Forensic Accounting and Firms Performance of Cement Companies in Nigeria: A Study of Cement Company of Northern Nigeria

Abdulsalam Nasiru, Kaoje (Ph.D) Abubakar Sabo, Yabo (Ph.D) Modibbo, Abubakar Abdulhadi, Nanafirdausi

I. INTRODUCTION

Forensic accounting is a specialized area of accounting that describes engagement which emanates from actual or anticipated disputes or litigation. Forensic accounting, also called investigative accounting or fraud audit or forensic audit, is a merger of forensic science and accounting.

Forensic accounting utilizes auditing and investigative skills to conduct an examination into a company’s financial statement. Thus, forensic accounting provides an accounting analysis suitable for court. Forensic accountants are trained to look beyond the numbers and deals with the business reality of a situation. They are frequently used in fraud cases.

In order to ensure proper firms performance, accountability and prevent fraud by the management, the forensic accountant who is an expert in financial fraud matters with special skills in scientific knowledge and legal matters could help management to improve performance in its firm. Though, quite new in Nigeria today, organizations has realized that there is need for the services of forensic accountant as the frequency of fraudulent financial practices have continued to be on the increase.

It has been claimed by some researchers such as Giehira and Thambo (2003) cited in Omondi Oyier (2003), that manufacturing firms in Nigeria have collapse due to fraudulent activities and lack of forensic accounting practice perpetrated by management and employees.

An empirical investigation conducted by Akhidime and Ekatah (2014) on the growing relevance of forensic accounting as a tool for combating fraud and corruption reveals that forensic accounting is still at its infancy stage in Nigeria and that most Nigerians seem to assume there is no clear difference between forensic accounting and auditing services.

Emeh and Obi (2013), opined that the practice and development of forensic accounting are relatively very much lower in developing countries like Nigeria. Ezeagba (2014) asserts that though the study of forensic accounting is fairly new and has not gained statutory recognition in Nigeria, forensic accounting has the potential or what it takes to positively impact on the quality of financial statement produced in Nigeria.

Enofe, et. Al (2013), regret that the specific problem with fraud in Nigeria business environment is the negative effect on corporate earnings and a loss of investors’ confidence.

Furthermore, Okunbo (2010), opines that forensic accounting were not effective in deterrence of fraud. The incidence of forensic accounting is neither limited to banks, industries, companies nor peculiar to Nigeria economy. However, the
high rate of fraud within the firm calls for forensic accounting attention as it affect the firms’ performance with a view to finding lasting solution. In view of the above problems, the study tends to assess forensic accounting and firms’ performance in cement companies in Nigeria, as this will help in the deterrence of fraudulent practices.

1.1 Objectives of the paper

The main aim of this paper is to assess forensic accounting and firms’ performance. The specific objectives are to assess the significant relationship between:

1. Forensic accounting and return on asset.
2. Forensic accounting and return on equity.
3. Forensic accounting and net profit margin

1.2 Hypotheses of the paper

This paper came-up with three null hypotheses.

1. There is no significant relationship between forensic accounting and return on asset.
2. There is no significant relationship between forensic accounting and return on equity.
3. There is no significant relationship between forensic accounting and net profit margin.

II. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Literature Review

According to Osisioma (2013), forensic accounting clearly demands a change in scope, method and operational style for accountants. In financial audits, accountants are alert to signs or evidence of errors and irregularities of a material nature. Small errors are of less concern to financial auditors. Conversely, forensic accountants are very much concerned about small errors and irregularities, particularly if they seem to be related to the modus operandi of corrupt employees and fraudsters. Criminals usually cannot bury all their tracks, small errors and irregularities may therefore be the tip of a fraudulent iceberg. Hence, the forensic accountant is expected to look out for evidence of control procedure exceptions, accounting classification anomalies and oddities in financial trends.

Singleton, T. W and Singleton A.J (2004), states that according to some, forensic accounting is one of the oldest professions and back to the Egyptians. The “eyes and ears” of the king was a person who basically served as a forensic accountant for Pharaoh, watchful over inventories of grain, gold and other assets. From the above, it can be said that forensic accountant are financial experts which use and applies scientific knowledge to detect fraud and crime in legal matters, which may be criminal or civil disputes.

According to Jafaru (2011), forensic and investigative accounting should be seen as the application of financial skills and investigative mindset conducted within the context of the rules of evidence to resolve unresolved issues. Degboro and Olofin sola (2007), note that forensic investigation is about the determination and establishment of fact in support of legal case. That is, to use forensic techniques to detect and investigate a crime is to expose all its attending features and identify the culprits.

Lindquist (1995) as cited by Chariri (2009), noted that as an investigator, forensic accountants should be seen as those who are specialists in fraud detection, and particularly in documenting exactly the kind of evidence required for successful criminal prosecution; able to work in complex regulatory and litigation environments; and with reasonable accuracy, can reconstruct missing, destroyed, or deceptive accounting records.

2.2 Forensic Accounting and Quality Assurance Of Firms Performance

The increasing spate of devolution of power from ownership to management has increased in the last decade and has now more than ever triggered off the need for quality assurance of firms performance and financial statements. A qualitative financial statement should be devoid of any misstatement or misrepresentations. Kristic(2009), advocates the need for the broader accounting public and users of financial statements to base their decisions on information that shows the real picture of financial and revenue position of an enterprise. Fraudulent misrepresentation can range from overvaluation of inventory and improper capitalization of expenses to misstatement of earnings and embezzlement (Harris & Brown 2000; Messmer 2004 in Digabriele, 2008).

2.3 Firm Performance Measurement

Measurement of performance can offer significant invaluable information to allow management’s monitoring of performance, report progress, improve motivation and communication and pinpoint problems (Waggone, Neely & Kenmerley, 1999). Accordingly, it is to the firm’s best interest to evaluate or measure its performance. Nevertheless, this is a management area characterized by lack of consistency as to what constitutes organizational performance.

On a similar note, Bititci et al. (1997), contended that performance measurement is at the core of the performance management process and it is of significance to the effective and efficient workings of firms’ performance. In management, the significance of performance is clear through the many prescriptions provided for performance enhancement. Research dedicated to forensic accounting relationship with firms’ performance was highly dependent on accounting-based indicators. Some studies have adopted individual measurements (accounting-based or market-based measurements). Although there are widely measurements of performance with many which it related to much fields but we tried to execute this measurement regarding to firms’ performance.

The countless number of ways has been brought forward to measure firms’ performance and among them are:
measurement of performance are the level of Return on Assets (ROA),
Return on Equity (ROE), Net Profit Margin (NPM), Earnings Per Share (EPS), Divided Yield (DY), Price-Earnings Ratio (PE), Return on Sales (ROS), Operating Cash Flow (OCF), Return on Capital Employed (ROCE), Return on Investment (ROI), Growth in Sales (GRO), Return on revenue (ROR), Return on Fixed Assets (ROFA) etc. Most of these proposed measures have been utilized by studies regarding firms’ performance.

2.4 Theoretical Review

Forensic accounting is a discipline that has its own models and methodologies of investigative procedures that search for assurance, attestation and advisory perspective to produce legal evidence. It is concerned with the evidentiary nature of accounting data, and as a practical field concerned with accounting fraud and forensic auditing; compliance, due diligence and risk assessment; detection of financial misrepresentation and financial statement fraud (Skousen and Wright, 2008); tax evasion; bankruptcy and valuation studies; violation of accounting regulation (Dhar and Sarkar, 2010).

There are two theories that are of interest to this study. These theories which are profession theory and relative size factor theory would help in assessing forensic accounting and firms’ performance. They are explained below;

2.4.1 Profession Theory

The Profession Theory provides an analytical lens with which to understand the characteristics, attributes and structures of forensic accounting. Therefore, the theory of Profession is described as the power and reputation granted by society to the profession in terms of protecting public interest where professional acquire a body of knowledge, which is connected to the major needs and values of the social and accounting system (Pollock and Amernic, 1981). Professionals are expected to commit their services to the interest of the public rather than the interests of their clients or self-interest (Pollock and Amernic, 1981). Therefore, accounting professionals are regarded as a mechanism to protect public interest as they are required to be act above and beyond material incentives (Larson, 1977). In the context of this paper, the Theory of Profession provides a useful framework for identifying the functions and characteristics of forensic accounting. (Canning and O’Dwyer, 2001), which is consistent with the necessary requirements and qualifications to work in the field of forensic accountancy.

2.4.2 Relative Size Factor (RSF) Theory

According to Manas (2014), relative size factor theory shows all unusual fluctuations, which may be arise from fraud or genuine errors. RSF is measured as the ratio of the largest number to the second largest number of the given set. In practice there exist certain limits (e.g financial) for each entity such as vendor, customer, employee, etc. These limits may be defined or analyzed from the available data if not defined. The RSF Theory provides a framework for establishing the relationship between forensic accounting and firms’ performance (ROA, ROE and NPM).

2.5 Empirical Reviews

Some of the empirical studies related to this paper have thus far revealed divergent outcomes. Notable among this studies are:

Ogbeide and Akenbor (2017), in their research indicate that there is a significant relationship between forensic accounting and reduction of fraudulent practices in the Nigeria public sector. The study recommends that government and regulatory authorities need to ensure the provision of standards and guidelines to regulate forensic activities and above all, Nigerians should embrace integrity, objectivity, fairness and accountability in their day-to-day activities particularly in the public sector. The point of view of their findings and expression is that stakeholders’ concern/ pressure should propel the agents entrusted with the management of establishment to embrace the use of forensic accounting services at unraveling the depth and level of frauds/ corruption perpetrated.

Ijeoma (2015), empirically examined forensic accounting techniques in curbing creative accounting. It was revealed that strong evidence exists on the effectiveness of techniques used by forensic accountants in helping to curb the problem of creative accounting. It was also established from the findings of this study that there is need that forensic accountants must possess solid knowledge and skills in the area of accounting and auditing and they are expected to develop capability in verbal and written communication, potentials in perceiving details and of the efficient application of investigative activities as well as a considerable degree of knowledge about information technologies in accounting and auditing procedures (Ijeoma, 2015).

Gbegi and Adebisi (2014), examined forensic accounting skills and techniques in fraud investigation in the Nigerian public sector in which they concluded that forensic accounting skills and techniques have significant effect on uncovering and reducing fraud in the Nigerian public sector.

III. METHODOLOGY

This paper adopts survey approach which involves the use of a questionnaire that was personally administered by the researchers. The paper principally makes use of primary data collection through the administration of the questionnaire design for that purpose. The paper sought to assess forensic accounting and firms’ performance. The questionnaire was subdivided into two sections containing different items with reference to hypothesis testing.

The target population of interest of this paper comprised of all staff under the administrative block of Cement Company of Northern Nigeria PLC.Since the population of the paper
consists of staff in the company which is too large for this research purpose. The researcher decided to narrow its respondents to thirty four (34) using the purposive sampling method. The motive behind sampling is to use the information obtained from a part of the population to take decision on the whole. Secondary data was also used to derive qualitative data from journals, articles and internet for the validity and reliability of the research work. The data collected and presented was analyzed and tested for validity. The technique of data analysis used to measure the consistency of the test in this research was the multiple regression analysis. Tables and frequency were used to represent data. Therefore, question are to be tested through the hypothesis and analysis will be built to summarize information in the question relating to the research based on the 5-Scale Likert questionnaire which is:

5 = Strongly Agree (SA)
4 = Agree (A)
3 = Undecided (U)
2 = Disagree (D)
1 = Strongly Disagree (SD)

The Models

Multiple regression analysis was used with the aid of Statistical Package for Social Sciences (SPSS) to assess forensic accounting and firms’ performance. The mathematical form of this model of multiple regression analysis formula is:

\[ Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \epsilon \]

Where:
Y = dependent variable
\(\alpha\) = Intercept or Constant
\(\beta\) = Slope of the regression line with respect to the independent variable
X = independent variables
\(\epsilon\) = error terms

If the p-value is less than the significant acceptance critical value, reject null hypothesis and accept the alternative hypothesis. Reject \(H_0\) at 5% (0.05) level of significance.

Model Specification
F.ACC = \(\alpha + \beta_1ROA + \beta_2ROE + \beta_3NPM + \epsilon\)

Where;
F.ACC = Forensic Accounting
ROA = Return on Asset
ROE = Return on Equity
NPV = Net Profit Margin

IV. DISCUSSION OF FINDINGS

4.1 Test of Hypotheses

Hypothesis 1: There is no significant relationship between Forensic Accounting and Return on Asset

The regression line F.ACC = -0.895 + 1.132ROA indicates that Forensic Accounting (F.ACC) increases by 1.132 units for every 1 unit increase in Return on Asset (ROA). The p-value of 0.001 is less than the t-value of 0.05, the study therefore rejects Null Hypothesis which states that there is no significant relationship between forensic accounting and return on asset. This is collaborated by the correlation coefficient (r) of 0.989 which shows that the predictors have a strong positive relationship and coefficient of determination \((r^2)\) of 0.977 which indicates that about 98% of variation in forensic accounting can be explained by return on asset. In the absence of return on asset, forensic accounting reduces by 0.895 as indicated by constant (\(\alpha\)).

Hypothesis 2: There is no significant relationship between Forensic Accounting and Return on Equity

The regression line F.ACC = -0.296 + 1.044ROE indicates that forensic Accounting (F.ACC) increases by 1.044 units for every 1 unit increase in Return on Asset (ROA). The p-value of 0.038 is less than the t-value of 0.05, the study therefore rejects Null Hypothesis which states that there is no significant relationship between forensic accounting and return on equity. This is collaborated by the correlation coefficient (r) of 0.899 which shows that the predictors have a strong positive relationship and coefficient of determination \((r^2)\) of 0.808 which indicates that about 81% of variation in forensic accounting can be explained by return on equity. In the absence of return on equity, forensic accounting reduces by 0.296 as indicated by constant (\(\alpha\)).

The above results is in line with the research work carried out by Emmanuel et al.(2018), based on the relationship of forensic accounting with the integrity of financial statements, the study revealed that about 23% of the integrity of financial statement which shows the return on equity is attributed to forensic accounting. That is, there is a significant relationship between forensic accounting and return on equity.

Hypothesis 3: There is no significant relationship between Forensic Accounting and Net Profit Margin.

The regression line F.ACC = 0.619 + 0.909NPM indicates that forensic Accounting (F.ACC) increases by 0.909 units for every 1 unit increase in Net Profit Margin (NPM). The p-value of 0.036 is less than the t-value of 0.05, the study therefore rejects Null Hypothesis which states that there is no significant relationship between forensic accounting and net profit margin. This is collaborated by the correlation coefficient (r) of 0.902 which shows that the predictors have a strong positive relationship and coefficient of determination \((r^2)\) of 0.814 which indicates that about 81% of variation in forensic accounting can be explained by net profit margin. In
the absent of net profit margin, forensic accounting stands at 0.619 as indicated by constant (α).

The above results is in line with the research carried out by Enofe et al. (2015) which revealed that forensic accounting enables firm to continually inspect the financial statement which shows the net profit margin in order to detect all intended and unintended frauds and obtain accurate profit margin.

4.2 Summary of Major Findings

The study revealed that forensic accounting has significant relationship with firms’ performance in terms of return on asset, return on equity and net profit margin.

The study aligns with the relative size factor theory which explains that variables needs to be related to one another in order to establish their relationship.

The correlation coefficients (r) in the respective hypothesis indicated strong positive relationship between the variables. Also, the coefficients of determination (r²) in all hypothesis revealed that more than 79% of variation in forensic accounting is explained by firms’ performance. It is also shown that return on asset as a measure of firms’ performance has influence on forensic accounting. Followed by return on equity and net profit margin.

V. RECOMMENDATIONS

In line with the above summary of findings and conclusions of the paper, the following recommendations are made since the practice and development of forensic accounting are fairly low in existing companies;

1. Government should encourage the practice of forensic accounting by providing adequate training and resources to forensic accountants such that they become an expert in their particular field of expertise.

2. Forensic accounting should be introduced in organizations as a compulsory tool in dealing with financial fraud and corruption in order to promote firms’ performance by adopting fraud detection techniques in forensic accounting.

3. Finally, the paper recommends that, the Institute of Chartered Accountants of Nigeria and Association of National Accountants of Nigeria should encourage formalization and specialization in the field forensic accounting. In addition, the government should develop interest in forensic accounting for monitoring and investigation of suspected corruption cases.

REFERENCE


### APPENDICES

#### Model Summary

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a. Predictors: (Constant), Return on Asset

#### ANOVA

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a. Predictors: (Constant), Return on Asset

b. Dependent Variable: Forensic Accounting

#### Coefficients

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a. Dependent Variable: Forensic Accounting

#### Model Summary

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a. Predictors: (Constant), Return on Equity

#### ANOVA

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a. Predictors: (Constant), Return on Equity
# Model Summary

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b. Dependent Variable: Forensic Accounting

# Coefficients<sup>a</sup>

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# ANOVA<sup>b</sup>

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a. Predictors: (Constant), Net Profit Margin
b. Dependent Variable: Forensic Accounting

# Coefficients<sup>a</sup>

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a. Dependent Variable: Forensic Accounting