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Forensic Auditing and Money Laundering Control in Nigeria Police Force

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ABSTRACT

This study investigated the association between forensic auditing and money laundering control in the Nigerian Police Force, and the moderating effect of information communication technology (ICT) in the relationship. The dimensions of forensic auditing in the study are investigative audit, litigation support, and detection skill. Data collected through a survey instrument from 165 senior police officers in Rivers State through accidental sampling procedure were analysed using Pearson correlation and hierarchical regression analysis. Results of the Pearson correlation showed that investigative audit, litigation support, and detection skill, each has a positive and significant relationship with money laundering control. The results of the regression analysis showed that ICT did not significantly moderate the relationship between forensic auditing and money laundering control, due possibly to the role ICT can play in mitigating as well as enhancing money laundering activities.

Keywords: Investigative audit, litigation support, detection skill, information communication technology, forensic auditing, money laundering control

1. INTRODUCTION

The malaise of money laundering has led to a huge economic loss for Nigeria and has degraded the reputation of the country among other nations in the world. The federal government of Nigeria has made several efforts, including setting up agencies such as the Economic and Financial Crimes Commission (EFCC) to mitigate the increasing incidence of money laundering activities. One of the agencies of the government that is equipped and expected to deal with money laundering involving Nigerians is the Nigeria Police Force. The prevalence of money laundering activities (MLA) in Nigeria is a pointer to the fact that the Police Force in Nigeria has been overwhelmed by the sophistication and technicalities designed by MLA perpetrators, and may have not been able to muster the moral strength required of an organized force to deal with the criminality of MLA. The limitations in the Nigerian Police Force have led to calls for reforms in the police force.

Another instrument that is expected to deal with the prevalence of money laundering activities is the audit process – both internal and external. The audit mechanisms have not been successful in Nigeria as shown by the banking crises of 2009. The banks' financial statements prepared after going through the internal audit processes, and certified by external auditors, showed positive financial position when indeed some

banks had a negative capital. The failure of the external audit procedures in mitigating fraud has led consumers of financial information and various stakeholders to seek for options that will deal with various forms of financial crimes with such evidence that will not be controverted in a fraud litigation process. That option is forensic auditing, a form of examination of the financial transactions that involves raising evidence that can be used to support litigation against various forms of financial crimes. Forensic auditing uses the knowledge of accounting, auditing, law and advanced information technology applications to generate evidence that can stand the rigors of litigation and re-assessments.

A number of studies have evaluated the role of forensic accounting/auditing in mitigating fraud in the public sector (Ebilaowei et al., 2024; Ingbaifegha et al., 2024; Nwodimkpa & Chukwu, 2024). None of these studies looked at the context of the Nigeria Police Force, a very important agency in the fraud control effort of the federal government of Nigeria, an agency that is also sometimes rated as one the most corrupt institutions in the country. This study therefore fills gap in literature by considering the application of forensic auditing as a tool to mitigate money laundering fraud through the Nigeria Police Force.

2. LITERATURE REVIEW

2.1. Conceptual review

The key concepts used in this study are forensic auditing, the independent variable, and money laundering, the dependent variable. The dimensions of forensic auditing are investigative audit, litigation support and detection support. Forensic audit is the application of accounting skills and investigative aptitude, to track and raise verifiable facts useful in circumstances aimed at detecting fraud, settling financial disputes and understanding financial positions in complex accounting transactions, and presenting evidence in legal proceedings. Investigative audit engages in processes that identify possible fraud or illicit activities (such as money laundering) and seek to unravel the surrounding circumstances, using rigorous and in-depth techniques. In litigation support, forensic accountants provide facts that enables attorney's understand complex accounting issues that are subject of legal dispute. Another concept in the study is money laundering control. Money laundering is the concealment of the source(s) of an illegitimately acquired fund by applying the fund in legitimate business or transferring the fund from one state or country to another. The Prohibition of Money Laundering Act of 2022 in Nigeria requires receivers of suspicious funds (especially banks) to report same to special control units, and to assess risk of new products and technologies as vehicles for money laundering.

2.2. Theoretical framework

This study relies on White-collar crime theory, one of the theories used to explain criminal activities. White collar crime, a term traced to the criticism offered by Edward Sunderland in 1939, is used to describe the illegal activities committed by persons and organizations in the upper echelon of the society. The crime is usually of a financial nature which bestows monetary advantage on the perpetrator of the crime. Simpson (2009) argues that white-collar offenders covers a wide range, including governments, chief executives, professionals, businesses, welfare cheats, income tax evaders, and persons who illegally download other people's software. In the context of this study which is based on the police force and money laundering, the police officers are professionals in their field, and perpetrators of money laundering are usually knowledgeable persons and organizations. The white-collar crime theory is therefore a relevant theory for this study.

2.3. Empirical review and hypotheses

A number of studies have examined the association of forensic auditing and fraud prevention/control in public sector entities. Ebilaowei et al. (2024) and Ingbaifegha et al. (2024) conducted an analysis on the association between forensic accounting techniques and fraud control using perceptual evidence from Bayelsa State Civil Service, Nigeria, Nwodimkpa and Chukwu (2024) conducted similar analysis based on survey data from Rivers State Civil Service, Nigeria. All the studies reported a positive association between forensic accounting techniques and fraud prevention/control. There are also studies on forensic auditing and fraud control based on data from business organizations. Anyadufu and Uchechi (2023)

studied forensic accounting services and their effects on fraud prevention in selected manufacturing firms in Anambra state and reported that the application of forensic accounting services techniques reduced the incidence of frauds in the firms studied, and therefore recommended the application of sophisticated forensic accounting techniques. Uwakwe and Chukwu (2024) reported that fraud opportunity had a negative effect on earnings quality (measured by timely loss recognition and earnings persistence). However, board diligence moderated this effect. Ahmed et al (2023) studied forensic auditing and its role in detecting financial fraud using the Beneish model. The study found that the use of this model helped forensic accountants to detect various fraud strategies. Based on the foregoing, the following hypotheses have been formulated for the study.

- H₀₁: There is no significant relationship between investigative audit and money laundering control in Nigeria Police Force.
- H₀₂: There is no significant relationship between litigation support and money laundering control in Nigeria Police Force.
- H₀₃: There is no significant relationship between detection skill and money laundering control in Nigeria Police Force.

The use of information and communication technology (ICT) have been useful in conducting audit exercises even in complex audit situations with a high probability of risk. There is also evidence that ICT aids the activities of fraudsters. Given these contradictory facts, the final hypothesis is formulated as follows.

- H₀₄: ICT has no significant moderating effect on the relationship between forensic auditing and money laundering control in the Nigeria Police Force.

3. METHODOLOGY

3.1. Research design and population

This study used the survey and correlation research designs. The survey design was used to collect data for the study in the two categories of the variables that were correlated. The survey and correlational designs were adopted because the study's objective to determine the relationship between forensic auditing and money laundering control in Nigeria Police Force. The Force has a staff strength of three hundred and seventy-one thousand, eight hundred personnel (371,800). This figure is the population of all the staff in the fourteen different ranks in the Nigeria Police Force in 2024. The target population is the number of Superior Police Officers (SPOS) serving in the Rivers State Command. The number of SPOS in Rivers State Command is 12,986 – twelve thousand nine hundred and eighty-six (Source: Police ICT Office, Moscow Road, Port Harcourt).

3.2. Sample and Sampling Techniques

The sample size of this study is four hundred (400) based on the Taro Yamane formula for sample size determination.

The formula is illustrated as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where

n= Sample size; 1= Constant; *N*= Population size; *e* = Level of errors (00.5)²

Therefore,

$$n = \frac{12986}{1 + 12986 (0.05)^2}$$

$$n = 399.5701$$

$$n = 400 \text{ (Approx.)}$$

The sample size for this study using Taro Yamen Formula is = 400.

The sampling technique used is accidental sampling which is a non-probability sampling approach that involves drawing sample from the part of the population close to the researcher. The researcher included in the sample people who are easy to reach. The technique is also called convenience sampling, grab sampling or opportunity sampling. The choice of this approach is based on the fact that officers can be easily transferred from one location to another and some officers are in very distant locations (from the researcher) such as Sokoto state or Bornu state, creating accessibility challenge. It is therefore most convenient and effective to collect data from persons that are easily accessible and available (Stratton, 2021).

3.3. Data Collection and instrument

The study utilized data collected using copies of questionnaire administered on police officers. Accordingly, the data for this study were obtained from primary sources through distribution of questionnaire which elicited responses from police officers. The instrument for this study was a structured questionnaire designed by the researcher titled: Forensic Auditing and Money Laundering Control Questionnaire (FALCQ). The questionnaire was divided into two sections (A and B). Section 'A' consists of respondents' profile, covering issues such as gender, marital status, age, occupation, educational qualification, while section 'B' elicited information on the study variables. Section B has 25 items which were structured on five (5) point Likert- scales: ranging from Strongly Agree, Agree, Moderately Agree, Disagree, and Strongly Disagree reflecting the degree of agreement with the statements/items, and weighted as Strongly Agree = 5, Agree = 4, Moderately Agree = 3, Disagree = 2, and Strongly Disagree = 1. The scale items were intended to measure the relationship between forensic auditing and money laundering control.

To determine the validity of the research instrument, the original copy of the instrument (questionnaire) was presented to the thesis's supervisor and other research experts (professors and senior lecturers) for assessment. These experts assessed the instrument with respect to its relevance to the research questions, hypotheses, and language used in developing the items. These experts suggested changes to reduce the ambiguity of a few items. The comments and suggestions from these experts were used to modify the instrument before using it for data collection. Reliability analysis was assessed using the Cronbach Alpha coefficient so as to determine the degree of consistency of the scale, given the nature of responses used to construct the scales. The Cronbach alpha value for each variable was above 0.70, and this is considered acceptable. Copies of the instrument were administered directly to the respondents by the researcher and three research assistants who were well instructed by the researcher. Copies to the instrument were collected by the researcher and his assistants for most of the cases on the spot and in some cases after an interval of days.

3.4. Method of Data Analysis

The data collected from the questionnaire were analyzed using Pearson Product Moment Correlation (PPMC). The analyses were conducted with the aid of Statistical Package for Social Sciences (SPSS) Version 20. The results were used to test the hypotheses at the 0.05 level of significance. The hypotheses were tested using the PPMC, and the formula is given below. .

$$r = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{(n\sum x^2 - (\sum x)^2)(n\sum y^2 - (\sum y)^2)}}$$

where

$\sum xy$ = Sum of the product of paired proxy for forensic auditing and money laundering control

$\sum x$ = Sum of the observations for each dimension of forensic auditing

$\sum y$ = Sum of the observations for money laundering control

$\sum x^2$ = Square of sum of the observations for each dimension of forensic auditing

$\sum y^2$ = Square of sum of the observations for money laundering control

For the 4th hypotheses, a moderated regression analysis was used to compute the moderating effect of information and communication technology on the relationship between forensic auditing and money laundering control. The moderated regression model is as follows.

$$MLC = \beta_0 + \beta_1IA + \beta_2LS + \beta_3DS + \beta_4ICT + \beta_4IA*ICT + \beta_5LS*ICT + \beta_6DS*ICT + \mu$$

where

IA = Investigative audit

LS = Litigation support

DS = Detection skill

ICT = Information and communication technology (moderating variable)

IA*ICT = Interaction term for investigative audit and ICT

LS*ICT = Interaction term for litigation support and ICT

DS*ICT = Interaction term for detection skill and ICT

MLC = Money laundering control

The computation was conducted using moderated regression analysis. One approach in conducting such analysis is to use the direct method which relies on the results from the table of coefficients, especially the p value of the coefficient of the interaction term (Chukwu et al., 2024; George & Chukwu, 2022). The other approach is the hierarchical regression analysis, which involves adding the predictors one at a time in individual steps, through the aid of SPSS (Jose, 2013). This study used both the hierarchical regression approach recommended by Jose (2013) and the direct method of moderation analysis used in many other studies (Chukwu et al., 2024; Ebirien et al., 2023; George & Chukwu, 2022).

4. DATA ANALYSIS AND RESULTS

4.1. Questionnaire distribution and retrieval

The Table below, Table 4.1., shows the distribution and retrieval of the copies of questionnaire used for the study. The Table shows that of the 400 copies of questionnaire distributed by the researcher and three research assistants, only 162 copies were retrieved and used for the study. This shows a response rate of about 41 per cent. The reason for the relatively low response rate is possibly due to the touchy nature of the topic of study in the Nigerian society.

Table 4.1. Distribution and Retrieval Frequency of Questionnaire

Study group	Questionnaire administered	Questionnaire returned	Questionnaire not returned
Superior Police Officers (SPOs)	400	162	238
Percentages	100%	41%	59%

Source: Survey data summary by researcher

The analysis conducted in this study was based on the 162 copies of questionnaire retrieved. This represents 41 per cent of the questionnaire distributed. In a survey research there is usually the threat of non-response bias leading to high level of questionnaire mortality. This is more so in the 21st century with its increasing complexity of life. What constitutes benchmark response rate is difficult to determine (Morton et al., 2012). Since the responses to the questionnaire used in this study was provided by more than 150 senior police officers (SPOS) with diversified experiences, it is reasonable to conclude that the outcome of this research is generalizable.

4.2. Test of Hypotheses

Hypotheses 1 to 3

Table 4.2 presents the correlation of forensic auditing and money laundering control. The results in the Table are used to test hypotheses 1 to 3, stated below.

H₀₁: There is no significant relationship between investigative audit and money laundering control in Nigeria Police Force.

- H₀₂: There is no significant relationship between litigation support and money laundering control in Nigeria Police Force.
- H₀₃: There is no significant relationship between detection skill and money laundering control in Nigeria Police Force.

Table 4.2 Bivariate correlation on forensic auditing and money laundering control

		Money laundering control
Investigative audit (IA)	Pearson Correlation	.947**
	Sig. (2-tailed)	0.000
Litigation support (LS)	Pearson Correlation	.913**
	Sig. (2-tailed)	0.000
Detection skill (DS)	Pearson Correlation	.747**
	Sig. (2-tailed)	0.000
	N	162

**Correlation is significant at 0.01 percent level

Table 4.2. shows the correlation between investigative audit and money laundering control. The correlation was positive, high ($r = .95$) and significant ($p < .001$). Accordingly, hypothesis one which states that *there is no significant relationship between investigative audit and money laundering control in Nigeria Police Force* is not supported. The null hypothesis is therefore rejected and the alternative is accepted.

Table 4.2. also shows the correlation between litigation support and money laundering control. The correlation was positive, high ($r = .91$) and significant ($p < .001$). Accordingly, hypothesis two which states that *there is no significant relationship between litigation support and money laundering control in Nigeria Police Force* is not supported. The null hypothesis is therefore rejected and the alternative is accepted.

Table 4.2. also shows the correlation between detective skills and money laundering control. The correlation was high ($r = .75$) and significant ($p < .001$). Accordingly, hypothesis eight which states that *there is no significant relationship between detective skills and money laundering control in Nigeria Police Force* is not supported. The null hypothesis is therefore rejected and the alternative is accepted.

Test of Hypothesis 4

To test hypothesis 4, the study used moderated multiple regression analysis. In the first stage of the analysis, money laundering control (MLC) is regressed on the independent variables of the study, namely, investigative audit, litigation support, and detective skills. In the second stage of the analysis, the moderator variable, information communication technology (ICT) is included in the model; and in the final stage the interaction term is included in the analysis. The results in the model summary are used in testing hypothesis 4 stated below.

- H₄: ICT has no significant moderating effect on the relationship between forensic auditing and money laundering control in the Nigeria Police Force.

Tables 4.3, 4.4. and 4.5. present the results for the hierarchical regression of model 1, involving the regression of money laundering control (MLC) on the independent variables of the study.

Table 4.3. Model Summary

Model	R	R Sq	Adj R Sq	Std. Error of the Estimate	Change Statistics				Sig. F Change
					R Sq. Change	F Change	df1	df2	
2a	.665a	0.442	0.431	0.82363	0.442	41.666	3	158	.000
2b	.682b	0.465	0.452	0.80852	0.024	6.96	1	157	.009
2c	.700c	0.489	0.466	0.79785	0.024	2.41	3	154	.069

a Predictors: (Constant), DS, LS, IA

b Predictors: (Constant), DS, LS, IA, ICT

c Predictors: (Constant), DS, LS, IA, ICT, DS*ICT, IA*ICT, LS*ICT

In Table 4.3 the R square of .442 shows that the main predictors of the study explained about 44% of the variations in the dependent variable; the main predictors and the moderator explained about 47% of the variations in the dependent variable, while all the predictors, including the interaction terms explained 49% of the changes in the dependent variable. The R square change in 2b shows that the moderator (information and communication technology, ICT) explained additional 2% of the variance in the dependent variable, while R square change in 2c indicates that the interaction terms explained about 2.4% of the new variance above and beyond the two main effects. The R square change for 2c, the third step of the hierarchical regression analysis, which includes the interaction terms, was not significant at the five per cent level. This suggests that ICT did not significantly moderate the relationship between money laundering control and forensic auditing.

Therefore, there is insufficient evidence to reject hypothesis 4 which states that *ICT has no significant moderating effect on the relationship between forensic auditing and money laundering control in the Nigeria Police Force*. This means that ICT does not significantly moderate the relationship between forensic auditing dimensions and money laundering control in the Nigeria Police Force.

5. DISCUSSION OF FINDINGS

From Table 4.2 showed a correlation coefficient, 'r' of 0.95 and a significant P-value (0.000), which shows that there is a very strong positive relationship between investigative audit and money laundering control in Nigeria Police Force. This finding is in line with Ebilaowei et al. (2024) who studied investigative auditing and fraud control in Bayelsa State, Nigeria, and reported a positive and significant relationship between the variables. The table also showed a correlation coefficient, 'r' of 0.92 and a significant P-value (0.000), which shows that there is a very strong positive relationship between litigation support and money laundering control in Nigeria Police Force. This finding is in line with Nwodimkpa & Chukwu (2024) who studied the relationship between litigation support and asset misappropriation control in Rivers State, Nigeria, and reported a positive and significant relationship between the variables. Table 4.2 also showed a correlation coefficient, 'r' of 0.75 and a significant P-value (0.000), which shows that there is a very strong positive relationship between detection support and money laundering control in Nigeria Police Force. This finding is in line with Ingbaifegha et al. (2024) who studied investigative auditing and fraud control in Bayelsa State, Nigeria, and reported a positive and significant relationship between the variables.

Table 4.3 showed that ICT did not significantly moderate the relationship between forensic accounting dimensions and money laundering control. This study is not consistent with Ingbaifegha et al. (2024) who reported that ICT positively moderated the relationship between forensic audit and fraud control. The insignificant relationship in this study may be due to the conflicting role of ICT in fraud control. Couchoro et al. (2021) noted that the introduction of ICT increased the risk of money laundering in sub-Saharan Africa, and this worsens the level of poverty and unemployment in the region. On the other hand, ICT is capable of generating digital footprints that can be used by regulatory authorities to trace the movement of laundered money. This positive and negative effects of ICT on money laundering can lead

to a zero-sum game where the use of ICT will not significantly affect the relationship between forensic auditing and money laundering control. This is likely the case with the findings of the current study.

6. CONCLUSION AND RECOMMENDATION

This study evaluated the relationship between forensic audit and money laundering control in the Nigeria Police Force using survey evidence generated from 162 police officers in Rivers State, Nigeria. The dimensions of forensic auditing were investigative audit, litigation support, and detection skill. The theoretical anchor of the study is the White-Collar Crime Theory. Findings based on Pearson correlation of the variables showed that investigative audit, litigation support and detection skill, had a strong positive relationship with money laundering control. However, information and communication technology (ICT) did not have a significant moderating effect on the relationship between forensic audit and money laundering control, possibly because ICT deployment may have a positive and sometimes a negative effect on fraud control. It is therefore recommended that forensic audit techniques should be continually emphasized and improved upon to mitigate money laundering practices.

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