fraudulent activities in Nigeria is alarming and requires the visible presence of forensic accountants (Ozuomba, Ofor & Okoye, 2016). Currently, a thread of studies confirms the need for the presence (engagement) of forensic accountants. These studies also found that demand for, and supply of, forensic accountants were very low in Nigeria, a trend which is expected to increase in the future (Dhar & Sarkar, 2010; Umar, Samsudin & Mohamed, 2016; Jugurnath. Bissessur, Ramjattan, Soondrum & Scedoyal, 2017).

In a bid to expound on how the engagement of forensic accountants is impactful on economic growth, Ocansey (2017) posits that economic and financial crimes have plagued every corner of the economies of the world. These crimes according to him, affect all firms and the economies of nations (developed, developing and under-developed).



However, there is no doubt that previous and continuous research evidence a strong demand for forensic accountants in all sectors of any economy. For instance, the American Institute of Certified Public Accountants (AICPA) (2010) indicated that fraud accounting professionals would be in high demand in a few years to come and developed Certified Financial Forensics (CFF) to increase the expertise of Certified Public Accountants.

Forensic Accounting Certification Criteria

Forensic accounting certification is still in its infancy in Nigeria, despite the alarming increase in complex financial crimes and lack of adequately trained professionals to investigate them. Previous studies on forensic accounting practice indicate that it is a rapidly growing accounting discipline. As part of the efforts to enhance the skills of professional accountants in Nigeria, the ICAN established a Forensic Accounting Faculty and commenced a Forensic Accounting Certification Programme in February 2009 to kick start the training of its members to become specialists in this inter-disciplinary field. In 2016, ANAN also registered a special body called Society for Forensic Accounting and Fraud Prevention (SFAFP) to train and strengthen its members and interested security officers both in Nigeria and other West African countries in the practice of fraud detection and forensic accounting. In an attempt to combat financial crimes and corruption in both private and public sectors, ICAN has partnered with ANAN to ensure that a Whistle Blower and Protection of Whistle Blower Act was put before the National Assembly. These amplify that the need for forensic accounting training and skills in Nigeria is an issue of concern (Emeh & Obi, 2013). Globally, the practice of forensic accounting appears to be growing due to demand to investigate fraud (Ramadhan, 2015). Nigeria is not an exception in terms of growing importance of forensic accounting certification, although the demand for forensic investigation across all sectors of the economy is relatively low. The growth of forensic certification evidences the expanding opportunities for, and increasing professionalism of, forensic accounting practice (Huber, 2011; 2012).

Forensic accounting certification criteria are those conditions which are characteristic of a profession. In explaining the profession of accounting, Fournier (1999) developed a model of professionalism as a disciplinary logic that embeds criteria of legitimacy, public good, social welfare and professional competence based on knowledge, conduct and control. According him, attaining a professional status requires appropriate conduct as well as the ability to gain and retain a body of knowledge on a subject. Therefore, for the purpose of this study and to succinctly address the research problem, a model is adapted from the work by Chen and Akkeren (2011) and represents the Theory of Professions for forensic accounting. Chen and Akkeren (2011) present the Theory of Profession framework with four attributes that contribute to accounting 'professionalism', namely: body of knowledge, control of entry, ethical codes of conduct and protection of public interest.

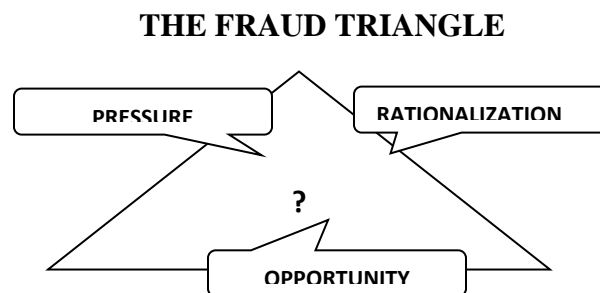
Fraud Reduction

From the variety of definitions available in academic literature, none seems to adequately capture the definition of fraud each definition reflects the character, nature as well as mode of operation

of each of the defining entity. For instance, Modugu and Anyaduba (2013) classify fraud into two: nature of fraudsters and method employed in carrying out the fraud. On the basis of the nature of the fraudsters, they categorised fraud into three: internal, external, and mixed frauds. They describe internal frauds as those committed by members of staff and directors of the organisations. While external fraud is committed by persons not connected with the organisation, mixed fraud involves outsiders colluding with the staff and directors of the organisation.

Okoye and Gbegi (2013) identify five elements to a fraud in legal terms: scienter or knowledge of facts; events or circumstances by one party; misrepresentations (including non-disclosure) of that knowledge of the party in dealing with another; reliance on those misrepresentations by the second party: an agreement, contract, or transaction between the parties which a reasonable person would not have entered into if privy to the first party's knowledge; and harm or damage to the second party as a result. The causal factor that should be removed to deter fraud is best described as fraud triangle. For a holistic risk assessment and fraud prevention and reduction, it is imperative to unveil what motivates people to commit fraud. However, Turner, Mock and Srivastava (2002) list three basic elements that cause fraud occurrence. They are pressure, rationalisation and opportunity. The fraud triangle as displayed in Figure 2.1 explains three factors that are present in every situation of fraud.

Figure 2:1 Analysis of Fraud Triangle



Source: Turner, Mock and Srivastava (2002)

Okoye and Gbegi (2013) further illustrate that motive (or pressure) refers to the need for committing fraud (need for money). Rationalization is the mind-set of the fraudsters that justifies the act of fraud while Opportunity is the situation that enables fraud to occur (often when internal controls are weak or non-existent).

Breaking the fraud triangle is the key to fraud deterrence. Breaking the fraud triangle implies that an organisation must remove one of the elements in the fraud triangle in order to reduce the likelihood of fraudulent activities. Of the three elements, removal of opportunity is most directly affected by the system of internal controls and generally provides the most achievable route to deterrence of fraud (Kassem & Higson, 2012).

There is a clarion call for statutory auditors to acquire forensic skills to reduce and prevent fraud in addition to their audit function. This call has been corroborated by Enyi (2009), Olukowade and Balogun (2015) who advocate that all normal statutory audits should embed some elements of



forensic enquiry as the evidence of fraudulent activities can be easily discovered if a thorough evaluation of the adequacy and compliance of the internal control mechanism is made.

Review of Empirical Studies

Domino, Giordano and Webinger (2017) investigated the factors that impact the perceived value of forensic accounting certification. The survey of 217 practicing accountants also provided information on widely held forensic certifications. To compare the forensic certifications, data was gathered from each granting organisation's website. The characteristics or factors deemed to be relevant to the perceived value of the certifications were then identified. The study results ranked the certifications using the opinions of attorneys and academics. A significant amount of the attorney experts' practices dealt with forensic support services and the academic experts teach and/or are engaged in forensic accounting. Results show three certifications perceived to be of most value to accountants for forensic support services by both the attorney and academic experts: Certified in Financial Forensics (CFF), Certified Forensic Accountant (CRFAC), and Accredited in Business Valuation (ABV). The study made use of a few number of experts to weigh the certification characteristics. A large number of experts may have yielded more reliable results. In view of the exponential growing demand and the evolving trend of forensic accounting, there is likelihood that current forensic certification criteria may change.

Huber (2013) examined whether forensic accountants exercised due diligence in investigating the corporations that issued their certifications prior to obtaining their certifications. The study uses the data collected by Huber to determine if failure to exercise due diligence may have contributed to their inaccurate beliefs. The results strongly suggest they did not. Failure to exercise due diligence in investigating forensic accounting corporations is especially perplexing since the Codes of Ethics of two forensic accounting corporations require the exercise of due diligence. The study therefore shows that the survey was not random which makes it somewhat impossible to infer that the results can be generalizable to all forensic accountants.

Theoretical Framework

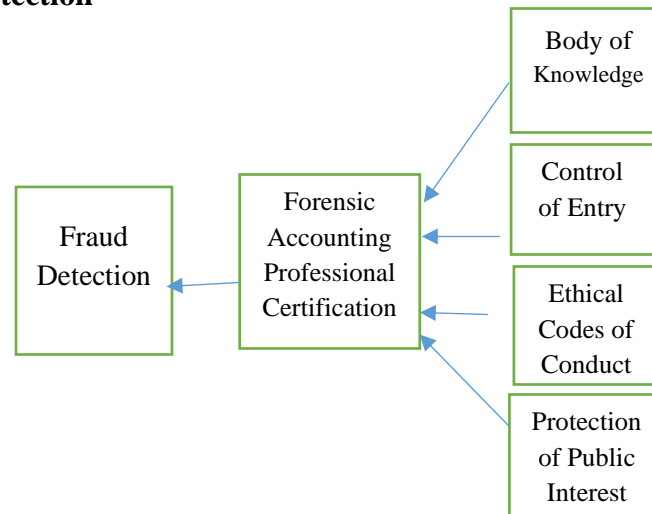
Theory of Professions

Pollock and Amernic (1981) define Theory of Profession as the power and reputation granted by society to the profession in terms of protecting public interest where professionals acquire a body of knowledge, which is connected to the major needs and values of the social and accounting system. The theory which emanated primarily from the field of sociology, sought to understand the essential elements of professions and to explain their functional role in society. Management scholars in organisation studies and accounting found this theory useful since 1990s in order to understand large professional organisations and how they differed from corporations.

Talcott Parsons is the father of the studies of professions. Early studies of the professions attempted to describe how these occupational groups differed from other forms of work while concerted effort was also made to cataloguing the unique attributes or traits of professionals. For instance, Greenwood (1957) discovered live key trails consisting of a systematic body of theory, professional authority, sanction of the community, a regulative code of ethics and a professional culture.

In order to confirm if forensic accountants are adequately qualified to undertake forensic accounting work and if the industry protects public interests, an adapted model by Chen and Akkeren (2011) from work by Canning and O'Dwyer (2001) and Candilis (2009) represented the Theory of Professions for forensic accounting. Therefore, since accounting professionals are regarded as a mechanism to protect public interest as they are required to act above and beyond material incentives (Larson, 1977), the Theory of Professions appears to be capable of providing some useful lens for better understanding of the role and characteristics of forensic accounting profession. This is in consonance with the conditions and qualifications to work in the profession of forensic accounting.

Figure 2.2: Conceptual Model of Forensic Accounting Professional Certification and Fraud Detection



Source: Modified Framework adapted from work Chen and Akkeren (2012)

METHODOLOGY

The study is based on time series non-experimental research design (which is a widely used research design in ex post facto research) and survey research designs. The study population for primary data collection purpose was made up of the 5,644 professionals certified by the forensic accounting bodies whose membership status was published as at the time the research survey was conducted as shown below:

Table 3.1: Distribution of Study Population for Primary Data Collection

S/No	Forensic Accounting Trainers	Population
1	Association of Certified Forensic Accountants (ACFA)**	217
2	Association of National Accountants of Nigeria(ANAN)**	135



3	Institute of Chartered Accountants of Nigeria (ICAN)*	405
4	Institute of Certified Fraud Examiners (ICFE)***	60
5	Institute of Forensic Accountants of Nigeria (IFAN)***	4,767
6	International Institute of Certified Forensic Investigation Professionals (IICFIP)***	60
	Total	5,644

Sources: * ICAN Annual Report and financial Statements as at December 31, 2016.
**ANAN Practicing Members:
***Official websites of ACFA, ICFE and IFAN as at December 2017.

For many practical purposes, sampling from a finite population that is large can be considered to be sampling from an infinite population (Spiegel & Stephens, 2011). The research sample was therefore drawn by calculating the needed sample size using both Taro Yamane formula and a model developed by Cochran in 1963 as cited by Kasiuleviius, Sapoka and Filipaviciute (2006), and Singh and Masuku (2014), amounting to 374 and 384 respectively. However, the sample size was approximated to 400 practitioner respondents (at 1 significant figure) which is proportionally distributed hereunder:

The study population for secondary data is relatively small in size, hence the entire DMBs represent the sample size. A researcher can opt to study the entire population when the population is well defined (complete sampling frame) and small (Alvi, 2014).

Convenience sampling which is a non-probabilistic sampling method was considered appropriate for quantitative data collection technique of this nature. According Showkat and Parveen (2017), in this type of sampling, researchers prefer participants as per their own convenience. Lagos, Abuja, and Kaduna metropolitan cities were selected since the three cities had the highest population of members supplied by forensic accounting professional bodies in Nigeria. A majority of the sampled respondents work with audit firms, while others come from different occupational jurisdictions across the private and public sectors. Since audit firms in the aforementioned three cities were surveyed, convenience sampling technique was used for selection.

The choice of audit firms in Abuja, Lagos, and Kaduna is purposive on the basis of their over 40% dominance among other states of the federation as gathered through internet source. For instance, Commonwealth Network (2017) confirms that out of many accountancy firms in Nigeria, some of them represent a large proportion of the international accountancy networks, particularly in Abuja and Lagos.

Closed-ended questionnaire was used to obtain the needed data from the participating respondents. In order to generate a well-designed research instrument to capture the respondents' perceptions regarding forensic accounting and fraud detection in Nigeria's DMBs, a five-point Likert Attitudinal Scale which allows respondents to indicate a degree of agreement or disagreement in



a multiple choice type format was adopted. Many researchers criticise the rationale behind awarding 3 points to the level of ‘undecided’ or ‘no opinion’ and conclude that zero (0) be assigned for it (Uzoagulu, 1998).

In an attempt to test hypothesis 1, for the purpose of achieving the research objective 1 of establishing the exact nature of the existing relationship between the dependent and independent variables, ordinary least square (OLS) regression was employed while generalized least square (GLS) regression was presented for the OLS results when the problem of autocorrelation was corrected. The bootstrapped regression was also used to show the results after resampling the observations.

Justification for using bootstrapping regression procedure stems from the fact that the number of observations seems not adequate. Bootstrapping estimation helps to transform data to generate more observations within the available runs.

For estimation purpose, the regression model is given as:

$$FRD_t = \alpha_0 + \alpha_1 FAE_t \dots\dots\dots \text{Model 1}$$

$$FRD_t = \alpha_0 + \alpha_1 FAE_t + \alpha_2 FAE_{(t-1)} \dots\dots\dots \text{Model 2}$$

Where:

FRD is Fraud Detection

FAE_t is current year’s forensic accountants’ engagement.

$FAE_{(t-1)}$ is immediate year’s forensic accountants’ engagement.

A priori expectations:

$\beta_0, \beta_1 > 0$ which means that professionally certified forensic accountants’ engagement (*fae*) could be attributed to high frequency of fraud detection (*frd*) in DMHs. Hence, there is a significant relationship between *fae* and *frd*. Reject H_0 (null hypothesis) if $P < 0.05$, accept if otherwise.

Research question 5 which examines practitioners’ perceptions on forensic accounting professional certification and fraud detection in DMBs employs one-way ANOVA. The choice of one-way ANOVA for this research is based on the fact that it determines the extent of variance in dependent variables that are caused by independent variables. It is also used in comparing the variation in more than two independent samples that are drawn just once from a population with the same variance (Okafor & Agbiogwu, 2016). An adapted model from the work of Chen and Akkeren (2012) represents the Theory of Professions for forensic accounting. Due to scanty existing empirical evidences on how the theory is applied, four underpinning elements that describe the theory of professions framework, namely: - body of knowledge (BOK), control of entry (COC), ethical codes of conduct (EEC) and protection of public interest (PPI) were considered.

Decision Rule:



The one-way ANOVA result was obtained with the aid of Statistical Packages for Social Science (SPSS) software version. The calculated significance value was compared to the alpha level of 0.05. If it is lower than 0.05 alpha level, null hypothesis is rejected. Otherwise, if it is greater, null hypothesis is accepted.

RESULTS AND DISCUSSION

Regression Analysis

In testing hypothesis 1, ordinary least square regression (OLS) was initially employed while generalized least square (GLS) regression was presented for the regression results when the problem of autocorrelation was corrected for. The bootstrapped regression was also presented to show the results after resampling the observation by 100. Table 4.3 below shows the results:

These models focus on estimating the relationship between the independent variables (i.e., engagement of Nigerian forensic accountants, forensic litigation support skill acquired by qualified accountants as well as forensic investigative skill acquired by non-qualified accountants) and fraud detection as the dependent variable.

Table 4.1: Regression Models land 2

<i>VARIABLES</i>	<i>OLS</i>	<i>GLS</i>	<i>Bootstrapped</i>
<i>C</i>	141.9(0.83)	353.08(0.35)	668.7(0.01)*
<i>fae</i>	-102(0.71)	-0.62(0.38)	2.77(0.02)**
<i>fae(-1)</i>		0.73(0.36)	
<i>R-Squared</i>	0.40	0.69	
<i>F-Statistic</i>	6.01 (000)*	8.52(0.00)*	
<i>VIF Test</i>	2.38		
<i>DW Statistics</i>	0.90	2.18	31(100)
<i>Observation</i>	31	31	

Source: STATA 13.0 Output (2018); **Note:** • is 1% level of significance and ** is at 5%. Values in () are the *p*-values

In the table above, the study finds from the OLS regression that the R-squared value of 0.40 shows that about 40% of the systematic variations in the dependent variable was jointly explained by the independent variables. This implies that fraud detection in Nigerian deposit money banks which is the dependent variable cannot be 100 per cent explained by all the forensic accountants' engagement variable used in this study. The unexplained part of the dependent variable can be



attributed to exclusion of very important independent variables that can explain the dependent variable but are outside the scope of this study.

The F-statistic value of 6.01 and its associated P-value of 0.000 shows that the OLS regression model on the is statistically significant at 1% level. This implies that the regression model is valid and can be used for statistical inference. Also from Table 4.1, it can be observed that the OLS regression results had autocorrelation of 0.90 which is less than 21 but this was corrected using generalized least square (GLS) regression.

One-way ANOVA Result

In testing whether forensic accounting professional certification contributes to fraud detection in DMI3s, One-way ANOVA was employed which reveals the following results;

Table 4.2: One way ANOVA Result of Practitioners' Perceptions on Forensic Accounting Certification Criteria and Fraud Detection

	Sum of squares		Df	Mean Square	F	Sig. Figure
BOK	Between Groups	52.693	1	52.693	9.792	.002
	Within Groups	2131.026	396	5.381		
	Total	2183.719	397			
COE	Between Groups	2.215	1	2.215	2.269	.133
	Within Groups	386.609	396	.976		
	Total	388.824	397			
ECC	Between Groups	548.223	1	548.223	18.081	.000
	Within Groups	12006.913	396	30.320		
	Total	12555.136	397			
PPI	Between Groups	20005.814	1	20005.814	36,111	.000
	Within Groups	219389.864	396	554.015		



	Total	239395.67 8	397			
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Source: STATA 13.0 output, (2018)

Table 4.6 Cronbach Reliability Statistics

Cronbach's Alpha	Number of Items
0.7137	4

Source: STATA 13.0 output, (2018)

Table 4.5 presents the result of One-way ANOVA on the contribution of forensic accounting professional certification to fraud detection in DMB's. The result reveals that *BOK*, *ECC*, and *PPI* are significant at 0.002, 0.000 and 0.000 respectively, indicating that they have positive contribution towards fraud detection while COE remains insignificant at 0.133. The results concur with previous findings of various researchers that report that the number of forensic accounting professional certification has a significant relationship with the frequency of fraud detection (Chen & Akkeren, 2010; Huber, 2012; Domino et al, 2017).

The possible explanation for COB revealing insignificant result might be due to certification of certain individuals without a robust qualifying examination system conducted by some forensic accounting professional bodies to test the competency of persons who wish to enter into the profession. Table 4.2 also presents the result for the descriptive statistics and Cronbach reliability test for internal consistency of the research instrument. As observed, the reliability statistic for all the variables is not significantly different from the 0.7 minimum level recommended by Nunnally (1978); hence it was concluded that the questions are able to measure the research variables. In other words, Cronbach's alpha of 0.7137 indicates a high level of internal consistency of the study scale. Hence, the items of the research instrument have a high level of internal consistency.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The importance of forensic accounting certification cannot be underestimated especially as the rising rate of fraud and corruption continues to signify the increasing need for forensic accounting experts. Developed economies such as the United States of America, United Kingdom, and others, have been achieving success in their anti-corruption crusade through regular adoption of various forensic accounting services ranging from litigation support, fraud investigation, business advisory, dispute resolution and expert consultation.

Application of forensic accounting to tackle fraud and corruption in Nigeria is still at the infant stage and needs to be urgently embraced. The trajectory and development of forensic accounting is relatively very low in developing economies like Nigeria, which apparently contributes to dearth of professionally qualified forensic accountants.



In conclusion, our regression results based on the bootstrapping estimation method clearly show that increase in the engagement (presence) of forensic accountants, number of qualified accountants with forensic litigation support skill, and the number of non-qualified accountants with forensic investigative skill would significantly reduce the incidence of fraud in deposit money banks in Nigeria. The results from the study also showed that forensic accounting expert consultation is yet to have a significant impact on fraud detection on deposit money banks in Nigeria. This means a robust or new approach to forensic accounting expert consultation may be needed to address the new challenges of increasing bank fraud.

More importantly, the result of the analysis of perceptions from practitioners suggests that forensic accounting is a profession and has significant effect of reducing financial fraud in the banking industry. The study has identified the existence of the four characteristics of the Theory of Profession with a plethora of qualifications, skills, certifications and experience amongst forensic accountants in Nigeria. The study has also identified the current state of forensic accounting certification in Nigeria, providing a clearer perception of how it is currently structured at this time.

Recommendations

Based on the findings from the study, the following policy options are therefore advanced:

The engagement of forensic accountants in deposit money banks has significant effect on fraud detection; hence more awareness campaign by professional bodies will go a long way to motivate bank stakeholders to employ forensic accounting services on regular basis to effectively tackle fraud.

Only one professional body among others has been able to produce a huge number of trained forensic accountants at the moment. Other professional bodies, especially ANAN and ICAN should provide more training on forensic investigative skills required to checkmate the activities of fraudsters in banking industry.

Professional bodies providing training and certification in forensic accounting need to restructure and standardise the procedure of entry to regulate membership of the profession. This would go a long way to regulate and monitor certification in the Nigerian forensic accounting industry.

Suggestions for Further Studies

Forensic accounting is a new area in the accounting profession that has taken the centre stage in academic discourse across the globe. The following suggestions are made to take the present research further:

Further research in this area may adopt a comparative cross-country approach, especially between developing and developed economies to enhance the generalizability of the research findings and for a more robust result. Further studies can also be conducted to include enlarged samples to accommodate the perceptions of legal practitioners, bank regulators, and forensic accounting practitioners. This could provide further insight into how the practice of forensic accounting can assist in fighting financial crime in the Nigerian banking industry.



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