

EFFECT OF FORENSIC ACCOUNTING MECHANISM ON FRAUD CONTROL IN SELECTED NIGERIAN FEDERAL GOVERNMENT PARASTATALS IN SOUTHWESTERN NIGERIA

Abstract

The growing demand for forensic accounting is a known characteristic of most companies in the world. Forensic accounting arises from the effect and cause of fraud and technical error made by human. Hence, this study examined the effect of forensic accounting mechanism on fraud control in selected Nigerian federal government parastatals in southwestern Nigeria. The study employed survey design using well-structured questionnaire. The population of the study comprises of all federal government parastatals in Nigeria while the study sample size comprises of selected forensic accountant of finance units of Department and Agencies in Osun, Lagos, Ogun, Oyo, Ondo, and Ekiti States in Nigeria. Purposive sampling technique was used to select respondents revealed that most of the respondents were male, married, average age of 41-50 years with first degree educational qualification of HND/BSc and average work experience of 16-20 years. The result of the PPMC analysis indicated that there is a moderate positive correlation (0.453) between the effectiveness of the forensic accounting mechanisms and the ability to detect and prevent financial fraud in the parastatals. This correlation is statistically significant (p -value = 0.000), indicating that forensic accounting mechanisms improve, the ability to detect and prevent financial fraud. The study concluded that positive relationship exists between forensic accounting mechanism and financial fraud control in selected federal government parastatals. The study therefore concluded that government should consider advocating for the widespread adoption of forensic accounting mechanisms in government parastatals to enhance overall financial integrity.

Introduction

The growing demand for forensic accounting is a known characteristic of most companies in the world. Forensic accounting arises from the effect and cause of fraud and technical error made by human (Enofe *et al.*, 2017).

Fraud has become very complicated in this era of technology, and increasingly difficult to detect, especially when it is collusive in nature and committed by top management who are capable of concealing it. In this respect, auditors have argued that the detection of fraud should not be their responsibility (Ismail, 2021). Consequently, the term fraud in prior auditing standards referred to irregularity which incorporated fraudulent financial reporting as (Imoniana, *et al.*, 2018)

In forensic accounting, fraud preventive measures reduce fraud from occurring. However, fraud detective measures are enforced when fraud preventive measures failed to identify fraud (Idris, 2017). Fraud detection involves the use of fraud control policies, whistle blowing and fraud risk registers to act upon the discovery of fraud elements in financial statements or financial transactions. Gbegi and Okoye (2018) asserted that fraud detection is a set of forensic activities continuously undertaken to prevent money or property from being obtained through false pretenses. Forensic detective measures are used to checkmate the intelligent criminal

strategies of fraudsters. Fraud detection is gaining importance in the corporate world because of the increasing rates of white collar crime committed across all levels of government, management of companies and categories of employees. In the private and public sectors of Nigeria, fraud detection is not a welcome idea because fraud a big business that is supported by Nigerians who are friends with the ruling political powers of the day.

Forensic accounting provides cultural mediation for economic and political logics (Williams, 2015). It is the venue within which the cultural mediation of legal and economic claims is accomplished. The first decade of the twenty-first century experienced a tsunami or blizzard in the number of corporate scandals, frauds, and failures (Umara *et al.*, 2016). These events precipitated and contributed to the Great Recession and significantly impacted the efficient functioning of free market capitalism. Some of which were actually facilitated by public accountants (Enron & Arthur Andersen). The scandals, frauds, and failures have contributed to the loss of confidence by the financial statements users in the ability of public accounting to contribute viable solutions to the financial problems, and have fuelled the growth in demand for forensic accountants (Olaniyan & Awe, 2021). However, Nigerian public sector had been found involved in fraud. This is because it is always possible for high level management to access data and change the information, paper-based system or a computerized system alike. It all relates back to human nature and high level management.

Williams (2015) states that forensic accounting is recognized as having a particular form of professional expertise and endowed with identifiable attributes among which are rationality, neutrality, and independence. Forensic accountants possess a particular social recognition, observation that is critical to the translation of economic issues into symbolic displays of trust. The critical social value that forensic accountants possess is the symbolic capacity by which the translation is realized. The frequent reports of fraudulent practices in Nigeria justify the application of forensic accounting in the public and private sector. The establishment of Independent Corrupt Practices and other Related Offences Commission (ICPC) and the Economic and Financial Crimes Commission (EFCC) saddled with the responsibilities of fighting and curbing the menace of corruption, frauds and fraudulent practices have not really performed their duties to the expectation of Nigerians and observers in the international communities. Civil servants and political leaders are busy embezzling public funds through financial misappropriation while management staff are laundering and engaging in sharp corrupt practices without fears of getting caught.

The organised nature of fraud in the public and private sectors in Nigeria is systematic and multi-dimensional. This requires systematic integration of forensic accounting skills and knowledge due to the inability of external and internal auditors to detect fraud and other economic crime carried out by public servants and private

employees in Nigeria. Therefore, the extent to which forensic accounting affects financial misappropriation in the Nigerian public sector is yet to be fully and clearly projected and required further empirical evidence in the Nigerian socio-cultural context. Thus, the study makes it imperative to examine the nexus between forensic accounting mechanism and fraud control in selected federal government parastatals.

Literature Review

Conceptual Issues: Forensic Accounting

Forensic accounting is the use of laws of nature to the laws of man. This is normally carried out by forensic scientists as interpreters and examiners of facts and evidence in legal case that also gives expert opinion concerning their findings in a court of law. Fyneface and Oseiweh (2017) affirm that forensic accounting is essential investigative device for the detection of fraud. Mukoro *et al.*, (2013) opined that forensic accounting helps in introducing useful internal control and fraud prevention in an organization as well as described forensic accounting as the mixture of auditing and investigation skills. Al Samara *et al.*, (2017) define forensic accounting as the use of criminal method and incorporation of investigative accounting issues and law processes to investigate and detect financial crimes and other economic malpractices. They view forensic accounting as the combination of auditing, accounting, and investigative skills. Forensic accounting is appropriate for legal matter, offering the highest rate of assurance (Blessing, 2015).

Adrian and Lawrence (2019) also described forensic accounting as the use of accounting and analytical skills to a level satisfactory by the competent court to handle matters in contention in the perspective of both criminal and civil litigation. Fraud can be a theme to forensic accounting because fraud can include the illegal acquisition of property, concealment or falsification. Forensic accounting knowledge can assist the accountant in preparing convincing facts from the previous records against the prosecutors in the court of law (Nekede & Oko, 2013). Forensic accounting has to a great extent become an interest area to accountants and auditors.

A study carried out by Imoniana *et al.*, (2018) revealed that 42 % of organizations have opined the call for forensic accountants due to the rapid increase in fraudulent activities and related economic crimes. According to Popoola *et al.* (2014), forensic accountants are trained to dig outside the figures and deal with the realities of circumstances. They also noted that forensic accounting include: scrutinizing, examining financial facts, creating computerized applications to support in the investigation and presentation of financial evidence and

communicating their finding in form of reports, displays and assemble records, and help in legal proofs, including attesting in court, as professional witness and setting up visual aids in supporting trial verification. Okafor and Agbiogwu (2016) itemize the classification of fraud based on the modes of perpetration which include the repression, outstripped, and embezzlement, tampering with reserves, fake payment, theft defalcation, unauthorized lending, deceitful replacements, lending money to faceless borrowers, fictitious contracts and the rest.

Forensic Accounting Mechanism

According to Umar, (2016) forensic accounting in the public sector involves applying forensic accounting techniques to investigate financial fraud, misconduct, and other irregularities within government agencies and organizations. Some types of forensic accounting in the public sector include: **Public**

funds investigation: Forensic accountants may investigate the misappropriation or misuse of public funds, including embezzlement, bribery, kickbacks, and other fraudulent activities within government agencies. They may analyze financial records, contracts, and transactions to identify discrepancies or irregularities, trace funds, and uncover financial misconduct.

Procurement fraud investigation: Forensic accountants may investigate procurement fraud, which involves fraudulent activities related to the procurement process in government agencies, such as bid rigging, contract fraud, and collusion among suppliers. They may examine procurement documents, contracts, and financial records to identify any irregularities, conflicts of interest, or fraudulent practices (Umar *et al.*, 2016).

Grants and contracts compliance: Forensic accountants may assess compliance with grant and contract requirements in the public sector. They may review financial records, contracts, and invoices to ensure that funds are used for their intended purposes, and that the terms and conditions of grants and contracts are followed. They may also verify the accuracy and completeness of financial reports submitted to government agencies (Nonye and Okoli, 2015).

Internal control and risk assessment: Forensic accountants may evaluate the effectiveness of internal controls and assess the risk of financial fraud and misconduct within government agencies. They may review financial policies and procedures, assess the design and implementation of internal controls, and

provide recommendations to strengthen controls and reduce the risk of fraud (Nekede and Oko, 2013).

Whistleblower investigations: Forensic accountants may conduct investigations into allegations of fraud, waste, or abuse reported by whistleblowers within government agencies. They may analyze financial records, conduct interviews, and gather evidence to determine the validity of the allegations and uncover any fraudulent activities (Mukoro, 2013).

Theoretical Framework

In the course of this study, the researcher anchor the work on Policeman Theory. The policeman theory claims that the auditor is a policeman and as such should focus on the arithmetical accuracy of financial figures and records. It thus expects the auditor to prevent and detect fraud, which again is the argument of financial statement users. However, it suggests that auditors are watch-dogs, but not blood hounds. Evidently from the theoretical submissions, it is clear that the preponderance of opinion is in favour of audit combining both roles of being a watch-dog as well as a blood hound. Audit is a creation of society and its continued relevance is a function of meeting society's expectation. Thus, it incumbent on the audit professional to give up its traditional role and embrace the much wider role arising from societal expectation.

Society itself is dynamic and not static and therefore audit cannot remain in its traditional defined role. The character of human economic transaction is changing and human greed appears to be on the rise thus foreclosing the traditional held strong views of morality and contentment. This greed propelled behaviour is leading to primitive acquisition and so called smart actions within a globalized personal acquisition world frame. Respect in society within human social interactions is increasingly be defined by wealth and even the might of nations is defined by economic power, thus creating an enabling environ for so called smart wealth acquisition models

Review of Empirical Studies

Okoye *et al.* (2019) empirically examines the effect of forensic accounting mechanism on fraud control. The objectives were to find the effectiveness of forensic accounting in fraud prevention and the positive effect of forensic litigation on recovery of funds lost to fraud. Survey design was adopted. Questionnaire was used in data collection from accounting staff of Nigeria

Breweries Plc, Cadbury Nigeria Plc, Nigeria Bottling Company and Dupril Forma Nigeria Ltd, all in Aba, Abia State. 190 were used as sample size. The study adopts descriptive statistics which involves the use of mean and standard deviation while regression analysis was adopted to test the stated hypotheses. Findings revealed that forensic accounting significantly influence fraud detection and prevention. It was also revealed forensic litigation has no significant positive effect on recovery of funds lost to fraud. Based on the above, it is recommended that companies in Nigeria step up their forensic accounting practices in order to detect fraud

Joy and Alexandra (2020) explores the impact of forensic accounting on misappropriation of fund in public and private sectors in Abuja metropolis, Nigeria, from the accountants' perspective. The study adopted descriptive survey design. A sample of 43 accounting officers from selected four federal ministries of government and five private multinational organisations operating in Abuja metropolis, Nigeria. Findings of the study revealed that accounting officers in the private and public sectors strongly agreed that forensic accounting has an impact on misappropriation of fund. The study further disclosed that accountants from the public sectors and private sectors do not differ significantly in their mean ratings on the impact of forensic accounting on misappropriation of fund in Abuja metropolis. The study concluded that genuine compliance of forensic accounting principles by internal and external auditors will not only reduce corporate frauds but also improves the financial reporting quality of accountants in the public and private sectors of the business world. It was recommended among others that government should establish an independent forensic accounting agency with legal provisions that will enable them to detect, monitor and report fraudulent activities in the business environment in Nigeria.

Olaniyan and Awe (2021) examined the influence of forensic accounting as a tool for fraud prevention of financial misappropriation in Nigeria. It specifically examined the influence of forensic accounting on fraud prevention and fraud detection in MDAs in Nigeria. The study was predicated on the policeman theory, white collar theory and fraud diamond theory. Primary source of data was employed through the use of questionnaire which covered the period of 10 years spanning from 2010-2019. A cross sectional Survey design was adopted. Questionnaire was used in data collection from staff of Integrated Personnel Payroll Information System and Office of the Account General of Federation. Seventy-five questionnaires were used as sample size. The study adopts descriptive statistics which involves the use of mean and standard deviation while

regression analysis was adopted to test the stated hypotheses. Findings revealed that forensic accounting have significant influence on fraud detection and prevention. It was also revealed forensic litigation has no significant positive effect on recovery of funds lost to fraud. The study recommends that forensic accounting system should be allowed as a procedure for internal control systems, so as to prevent or reduce the level of income leakages, mismanagement of funds and budget padding.

Methodology

The study employed survey design using well-structured questionnaire. The population of the study comprises of all federal government parastatals in Nigeria while the study sample size comprises of selected forensic accountant of finance units of Department and Agencies in Osun, Lagos, Ogun, Oyo, Ondo, and Ekiti States in Nigeria. Purposive sampling technique was used to select the sample size. Both descriptive and inferential statistics were employed for the purpose of the data analyse. Descriptive statistics involved the use of frequencies, tables, figure and percentage to analysis the socio-economic characteristics of the respondents while inferential statistics of Pearson Product Moment Correlation (PPMC) was used to analyse the relationship between forensic accounting mechanism and fraud control.

Results and Discussion

Relationship between forensic accounting mechanism and fraud control in selected federal government parastatals

In an attempt to examine the relationship between forensic accounting mechanism and financial fraud control in selected federal government parastatals, descriptive statistics such as percentage frequencies was employed while inferential statistics such as multiple regression analysis were presented in Table

1. From Table 1, 15.2% of the total respondents strongly agreed that forensic accounting mechanisms are specifically designed to detect and prevent financial fraud in government parastatals, 15.7% of the total respondents agreed that forensic accounting mechanisms are specifically designed to detect and prevent financial fraud in government parastatals, 44.2% of the total respondents strongly couldn't decide whether forensic accounting mechanisms are specifically designed to detect and prevent financial fraud in government parastatals, 14.0% of the total respondent disagreed that Forensic accounting mechanisms are

specifically designed to detect and prevent financial fraud in government parastatals and 10.9% of the total respondents strongly agreed that forensic accounting mechanisms are specifically designed to detect and prevent financial fraud in government parastatals.

From Table 1, 24.9% of the total respondents strongly agreed that forensic accounting mechanisms involve the collection and preservation of evidence in a legally admissible manner, 13.2% of the total respondents agreed that forensic accounting mechanisms involve the collection and preservation of evidence in a legally admissible manner, 39.3% of the total respondents couldn't decide that forensic accounting mechanisms involve the collection and preservation of evidence in a legally admissible manner, 12.2% of the total respondents disagreed that forensic accounting mechanisms involve the collection and preservation of evidence in a legally admissible manner and 10.4% of the total respondents strongly disagreed that forensic accounting mechanisms involve the collection and preservation of evidence in a legally admissible manner.

From Table 1, 25.4% of the total respondents strongly agreed that forensic accounting mechanisms take a proactive approach to fraud control by conducting regular audits and investigations to identify potential fraud risks before it result in financial losses, 9.9% of the total respondents agreed that forensic accounting mechanisms take a proactive approach to fraud control by conducting regular audits and investigations to identify potential fraud risks before it result in financial losses, 44.2% of the total respondents couldn't decide that forensic accounting mechanisms take a proactive approach to fraud control by conducting regular audits and investigations to identify potential fraud risks before it result in financial losses, 9.9% of the total respondents disagreed that forensic accounting mechanisms take a proactive approach to fraud control by conducting regular audits and investigations to identify potential fraud risks before it result in financial losses and 5.3% of the total respondents disagreed that forensic accounting mechanisms take a proactive approach to fraud control by conducting regular audits and investigations to identify potential fraud risks before it result in financial losses.

From Table 1, 19.6% of the total respondents strongly agreed that forensic accounting mechanisms contribute to building a strong internal control system in government parastatals, 14.5% of the total respondents agreed that forensic accounting mechanisms contribute to building a strong internal control system in government parastatals, 43.0% of the total respondents couldn't decide that Forensic accounting mechanisms contribute to building a strong internal control system in government parastatals, 12.3% of the total respondents disagreed that forensic accounting mechanisms contribute to building a strong internal control

system in government parastatals and 10.6% of the total respondents strongly disagreed.

From Table 1, 42.6% of the total respondents strongly agreed that promoting the use of forensic accounting mechanisms further strengthen financial fraud control in government parastatals., 19.0% of the total respondents agreed that promoting the use of forensic accounting mechanisms further strengthen financial fraud control in government parastatals., 15.7% of the total respondents couldn't decide whether the promoting the use of forensic accounting mechanisms further strengthen financial fraud control in government parastatals., 11.4% of the total respondents disagreed that promoting the use of forensic accounting mechanisms further strengthen financial fraud control in government parastatals and 11.2% of the total respondents strongly agreed that promoting the use of forensic accounting mechanisms further strengthen financial fraud control in government parastatals.

Table 1 Relationship between forensic accounting mechanism and financial fraud control in selected federal government parastatals

S/N	Variables	SA (%)	A (%)	UD (%)	D (%)	SD (%)
1.	Forensic accounting mechanisms are specifically designed to detect and prevent financial fraud in government parastatals.	60 (15.2)	62 (15.7)	174(44.2)	55 (14.0)	43 (10.9)
2.	Forensic accounting mechanisms involve the collection and preservation of evidence in a legally admissible manner.	98 (24.9)	52 (13.2)	155 (39.3)	48 (12.2)	41 (10.4)
3.	Forensic accounting mechanisms take a proactive approach to fraud control by conducting regular audits and investigations to identify potential fraud risks before it result in financial losses.	100 (25.4)	39 (9.9)	174 (44.2)	39 (9.9)	21 (5.3)
4.	Forensic accounting mechanisms contribute to building a strong internal control system in government parastatals.	35 (19.6)	26 (14.5)	77 (43.0)	22 (12.3)	19 (10.6)
5.	Promoting the use of forensic accounting mechanisms further strengthen financial fraud control in government parastatals.	168 (42.6)	75 (19.0)	62 (15.7)	45 (11.4)	44 (11.2)

Source: Researchers computation using SPSS version 22

Test of Hypothesis

The analysis in table 2 showed that there is a moderate positive correlation (0.453) between the effectiveness of the forensic accounting mechanisms and the ability to detect and prevent financial fraud in the parastatals. This correlation is statistically significant (p-value = 0.000), indicating that as forensic accounting mechanisms improve, the ability to detect and prevent financial fraud also improves. Also, there is a strong positive correlation (0.537) between the effectiveness of forensic accounting mechanisms and the capacity to collect and preserve evidence related to financial fraud. This correlation is highly statistically significant (p-value = 0.000), indicating that as forensic accounting mechanisms become more effective, the ability to collect and preserve evidence also increases significantly. Furthermore, a strong positive correlation (0.633) exist between the effectiveness of forensic accounting mechanisms and the ability to identify potential fraud risks within the parastatals. This correlation is highly statistically significant (p-value = 0.000), demonstrating that as forensic accounting mechanisms improve, the capacity to identify potential fraud risks also increases significantly. The analysis also indicated a moderate positive correlation (0.383) between the effectiveness of forensic accounting mechanisms and the establishment of a strong internal control system to prevent financial fraud. This correlation is statistically significant (p-value = 0.000), indicating that as forensic accounting mechanisms improve, the development of a robust internal control system also improves. Apparently, there is a strong positive correlation (0.651) between the effectiveness of forensic accounting mechanisms and the strengthening of financial fraud control measures in the parastatals. This correlation is highly statistically significant (p-value = 0.000), demonstrating that as forensic accounting mechanisms become more effective, financial fraud control measures are significantly strengthened.

Table: 2. Pearson Correlation Results of the relationship between forensic accounting mechanism and financial fraud control in selected federal government parastatals.

Variables	Correlation coefficient	Probability value	Remark
Detection and prevention of financial fraud	0.453**	0.000	Significant
Collection and preservation of evidence	0.537**	0.000	Significant
Identify potential fraud risks	0.633**	0.000	Significant
Building a strong internal control system	0.383**	0.000	Significant
Strengthen financial fraud control	0.651**	0.000	Significant

* = 10% significant

** = 5% significant

*** = 1% significant

Source: Researchers computation using SPSS version 22

Conclusion and Recommendation

Based on the summary of findings of this study, it was concluded that positive relationship exists between forensic accounting mechanism and financial fraud control in selected federal government parastatals. The study therefore recommended that government should consider advocating for the widespread adoption of forensic accounting mechanisms in government parastatals to enhance overall financial integrity.

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