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Effect of Forensic Auditing on the Financial Performance of Quoted Food & Beverage Firms In Nigeria

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ABSTRACT

The aim of this study is to determine the effect of Forensic auditing on the financial performance of quoted food and beverage firms in Nigeria for the period of six years ranging from 2010 – 2016. The research design employed in this study is Ex-post facto research. An Ex-post facto research determines the cause-effect relationship among variables. Only secondary data was used in the study. The statistical tool used to test the hypothesis was STATA 13 statistical software, using coefficient of correlation which is a good measure of relationship between two variables. The study revealed that forensic auditing has a positive and statistically significant effect on ROA, ROE, and EPS of food and beverage firms quoted on the floor of Nigerian stock exchange at 5% level of significance. The researcher recommends that the management of food and beverage firms emphasize and enhance the use of forensic audit information as this will help in increasing the profitability. Secondly, appropriate sanctions should be applied when fraud is detected where prosecution is considered to be appropriate sanction, proper forensic audit procedures need to be followed during investigation and trained experts should conduct the investigation, where there is evidence of fraud, appropriate disciplinary action in accordance with public service rules should be implemented.

Keywords: Forensic auditing, Fraud, Financial profitability, investigation

INTRODUCTION

In recent years, cases of financial and economic fraud have been on increase. But the phenomenon of fraud is not static and every day new methods and methods of defrauding individuals, corporate bodies arise, even social habits and the environment as a whole.

Therefore, it is necessary to adopt important security and fraud detection measures that are capable of detecting and preventing any type of fraud, no matter how complex. One of these measures is forensic audit. This is developed above all in the field of public and private finances and is one of the types of audits that are mainly responsible for the investigation of fraud.

The forensic audit is a method of prevention of fraud and corruption, it puts in the hands of judges and the relevant legal authorities information and sufficient evidence to analyze and put as evidence in the judicial process, thus determining, based on legal texts , whether or not it is a fraud case or not.

Forensic auditing is also known as forensic accounting. A forensic auditor is a Certified Public Accountant (CPA) who uses special techniques to detect or prevent certain types of crime for businesses and government agencies.

Gallet (2010) presents in his work, a series of attempts to identify the dimension and determining factors of fraud by listing the studies of renowned experts in the field (Donald Cressey 1919-1987, Dr. Steve Albrecht 1980, Richard C. Hollinger – John P. Clark 1983 and Joseph T. Wells). All these approaches are however more oriented towards the behaviour of the person who commits the fraud (attitude, reasoning, pressures, and the work environment, personality) and less towards the identification and description of financial behaviours specific to fraud companies.

Fraud examiners from global accounting firms and local law firms are often hired by private and public organisations to investigate when there is suspicion of misconduct and financial crime (Button, Johnston, Frimpong, & Smith, 2007). The client organisation defines an investigation mandate with the hired examination firm, and fraud examiners from the firm conduct the investigation in the client organisation (Williams, 2014). At the end of investigation, fraud examiners present a report of investigation to the client organisation (Schneider, 2006). Very often, the report of investigation is kept secret and confidential, both in relation to the police and the general public (Gottschalk & Tcherni Buzzeo, 2017). Private policing by fraud examination is a growing business for global accounting firms such as BDO, Deloitte, Ernst & Young, KPMG, and PwC as well as local law firms in various jurisdictions. Because of limited access caused by secrecy, little is known about the performance of internal investigators in fraud examinations (Gottschalk & Tcherni Buzzeo, 2017).

This study is intended to unravel the effect of fraud examiners, forensic auditors on the financial performance of quoted food and beverage firms in Nigeria.

Statement of the Problem

The use of forensic auditing services as a method to detect fraud should have certain factors that engender intention to use it by establishments in Nigeria. Muruthsamy et al. (2010) initially examined the intention to use forensic auditing services; the study did not empirically evaluate factors precipitating the intention to use forensic auditing services in fraud detection and prevention in organizations. Hence this study is a departure from the study to examine how some variables could engender the intentions to use forensic auditing services in fraud detection and prevention in the Nigerian context. Intentions are assumed to capture the motivational factors influencing a behaviour; they serve as indications of how hard persons are willing to try, how much of an effort they are planning to exert in order to perform the behaviour (Ajzan, 1991). From the stands of the theory of reasoned action; all behaviours are predicated on intentions and only immediate cause for any action is an individual"s intention to engage in or refrain from that behaviour (Hedeker, Flay & Petraits, 1996).

Basically, the use of forensic auditing services is a function of the awareness people have about its efficiency against the normal audit. Theoretically, it suggests awareness as a factor could determine the use of forensic auditing services. The stance of this study is that a firm's intention to employ the services of forensic auditing in detecting and preventing fraud is hinged on how much awareness they have about the efficiency of forensic auditing services, the perceived benefits, perceived risks, attitudes and stakeholders" pressure. Some prior researchers such like Ogbeide and Akenbor (2017); Modugu and Anyaduba (2013); Okoye and Gbegi (2013); Enofe, Okpako and Atube (2013); Onurah and Ebimobowei (2012); Muthusamy, Quaddus and Evans (2010) examined the implication of forensic auditing and accounting services in organizations theoretically and to a large extent using some preliminary statistical tool, resulting to varying mixed and inconclusive findings. A lot of the prior studies particularly in the developing countries such as Nigeria have not empirically assessed factors that could influence the intention to use forensic auditing services in fraud detection and prevention by companies and public establishments in Nigeria, thus creating gap(s) in literature.

Consequently, in view of the above empirical findings there is an established gap owing to the divergent views of the various authors which could result from different measurement of variables, period of study, control variables used or not used and the number thereof, methodology, data type and statistical tools used.

This study sought to bridge this huge gap by examining the effect of Forensic auditing on the financial performance of quoted Food and beverage firms in Nigeria by considering variables such as red flags, fraud triangles, fraud diamond etc which have not been tested extensively in other researchers work.

Objectives of the Study:

The main objective of this study will be to examine the effect of forensic auditing on the financial performance of quoted food and beverage firms in Nigeria. However, the specific objectives shall be to:

1. Determine the effect of Forensic auditing on the financial performance of quoted Food and beverage firms in Nigeria.

2. Evaluate the roles of Forensic auditing on the financial performance of quoted Food and beverage firms in Nigeria.
3. To find out whether the existence of Forensic auditing has contributed to the growth of financial performance of quoted Food and beverage firms in Nigeria.

Scope of the Study

The study shall focus on the components of forensic auditing namely fraud examiners, red flags, forensic auditors, forensic audit, forensic accountants, and financial performance.

This study will be carried out mainly in the Manufacturing firms, precisely in Food and beverage firms quoted on the floor of the Nigerian Stock Exchange in the south-east geo-political zone in Nigeria. It will cover a period of three years ranging from 2014 – 2016.

Limitations of the Study

The limitations envisaged in the course of the study include the following:

Public officers fear to divulge information which to them may be detrimental to their work.

Non-availability of Research materials and Textbooks.

The World is a global village, current materials are put in the internet and the information is abridged and most textbooks are out-dated.

REVIEW OF RELATED LITERATURE

Conceptual Framework

Fraud is an intentional act designed principally to deceive or mislead another party (Arens & Loebbecke, 1996), and regardless of the form fraud is noticed, it is problematic to auditors to detect since the perpetrators take steps deliberately to conceal the resulting wrongdoings (Knapp & Knapp, 2001). In addition, fraud harms the character and the trustworthiness of the audit profession (Wuerges, 2011). Accounting researchers, practitioners, and standard setters alike uttered the concern for auditors‟ apparent failure in detecting fraud during an audit (Jamal, 2008; Wells, 2005; AICPA, 2002). The Association of Certified Fraud Examiner (ACFE) argues that financial statement auditors are not fraud examiner and also states that external audits are not the most efficient way to detect or limit fraud (ACFE, 2010). These viewpoints are also shared by this study based on the knowledge requirement, purpose and scope of the assignment.

The Certified Fraud Examiner is a Certificate awarded by the Association of Certified Fraud Examiners. The Association of certified fraud examiners is a provider of anti-fraud training and education. A certified fraud examiner often testifies his or her findings in cases of fraud allegation to resolve the issues. He or she commonly works with Attorneys and Law enforcement officers and assists in the arrest of individuals charged with fraud. Certified fraud examiner is professionally trained in detecting, investigating and resolving fraud cases.

Fraud Examiners

Fraud examiners compile and examine evidence to be used in fraud investigation in accordance with legal search regulations; their activities include analysing financial information, collecting evidence and interviewing witnesses and suspects. Fraud examiners determine whether a fraud has been committed and establish a case to prove it.

A fraud examiner must be partly an accountant and a detective. The accountant has a good working knowledge of financial books and records, ability to analyse the books and records, which results into various schedules and statements and act as a forensic accountant in court. The detective has the ability to interview witnesses and discover evidence and has knowledge of criminal law, especially the rules of evidence. When these elements of both the accountant and the detective are combined, the fraud examiner role is formed.

Fraud Examiners Required Skills

Fraud examiners must have experience in criminology, sociology, psychology or other related field which can help them understand the motivating factors associated with illegal activities. They also should be able to handle large amount of data analysis and have excellent deductive reasoning skills.

Fraud examiners from global accounting firms and local law firms are often hired by private and public organisations to investigate when there is suspicion of misconduct and financial crime (Button, Johnston, Frimpong, & Smith, 2007). The client organisation defines an investigation mandate with the hired examination firm, and fraud examiners from the firm conduct the investigation in the client organisation (Williams, 2014). At the end of investigation, fraud examiners present a report of investigation to the client organisation (Schneider, 2006). Very often, the report of investigation is kept secret and confidential, both in relation to the police and the general public (Gottschalk & Tcherni Buzzeo, 2017). External investigators are fraud examiners who are hired by clients to perform investigations in the clients' organisations. Although the investigators are employed by law firms, accounting firms, and consulting firms, they are hired by business and government organisations to carry out internal investigations. They have backgrounds such as forensic accountants, police detectives, business lawyers, organisational psychologists, and executive managers.

Ethical Values Of A Fraud Examiner

The Code of Professional Ethics as promulgated by ACFE for Fraud Examiners are as follows:

- A commitment to professionalism and diligence in the performance of their duties
- Must not engage in any illegal or unethical conduct, or any activity that will constitute a conflict of interest.
- Exhibit the highest level of integrity
- Comply with lawful orders of the court and will testify to matters truthfully and without bias.
- Obtain evidence or other documentation to establish a reasonable bias for any opinion rendered.
- Must not reveal any confidential information obtained during a professional engagement without proper authorization.
- Reveal all material matters discovered during the course of an examination, which if omitted could cause a distortion of the facts.
- Always promote professional competence and effectiveness.

Qualities And Conduct Of A Fraud Examiner

- Diligence
- Illegal conduct
- Unethical conduct
- Integrity
- Professional competence
- Testimony
- Obtaining evidence
- Confidential information - Complete reporting.

Forensic auditing can be viewed as the application of auditing knowledge and investigative skill in the identification and resolution of legal issues. This entails the use of the knowledge of accounting, law, investigation, criminology and psychology to prevent and detect fraud, obtain and evaluate evidence to be presented in court of law. In other words, forensic auditing could be described as an accounting analysis that can uncover possible fraud in a manner that is suitable for presentation as evidence in a court of law.

A Forensic Audit is an examination of a company‟s financial records to derive evidence which can be used in a court of law or legal proceeding.

A forensic audit is a detailed engagement which requires the expertise of not only accounting and auditing procedures but also expert knowledge regarding the legal framework. A forensic auditor is required to have an understanding of various frauds that can be carried out and of how evidence needs to be collected.

Jack Bologna and Robert defined Forensic Audit as the application of financial skills and an investigative mentality to unresolved issues, conducted within the context of the rules of evidence. As a discipline, it encompasses financial expertise, fraud knowledge, and a strong knowledge and understanding of business reality and the working of the legal system.

Collin Greenland defines that forensic accounting (or auditing) is the integration of accounting, auditing and investigative skills in order to provide an accounting analysis suitable for the resolution of disputes (usually but not exclusively) in the courts.

Forensic means suitable for use in a court of law, and it is to this standard forensic accountants generally work.

Forensic Auditing is used in a number of ways and for a number of purposes and not just for criminal activity detection. Firms that do "turn-around" or takeovers of businesses, for example, need to have an in-depth understanding of their target's finances. In that scenario, Forensic Audit provides a clear understanding of the financial position along with the connection of the communications related to that.

Forensic auditing has taken an important role in both private and public organizations since the dawn of the 21st century especially in the advance economies. The catastrophe of some formerly prominent public companies such as Enron and WorldCom (MCI Inc.) in the late 1990s, coupled with the terrorist attacks of September 11, 2001 and the recent incidence of frauds taken place in the corporations including the one in the leading public bank of Indian economy, have fuelled the prominence of forensic auditing/ accounting, creating a new, important and lucrative specialty. Forensic auditing procedures target mostly financial and operational fraud, discovery of hidden assets, and adherence to federal regulations. Cressy19 (2012) in his paper explained that in forensic auditing specific procedures are carried out in order to produce evidence. Audit techniques and procedures are used to identify and to gather evidence to prove, for example, how long have fraudulent activities existed and carried out in the organization, and how it was conducted and concealed by the perpetrators. Evidence may also be gathered to support other issues which would be relevant in the event of a court case.

Further, with the increase in the financial frauds popularly known as white collar crimes, forensic auditing and accounting have risen to prominence for ensuring the directed growth of the corporations and inclusive growth of the economy.

Forensic auditing covers a broad spectrum of activities, with terminology not strictly defined in regulatory guidance. Generally, the term „forensic auditing‟ is used to describe the wide range of investigative work which the professionals in practice could be asked to perform. The work would normally involve an investigation into the financial affairs of an entity and is often associated with investigations into alleged fraudulent activity.

Forensic Auditing refers to the whole process of investigating a financial matter, including potentially acting as an expert witness if the fraud comes to trial.

The process of forensic accounting includes the „forensic investigation‟ itself, which refers to the practical steps that the forensic auditor takes in order to gather evidence relevant to the alleged fraudulent activity. Forensic audit is an examination of evidence regarding an assertion to determine its correspondence to establish criteria carried out in a manner suitable to the court. An example would be a Forensic Audit of sales records to determine the quantum of rent owing under a lease agreement, which is the subject of litigation.

Forensic Investigation is the utilization of specialized investigative skills in carrying out an inquiry conducted in such a manner that the outcome will have application to a court of law. A Forensic Investigation may be grounded in accounting, medicine, engineering or some other discipline

Red flags are nothing but symptoms or indicator of situation of fraud. A red flag is a set of circumstances that are unusual in nature or vary from the normal activity. It is a signal that something is out of the ordinary and may need to be investigated further.

Financial Performance

Financial performance is the measurement of what has been attained by the firm, which is an indicator of the good conditions for a period of time. The objectives of measuring performance are to obtain very useful information about flow of funds, the uses of firm finances, their efficiency and effectiveness.

Besides, the managers are able to make best decisions from the information on firm‟s performance (Almajali, 2012). Research has found the following among the many factors that affect the Financial

Performance of Companies: Company Size, Leverage, Liquidity, Company Age and Management Competence index (Almajali, 2012).

Profitability is very crucial for an enterprising firm. It"s through profitability that investors are willing to buy the company"s shares due to enhanced reputation, and if the demand for its shares increases the shares prices increases hence an increase in the firm"s value. Profitability enables a firm to withstand negative economic shocks and enhances stability of the firm. Profitability also maximizes the utility for shareholders through dividend and increased firm value and stakeholders" interest through corporate social responsibility (Bhutta and Hasan, 2013).

Return on Assets

Return on Assets (ROA) is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to efficient management is at using its assets to generate earnings. ROA is calculated by dividing a company"s annual earnings by its total assets, ROA is displayed as a percentage. The ROA formula is a straight forward calculation, and its component parts are easily located on a company"s financial statements. The ROA ratio often called the return on total assets is a profitability ratio that measures the Net Income produced by total assets during a period by comparing Net Income to the average total assets. ROA is an indicator of how a business manages existing assets when generating earnings. If ROA is low, the management may be inefficient while a high ROA figure shows the business is running smoothly and efficiently (Madura 2015).

According to Shopify (2014), Management will look closely at the ROA figure at year end. If the ROA is high, it is a good sign that the business is making the best from what it already has in assets. Combing the ROA with the metric, return on investment may show that further investment is worthwhile and that the business is capable of using new investment efficiently. Examining a low ROA is vital for the efficient running of a business. If the ROA is consistently low it may show that either management are not making enough use of existing assets or that assets within the business are of no longer any use.

Falling ROA is always a problem but investors and analyst should bear in mind that the ROA does not account for outstanding liabilities and may indicate a higher profit level than actually derived (Bank of Ghana, 2015)

Therefore, ROA is considered as an effective way of measuring the efficiency of manufacturers, but can be suspect when measuring service companies or companies whose main assets are people (Bloomsbury, 2009).

Theoretical Framework

This study discussed two theories namely Contingency theory and Stakeholders theory. But the study is anchored on Stakeholder"s theory, the reason is because the stakeholder view holds that "the goal of any company is or should be the flourishing of the company and all its principal stakeholders (Freeman, 2004). Stakeholder theory asserts that companies have a social responsibility that requires them to consider the interests of all parties affected by their actions. Fraud issue is a big concern to all and sundry in the organization and Forensic auditing is highly needed in the interest of all stakeholders.

Contingency Theory

Contingency theory was developed by Fred Edward Fiedler in 1958. Contingency theory is an approach to the study of organizational behavior in which explanations are given as to how contingent factors such as technology, culture and the external environment influence the design and function of organizations. The essence of contingency theory is that best practices depend on the contingencies of the situation. Contingency theory is often called the "it all depends" theory, because when you ask a contingency theorist for an answer, the typical response is that it all depends. The term contingency as used in contingency theory is similar to its use in direct practice. A contingency is a relationship between two phenomena. If one phenomenon exists, then a conclusion can be drawn about another phenomenon.

Contingency theory is a behavioral theory that claims that there is no single best way to design organizational structures. The best way of organizing, for example, a company is however, contingent upon the internal and external situation of the company.

The contingency approach to organizational design tailors the design of the company to the sources of environmental uncertainties faced by the organization. The point is to design an organizational structure that can handle uncertainties in the environment effectively and efficiently.

Therefore, previous theories such as Weber's theory of bureaucracy and Taylor's scientific management approach sometimes fail because they neglect that effective management styles and organizational structures are influenced by various aspects of the environment: the contingency factors. Therefore, there cannot be one optimal organizational design for every company, because no companies are completely similar, and because every company faces its own set of unique environmental contingencies that result in different levels of environmental uncertainties.

Stakeholder Theory

Stakeholder theory was developed originally by Lan Mitroff (1983), in his book Stakeholders of the Organizational mind. The Stakeholder theory is based on the argument that other than shareholders, there are several agents with an interest in the actions and decisions of companies. Stakeholders are groups and individuals who benefit from or are harmed by, and whose rights are violated or respected by corporate actions. In addition to shareholders, stakeholders include creditors, employees, customers, suppliers, and the communities at large. Stakeholder theory asserts that companies have a social responsibility that requires them to consider the interests of all parties affected by their actions. Management should not only consider its shareholders in the decision making process, but also anyone who is affected by business decisions. In contrast to the classical view, the stakeholder view holds that "the goal of any company is or should be the flourishing of the company and all its principal stakeholders (Freeman, 2004).

Some of the problems with stakeholder theory lie in the difficulty of considering voiceless stakeholders such as the natural environment and absentee ones such as future generations or potential victims (Oskar, 2012). The difficulty of considering the natural environment as a stakeholder is real because the majority of the definitions of stakeholders usually treat them as groups or individuals, thereby excluding the natural environment as a matter of definition because it is not a human group or community as are, for example, employees or consumers (Buchholz, 2004). Phillips and Reichart (2000) argue that only humans can be considered as organizational stakeholders and criticize attempts to give the natural environment stakeholder status.

Empirical Review

Petter Gottschalk (2010) examines and evaluates the investigative processes used to combat white-collar crime. He also presents a general theory regarding the economic, organizational, and behavioural dimensions of its perpetrators. It evaluates a number of internal investigation reports to reflect on the practice of fraud examinations. Empirical studies provide a basis to reflect theoretically on practice improvements for fraud examiners.

Emeh and Obi (2013) applied a survey research design in carrying out a study on the empirical analysis of forensic accounting and financial fraud in Nigeria. The study adopted a simple random sampling techniques and primary data was used in the study. The instances of forensic investigation were able to show accounting analysis that revealed the whole level of financial fraud in Nigeria.

Dada and Okuni (2013) applied multiple regression analysis using statistical package for social science (SPSS) in carrying out a study on forensic accounting education as a panacea to alleviate fraudulent practices in Nigeria. Their study was centred on investigating the level of awareness of the staff of Nigeria"s economic and financial crime commission awareness of forensic techniques and its relevance in detecting financial fraud in Nigeria. The study concluded through its finding that there is a positive relationship between forensic accounting and investigation and detection of fraudulent practices. It further discovered however, that forensic accounting has not been applied in the investigation and detection of fraud, especially by the major anti-corruption agency (EFCC) in Nigeria.

According to Nweke (2010) as cited in Olukowade and Balogun (2015) in a recent forensic audit of the Nigerian Stock Exchange (NSE) by some independent auditors; the audit outcome revealed that they exists pockets of shady deals especially in the expense accounts of the exchange agency which came to light during the statutory audit (Olukowade & Balogun, 2015).

Boritz, Kotchetova, and Robinson (2008), the researchers confirmed that forensic accountant stand better chance of detecting great and higher quantity of fraud than the conventional auditors.

Gallet (2010) presents in his work a series of attempts to identify the dimensions and determining factors of fraud by listing the studies of renowned experts in the field (Donald Cressey 1919-1987, Dr. Steve Albrecht 1980, Richard C. Hollinger – John P. Clark 1983 and Joseph T. Wells). All these approaches are however more oriented towards the behaviour of the person who commits the fraud (attitude, reasoning, pressures, the work environment, personality) and less towards the identification and description of financial behaviours specific to fraud companies.

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.

A study conducted by Effiong (2012) on the level of awareness of forensic accounting education in Nigeria revealed that there is low level of awareness on forensic accounting among persons especially undergraduate students.

Emeh and Obi (2013) opined that the practice and development of forensic accounting are relatively very much lower in developing countries like Nigeria.

Okoye and Gbedi (2013) examined forensic accounting as a tool for fraud detection and prevention in Kogi State, Nigeria. The findings revealed that the top management and senior staff are aware of forensic accounting while very few of the lower cadre has knowledge of forensic accounting.

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. This finding may mean that persons tend to use forensic accounting services if they see that the perceived risks of not using it tend to outweigh the perceived benefits though this has not be tested on an empirical ground to validate the claim.

In a study conducted by Kasum (2009) on the relevance of forensic accounting to financial crimes in developing countries, the result indicate that the services of forensic accountants are more required in developing economy and more especially in the public sector than developed economy.

Empirical study by Ogbeide and Akenbor (2017) 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.

Dada, Owolabi and Okwu (2013) survey research shows that forensic accounting services are positively related to the investigation and detection of fraudulent practices and it has not been applied in the investigation and detection of frauds especially by major anti-corruption agencies in Nigeria; and this could be as a result of the fact that in the past people are not fully aware of the perceived benefits and risks associated with the use of forensic accounting services to detect and prevent fraud. They may have always depended on the conventional audit. Interestingly enough the statutory auditors will always hold claim to it that their function is not to investigate the level of fraud committed in an organization but to report that the financial statement reflect a true and fair view of the affairs for and as at a period.

Singleton et. al. (2006), in their study, reported on forensic accounting and fraud auditing. While they concentrated on topics such as responsibility of the auditors, red tags and fraud detection, protection from fraud and control, forensic accounting with the dimension of expert testimony.

Di Gabriele (2010) made an empirical study over expert testimony transparency perceptions devoted to forensic accountants, lawyers and academicians in the field of accounting. According to the results of the surveys applied by the author to 85 academicians, 87 forensic accountants and 86 lawyers; while forensic accountants and lawyers have responded differently in all research points, academicians and forensic accountants have differentiated in majority of the results.

Njanike et al. (2009) used the questionnaire which consisted of three parts that is personal, detection and investigation sections designed to capture information on the forensic auditing status quo and the suggestions on the way forward. A sample of thirty forensic auditors from thirteen commercial banks, four building societies and four audit firms in Zimbabwe. Result was that forensic audit departments suffer from multiple challenges, amongst them being lack of materials resources, technical knowhow, interference from management and unclear recognition of profession. Taking a different perspective, Boritz et al (2008) investigated forensic accountants and auditors in terms of the relative merits of involving fraud specialist during the planning stage in assisting auditors by developing an audit plan that will effectively identify fraud. They found that involving the fraud specialists in the risk assessment process leads to better results than simply consulting with them by providing summery risk assessments and asking for input.

Gottschalk (2010) used a structured questionnaire of 517 potential respondents only 141 responses were completed and used for the analysis with the help of descriptive statistics. The results reveal that control is the most important means by which fraud is prevented and controlled. However, some respondents believe that influence is more important in terms of ethical guidelines and other measures.

Ebimobowei (2011) examined the effect of forensic accounting services in fraud detection. The primary data was collected with the help of a well structured questionnaire of three sections administered to twenty four banks in Port Harcourt, the capital of Rivers State and the data collected from the questionnaires were analyzed with descriptive statistics, Augmented Dickey-fuller, ordinary least square and Granger Causality. The result reveals that the application of forensic accounting services affects the level of fraudulent activities of banks.

Okoye (2011) in his examination of forensic accounting as a tool for fraud detection and prevention used primary and secondary sources of data. 370 questionnaires were administered to staff of 5 selected ministries in Kogi area. Tables and simple percentages were used to analyze the data. The statistical tool used to test hypotheses was Analysis of Variance (ANOVA). Among the findings was that, the use of forensic accounting do significantly reduce the occurrence of fraud cases in the public sector and therefore can help better in detecting and preventing fraud cases in the public sector organization.

Ekechukwu, Chijioke, Ugwu Timothy Chidubem and Mbah, Paulinus Chigozie (2018) conducted an empirical research on "Effect Of Forensic Accounting On The Performance Of Nigerian Banking Sector" The paper examined the effect of forensic accounting on the performance of Nigerian banking sector. The data were gathered from sample of Guarantee trust bank and Access Bank Plc"s annual reports and accounts for (12) twelve years (2006-2017). The research work made use of multiple regression method. Forensic audit (FAUD) was used as proxy for forensic accounting and the dependent variable, net profit margin (NPM), Profit after tax (PAT) and dividend per share (DPS) were used as independent variable using multiple regression technique, E-view 9.0 software package as tool for data analysis. The result of the analysis shows that forensic audit has significant effect on the net profit margin of selected Nigerian banks. It was also observed that forensic audit influences profit after tax of Nigerian banks. The study also revealed that forensic audit has significant effect on retained earnings and dividend per share of Nigerian banks. Based on the findings of this study, the researcher recommends that the management of the commercial banks should emphasize and enhance use of forensic financial information as this will help in increasing the profitability.

Madugu and Anyaduba (2013) carried out a study on Forensic Accounting and financial fraud in Nigeria. They used an empirical approach, using a sample of 143 respondents which consists of companies, accountants, internal and external auditors as well as top management staff. The findings of the study indicate that there is significant agreement amongst stakeholders on the effectiveness of Forensic Accounting in fraud control, financial reporting and internal control quality.

Ogundaua, Okere, Ogunleye and Oladapo, (2018), examined the role of the forensic accountant in the prevention and detection of fraud in the Nigerian banking system. The study adopted survey research design. Three hypotheses were formulated and tested and the findings revealed that Forensic Accounting has a significant impact on fraud prevention and detection. The findings further revealed that the Government should provide the enabling environment for Forensic Accounting profession to thrive in the country by strengthening the legal, educational and political framework in the country.

Jagun (2016) in a study examined the application and importance of Forensic Accounting skills and techniques in economic and financial crime investigation in Nigeria. Survey method and co relational design was employed in collecting data. The findings of the study revealed that professional opinions, skills and techniques impact positively on fraud prevention and detection whereas delay in court processes has a negative impact on the same.

Enofe, Utomen and Danjuma (2015) adopted a survey research designed method in their study to examine the role of Forensic Accounting in curbing financial crimes. The population of the study comprised of staffs of selected banks. The hypotheses were tested via Regression analysis; and the findings reveals emphasized the need for forensic accountants in the banking system. The findings further revealed that Forensic Accounting is an effective tool for addressing the menace of financial crimes in the Nigerian banking system.

Aduwo, (2016) in a paper presentation on the impact of Forensic Accounting towards utilizing professional judgments, auditing, law procedures and accounting skills to combat the menace of corporate liquidation, concluded that Forensic Accounting can have fundamental effects in reducing financial scandals in corporate organizations.

Okunbor and Obaretin (2010) adopted a sample of ten companies quoted in the Nigerian Stock Exchange in a study aimed at examining the effectiveness of the application of forensic services in Nigerian corporate organizations. The study employed simple regression model for the test of hypothesis. The findings of the study reveal that the application of Forensic accounting services by corporate organizations in Nigeria is effective in deterring fraudulent activities.

Adegbie and Fakile (2012) examined the role of Forensic accounting as antidote to economic and financial crime in Nigeria. The study employed chi-square and statistics packages for social sciences (SPSS) to evaluate its data. Four hypothesis were tested and the findings of the study revealed that Forensic accounting is a financial strategy to curb and resolve economic and financial crime in Nigeria. It is evident from the above, that a great number of studies have been carried out on the efficacy of Forensic accounting in the Nigerian corporate world. The current study is aimed at refocusing in the critical role expected of the Forensic accountant in managing the various categories of fraud in the Nigerian banking sector.

METHODOLOGY

Research Design:

Ex-post facto research design will be used. Ex-post facto research design is undertaken after events have happened and data are already in existence. It investigates the possible causes and effects of a subsisting relationship between variables (Adefila 2008) with ex-post facto, attempts are made to: Explain a consequence based on antecedent conditions, determine the effect of a variable on another variable and test a claim using statistical hypothesis testing technique.

Sampling Technique/Method

Non-probability method was adopted to determine the sample size. This research adopted judgmental sampling technique because of the availability of annual financial statements. Extra care is taken to select those elements that satisfy certain requirements or criteria critical to the research purpose.

Research Variables

Independent Variable

The independent variable in this study is Forensic audit which is proxy by Red flags (RF).

Dependent Variables

The dependent variable is profitability, which is measured by the following driver variables:

i. Return on Asset (ROA)

ROA is an indicator of how profitable a company is in relation to its total assets. It gives an idea as to how efficient the management uses assets to generate earnings. In fact, using this ratio, we can evaluate firm performance and it reflects the degree of efficiency in employing assets to obtain profit

$$ROA = \frac{\text{Net Profit after Tax}}{\text{Total Assets}} \times \frac{100}{1}$$

Control Variables

The following control variables were used in this study:

i. **Total Asset (TA):** this is measured with the natural log of total assets
ii. **Total Sales (TS):** this is measured with the natural log of total sales

Method of Data Analysis

The analysis of data for this study was done based on the data collected from publications of the Nigerian Stock Exchange (NSE) and the annual report and accounts of the selected quoted food and beverage firms.

Inferential statistics of the hypotheses were carried out with the aid of STATA 13 statistical software, using coefficient of correlation which is a good measure of relationship between two variables, tells us about the strength of relationship and the direction of relationship as well. Ordinary Least Square Regression analysis was used for the study. Regression analysis predicts the value of a variable based on the value of the other variables and explains the impact or effect of changes in the values of the variables.

Model Specification

To conduct the investigation that ascertains the effect of Forensic audit to Firm performance. The model for this study takes the following form:

$Y = \beta o + \beta_1 X_1 + \beta_2 X_2 + \mu$ Where:

Y = Performance (Dependent Variable)

X = Forensic audit (Explanatory/Independent Variable)

β_0 = Constant term (Intercept) β

= Coefficient of Forensic Audit

μ = Error term (Stochastic Term)

Explicitly, the equation can be defined as:

Performance = f (Forensic audit) + μ

Representing other equations with the variables of the construct, hence the equations below are formulated:

$ROA_{it} = \beta_0 + \beta_1 FAUD_{it} + \beta_2 TA_{it} + \beta_3 TS_{it} + \mu_{it}$ -

$ROE_{it} = \beta_0 + \beta_1 FAUD_{it} + \beta_2 TA_{it} + \beta_3 TS_{it} + \mu_{it}$ -

$EPS_{it} = \beta_0 + \beta_1 FAUD_{it} + \beta_2 TA_{it} + \beta_3 TS_{it} + \mu_{it}$ -

Legend:

β_0 = Constant term (intercepts)

β_{it} = Coefficients to be estimated for firm ί in period t

μ_{it} = Error term/Stochastic term

DATA PRESENTATION AND ANALYSIS

This section deals with the presentation and analysis of data obtained from publications of the Nigerian Stock Exchange (NSE) and the annual report and accounts of the selected quoted food and beverage firms in Nigeria. The results of the study with the discussion of major findings are also presented in this chapter. The study therefore considered only secondary data for the analysis.

Data Analysis:

Only ROA model specification was used to test the research hypotheses:

$ROA_{it} = \beta_0 + \beta_1 FAUD_{it} + \beta_2 TA_{it} + \beta_3 TS_{it} + \mu_{it}$ -

Table 1: Correlation matrix of variables in food and beverage firms

```
. correlate roa roe eps faud ta ts
(obs=66)

        |      roa      roe       eps       faud      ta      ts -------------+--------------------------------------------
---------------------            roa |    1.0000          roe |    0.1814    1.0000          eps |    0.0766   -0.0023
1.0000        faud| -0.0737   0.1673   0.2799   1.0000          ta |    0.2107   -0.1297   -0.1603   -0.2453
1.0000        ts |   0.0860   0.0937   0.0379  -0.0667   0.5684   1.0000
```

Source: Researcher's computation using STATA 13, 2016

It is indicated in table 1 that FAUD associates positively with ROA.

Test of Hypothesis I

H_{o1}: Forensic Audit, proxy by red flags has no significant effect on ROA of quoted selected quoted food and beverage firms in Nigeria.

Model Specification

$$ROA_{it} = \beta_0 + \beta_1 FAUD_{it} + \beta_2 TA_{it} + \beta_3 TS_{it} + \mu_{it} \quad - \quad - \quad (1)$$

Table 2: Ordinary Least Square Regression Analysis showing the Relationship between FAUD, TA, TS and ROA of food and beverage industry

```
 regress  roa  faud  ta  ts

    Source |      SS         df      MS                   Number of obs =     66
-------------+------------------------------ --------------          F(3,    62)      =    1.01
     Model | 1.91546207    3    .638487356            Prob > F        =    0.0261
   Residual | 39.3361612   62   .634454212            R-squared     =     0.5464
-------------+--------------------------------------------            Adj R-squared =     0.5003
     Total | 41.2516232    65    .634640357            Root MSE      =    .79653
------------------------------------------------------------------------------------------------------
----------------
       roa |     Coef.     Std. Err.       t      P>|t|      [95% Conf. Interval]
-------------+------------------------------------------------------------------------------------------
---------------
      faud |    .0025901    .0168924     0.15    0.039    -.0363575    .0311773          ta |    .0235261
.0157309     1.50   0.040    -.0079195    .0549717         ts |  -.0063826   .0202459    -0.32   0.754    -
.0468536    .0340884     cons | 9.519556   .1691947     56.26   0.000     9.181341    9.857772
------------------------------------------------------------------------------------------------------
-----------------
```

Source: Researcher's computation using STATA 13, 2016

Interpretation of Regressed Result

The regressed coefficient correlation result in table 2 shows the existence of a positive and statistically significant relationship between FAUD ($\beta 1=0.0025901$), and ROA at 5% significance level. The probability values for the slope coefficient show that P(x1=0.039<0.05). This implies that Forensic audit has a statistically significant relationship with ROA at 5% significance level. The coefficient of determination obtained is 0.50 (50%), which is commonly referred to as the value of adjusted R2. The cumulative test of hypothesis using adjusted R2 to draw statistical inference about the explanatory variables employed in this regression equation, shows that the adjusted R-Squared value shows that 50% of the systematic variations in the dependent variable can be jointly predicted by all the independent variables. 50% was explained by unknown variables that were not included in the model. The overall significance of the model Prob > F-statistic (0.0261) is statistically significant at 5%.

Model Specification

ROA = 9.519556 + 0.0025901FAUD

The implication is that for there to be a unit increase in ROA, there must be 0.0025901 multiplying effect of FAUD

Decision Rule:

Accept the null hypothesis, if the P-value of the test is greater than 0.05. Otherwise reject.

Decision:

The P-value of the test (Prob > F = 0.0261) is less than 0.05. In view of the rule of thumb, H1 will be accepted and H0 rejected.

CONCLUSION

It would be concluded that Forensic Audit (Proxy by red flag) has a positive and statistically significant effect on ROA of food and beverage firms quoted on the floor of Nigerian Stock Exchange at 5% level of significance.

DISCUSSION OF FINDINGS

The hypothesis that was analysed states that there is no significant effect between return on assets and forensic audit of quoted Food and beverage firms in Nigeria. From the regression analysis, it revealed that Forensic audit has significant effect on the return on assets of the quoted Food and beverage firms in the tune of 0.0261

At the end of this research work on the effect of forensic auditing on the financial performance of quoted Food and beverage firms in Nigeria, the researcher found out the following;

Forensic auditing has significant effect on the return on assets of selected quoted Food and beverage firms in Nigeria.

The researcher also observed that forensic auditing influences the general performance of firms, as it will serve as a check on both management and employees behaviour.

The study also revealed the salient roles played by the Forensic Auditors to the preparation of sound financial statement.

Most Companies abroad employ the serves of fraud examiners and forensic auditors extensively but Companies in Nigeria are yet to key into the new innovations of forensic auditing.

CONCLUSION

Forensic auditor is expected to look out for evidence of control procedure exceptions, accounting classification anomalies etc. According to Jafaru (2011), forensic and investigative auditing 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. Bologna an Lindquist (1995) as cited by Chariri (2009) noted that as an investigator, forensic auditors 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.

Forensic auditing has taken an important role in both private and public organizations since the dawn of the 21st century especially in the advance economies. The catastrophe of some formerly prominent public companies such as Enron and WorldCom (MCI Inc.) in the late 1990s, coupled with the terrorist attacks of September 11, 2001 and the recent incidence of frauds taken place in the corporations including the one in the leading public bank of Indian economy, have fuelled the prominence of forensic auditing and accounting, creating a new, important and lucrative specialty. The importance and the roles of Fraud examiners, Forensic auditors and other forensic financial experts cannot be overemphasized.

RECOMMENDATION

Based on the research findings, the following recommendations are proffered to address the research problem:

The study recommends that the management of Food and beverage firms should emphasize and enhance the use of forensic audit information as this will help in increasing the profitability.

Secondly, the management should ensure that the firms adapt to new advance technological manufacturing changes to ensure that they have a well-structured system to accommodate these changes.

Thirdly, appropriate sanctions should be applied when fraud is detected. Where persecution is considered to be the appropriate sanction, proper Forensic audit procedures need to be followed during investigation and trained experts such as the Professional Forensic Auditors, fraud examiners should conduct the investigation, where there is evidence of fraud, appropriate disciplinary action in accordance with the provision of public service rules should be implemented.

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