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Mediating effect of Chief Executive Officer Dominance on the relationship between Firm Attributes and Financial Fraud Likelihood

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Abstract

This study intends to enhance our understanding of the role of firm attributes on financial fraud likelihood focusing on firm structure and corporate governance attributes. Additionally, the research highlights the underlining mediating role of Chief Executive Officer (CEO) dominance in this regard. Following the fraud triangle, our rationale is that firm structure variables such as firms' size, leverage, earnings, financial performance amongst others provides the motive or incentive for fraud occurrence while corporate governance provides an opportunity in the presence of dominant CEOs. The methodology employed is the library research design through the review of relevant and extant literature, after which conclusion and recommendations were proffered. Based on the outcome of the review, clearly studies on financial statement fraud have not received the expected research attention in the Nigerian environment despite the topical nature of the issue. What is known about how CEO dominance affects the likelihood of financial statement fraud is still very inadequate and conflicting and hence necessitating the need for more studies in this regard. The evidence in the Nigerian environment is largely elusive and demands for more thorough research in this regard. The study recommends the need for more studies to investigate how firm attributes drive financial statement fraud likelihood in Nigerian firms and how dominant CEO's either accelerate or decelerate this process via their mediating influence.

Keywords: *Chief Executive Officer Dominance; Firm Attributes; Financial Fraud Likelihood*

Introduction

Financial statement fraud varies widely in their representations, depending on the market segments in which they are perpetrated, the financial instruments they pertain to, and the actors involved. Reflecting this diversity, the literature dealing with the phenomenon of financial fraud as defined above displays a plethora of often overlapping terms and concepts. Examples of such terms are fraud (Biegelman 2013; Goldmann 2010), financial fraud (Young 2006; Harrington 2012; Gough 2013), corporate fraud (see, Comer 2003;

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O’Gara 2004), management fraud (see, O’Gara 2004), and accounting fraud (Kat & Lakeman 2010), financial statement fraud (see, Zack 2013).

At a general level, financial statement fraud exploits the information asymmetry that exists between different parties in a financial transaction. By combining the illusion of disclosure with false information, financial statement fraud increases this information asymmetry while appearing to minimize it (Black, 2006). As Leap (2007) points out, accounting fraud may have either one of two objectives. First, fraudulent accounting techniques may be used to cover up the misappropriation or misapplication of funds in the enterprise or organisation. Company insiders who embezzle funds from the company may alter accounting ledgers and supporting documentation to conceal their deeds. Second, fraudulent financial statements may be issued by managers to mislead investors or regulators about the profitability and prospects of an enterprise.

A look at financial statement fraud in more detail reveals that, in carrying out their schemes, perpetrators resort to an enormous variety of fraudulent accounting techniques. A review of the literature (Lev, 2003; Rezaee, 2002) however, shows that this myriad of techniques can be broken down into five broad categories. The first two of these, revenue-based schemes and expense-based schemes, aim at artificially boosting a firm’s current profitability as reported on the income statement. The third and fourth categories, asset-based schemes and liability-based schemes, involve the fraudulent strengthening of the end of year financial statement through misrepresentations of asset values and risk exposures. This is with a view to increase a company’s financial health and perceived future earnings power. The final category, other financial statement schemes, represents a residual one.

Aiming to find some ways to prevent frauds, researchers have started to analyse the factors that are related to them, in order to implement preventive actions and mechanisms to avoid, or at least reduce, the possibility of the fraud occurrence (Lev, 2003; Rezaee, 2002). Research into the drivers of corporate fraud in listed companies has become a vocal issue of discourse for both academics, regulators and shareholders. Already, there is a consensus that financial reporting fraud requires three simultaneous circumstances: the opportunity to deceive, a motive for doing so, and willingness on the part of the perpetrator (Snyder, Priem, & Harris, 2009). Opportunity is foremost among these circumstances, because without an opportunity even the most highly motivated and willing potential perpetrator cannot commit fraud. Moving into factors

within the micro environment of the firm, there are several factors that may increase financial fraud likelihood. First, there is the role of firm specific structure variables like the size of the firm, the leverage structure, financial performance, and executive compensation amongst others. A Second and highly related theme concerns the failure of corporate governance and market mechanisms designed to prevent financial statement fraud. It is argued that these “gatekeepers” (Coffee, 2004) or “reputational intermediaries” (Tillman 2009) failed in their tasks of certifying the soundness of financial information provided by corporate insiders to investors; instead, they are said to have colluded with those they were supposed to control.

Aside from motives, opportunity is a necessary precondition for fraud, and it is in this regards that the mediating role of CEO dominance is introduced. Agency theorists have shown that the CEO role is especially conducive to such opportunities because the widespread separation of ownership from firm control contributes to goal and information asymmetries between the CEOs who control firms and their shareholders (Berle & Means, 1932). Given divergence in the goals of top managers (as agents) and those of shareholders (the principals), without intervention, CEOs have the opportunity to engage in self-serving behaviours detrimental to shareholders due to two main reasons; (i) CEOs know more about their firms’ resources and operations than do their shareholders and (ii) because the relationship between CEOs’ behaviours and the resulting outcomes often is not clearly visible to the dispersed shareholders (Jensen & Meckling, 1976). When shareholders lack such key information, CEOs are subject to moral hazard because they can engage in self-serving behavior with relative impunity (Richardson, 2000).

This study intends to enhance our understanding of the role of firm attributes in financial fraud likelihood focusing on firm structure and corporate governance attributes. Additionally, the research intends to also highlight the underlining mediating role of CEO dominance in this regard. Following the fraud triangle, our rationale is that firm structure variables such as firms’ size, leverage, earnings, financial performance amongst others provides the motive or incentive for fraud occurrence while corporate governance provides an opportunity in the presence of dominant CEOs.

Research Problem

The uncertainty on investors’ returns on their investments is geometrically increasing and the confidence of stakeholders on the financial statements of organisations, as a means of decision-making is being

gradually eroded owing to the cases of fraudulent activities that have characterised the financial statements (Meenatkshu & Sivaranjani, 2016). The integrity of financial disclosure has been an issue of primary concern to researchers, especially after the high-profile accounting failure in corporate organisations (Amara et al., 2013). More worrisome in literature is that financial statement frauds in Nigeria have not been resolved in a way that can boost investors' confidence; also, the public confidence has waned as a result of lack of check and balances in the political terrain and poor corporate governance practice. More so, the rapid development of information technology in organisations has created new opportunities for fraud to be perpetrated and concealed (Adeyemi & Fagbemi, 2010).

Onza and Lambogha (2014) have revealed weaknesses in several main factors of corporate governance and their connection to the probability of fraud in financial statements. These weaknesses include: the board with a lower percentage of external directors, fewer audit committee meetings, the percentage of independent directors, fewer audit committee financial experts, the quality of the external audit firm and when the Chief Executive Officer (CEO) hold a significant percentage equity shares in a company, the presence of a rapid growth of the company, poor financial performance; the age of the companies; managerial shareholdings (Razali & Arshad, 2014). This study empirically examined the disclosure of corporate governance and the likelihood of fraudulent financial reporting. Also, in Italy, Onza and Lambogha (2011) reviewed the relationship between corporate governance characteristics and financial statement fraud; their findings revealed that a well-established and functioning audit committee may reduce the likelihood of financial statement fraud.

Fagbemi & Abogun (2014); Lin and Yang (2006); Roodposhti and Chashmi (2011) claimed that corporate governance's efficacy reduces when the CEO and chairman are the same. That is, when the CEO's position is not separated from the chairman's position, the probability of financial statements fraud occurring is high. Kehinde (2015) still examined the asset protection and financial statement fraud of companies in this vein. In his research, attention was paid solely to the inner function of corporate governance, while no consideration was given to external tasks. In literature, we observe that there is no overall consensus on the impact of corporate governance factors on the probability of financial statements fraud, and also that this element of the probability of fraudulent financial statement fraud remains a feasible region to be explored in developing markets with poor application of public policies, uncertainties, market frictions and poor corporate governance.

The uniqueness of this study lies in the variety of variables and the intention to employ the Beneish M-Score to measure the likelihood of financial statement fraud compared to Altman Z-Score that is predominantly used in most fraud related studies as well as the current and comprehensive view provided by this study.

Research Objective

The broad objective of this study is to examine the impact of corporate governance on the likelihood of financial statement fraud in Nigeria

Theoretical Literature Review

Fraud has enjoyed robust base of theoretical underpinning as captured in the fraud triangle, and fraud diamond. The fundamental theory underlying corporate governance is theoretical illustration of corporate behaviour as it is and how a long-term improvement in the efficiency and effectiveness of firms can be sustained. History has revealed that there is a never-ending evolution of theories (Abdullah & Valentine, 2009). On this note, the fundamental theories underpinning this study give in-depth understanding and appreciation of corporate governance as a crucial tool in organisational management. The theory of corporate behaviour began with the agency theory, expanded into stewardship theory and stakeholder theory and evolved to resource dependency theory, transaction cost theory, political theory and ethics related theories such as business ethics theory, virtue ethics theory, feminists' ethics theory, discourse theory and postmodernism ethics theory. However, these address the cause and effect of theories variables, such as the independent board of directors, audit committee financial expertise, nominating committee effectiveness and the efficiency of internal audit.

The Resource-Based View (RBV)

The issue of what drives firms' actions and in this context pursuing earnings quality have been central in strategy research for decades and encompasses most other questions that have been raised in the field, as for instance, why firms differ, how they behave, how they choose strategies and how they are managed (Porter,1991). In the 1990s, with the rise of the resource-based approach, strategy researchers' focus regarding the sources of sustainable competitive advantage shifted from industry to firm specific effects. Initiated in the mid-1980s by Wernerfelt (1984), Rumelt (1984) and Barney (1986), the resource-based view (RBV) has since become one of the dominant contemporary approaches to the analysis of why firms

do what they do. A central premise of the resource-based view is that firms compete based on their resources and capabilities (Peteraf & Bergen, 2003). The resource-based view (RBV) emphasizes the firm's resources as the fundamental determinants of competitive advantage and performance. In this respect, Teece, Pisano and Shuen (1997), define resources 'as firm-specific assets that are difficult if not impossible to imitate'. These resources can be classified into three categories: 1) physical capital, 2) human capital and 3) organizational capital. Hence the study argues that firms' resources such as leverage, size, financial performance, liquidity and other resources and assets can influence whether a firm pursues earnings quality. Mc Williams and Siegel (2001) state that firms' decisions are strategic and depends on several internal and external factors which includes the firm's characteristics and structure of the firm. In line with the resource dependency theory, type of ownership in a company is a key factor that can affect the earnings quality which is part of the expected organisational outcomes.

The study adopts the resource-based view theory as the anchor for the study. The resource-based view is chosen because the theory sees corporate governance as a resource for the firm that can account for organisational outcomes such as the earning quality. In the light of the theory, corporate governance is an internal resource that has the potential for providing competitive advantage for the firm. The theory thus properly, places corporate governance as a vital tool unique to the firm which determines how they behave, how they choose strategies and how they are managed. In the light of earnings quality, the theory sees corporate governance as a resource for the firm that can account for organisational outcomes such as the earning quality.

Fraud Pentagon Theory

Horwarth (2011) refined upon Cressey (1953) Fraud Triangle model which defines the factors cause the occurrences of fraud in various organisations. The initial factors recognised by the fraud triangle were opportunity, pressure and rationalisation. Pressure can be defined as the motivational factors which persuade a perpetrator to carry out fraud in order to meet his needs. Opportunity can be defined by the ease in the carrying out of illegal activities due to weak organisational culture and structure. Rationalization can be defined as the justification for the fraud occurrence in the mind of the fraud perpetrator. Wolfe and Hermanson (2004) developed on these existing factors by adding the "capability" factor which is owed to the fact that a fraud perpetrator has to possess the required skill or capability in order to carry out the

fraudulent activity. This fourth factor led to the Fraud Diamond theory in the course of identifying factors which induce fraudulent occurrences.

Furthermore, the Fraud Pentagon theory postulated by Horwarth (2011) deeply assessed the fraud triangle factors and developed two additional factors namely; competence and arrogance factors. Santosa et al. (2020) defined competence as the possession of skills, knowledge, basic attitudes and values possessed by the fraud perpetrator. Competence is defined as the ability to utilize a position of authority in order to violate set rules and regulations of the organisation. Arrogance explains the attitude of superiority possessed by the fraud perpetrator with the mind-set of the rules and regulations set by the organisation does not apply to his personality (Crowe, 2011).

Flowing from the review of the forgoing theories, this study was anchored on the information asymmetry theory. The justification for this choice is that the information asymmetry theory best explains the possible reason for the likelihood of financial statement fraud in a corporate organisation. This information asymmetry theory details on management behaviour, as a result of opportunity to information and corporate resources that gives rises to manipulative behaviour. The increases in complexity-based information asymmetries obscure self-interested top management behaviours and, thereby, increase the probability of financial statement fraud.

Empirical Literature Review

In investigating the links between firm attributes and corporate governance, several studies have attempted to examine firm specific factors that may act as motives for financial statement fraud practices. For example, firm size has been identified as an important factor that may reduce or increase the likelihood that a firm engages in fraud depending on the size of the firm. For instance, large companies may have greater reputation in the market than smaller firms, so they must consider the costs of lost reputation, which are larger compared to smaller firms. This is a good reason for not engaging in fraudulent reporting initiatives. However, looking at the empirical side, in some cases, these theoretical expectations are not always upheld. Ching, Firth and Rui (2002) resulted that larger firms were manipulating current accruals to overstate earnings than the small sized firms. Kim, Liu and Rhee (2003) examined the relationship between corporate financial statement fraud and the firm size.

Husnan (2002) identified the role of leverage and pointed out that higher leverage caused by errors in managing the company's financial management can also increase opportunistic behavior management to engage in financial statement fraud. In this regard, studies by Saleh, et.al. (2005) and Lin et al. (2009) found that the leverage has a positive relationship with financial statement fraud. In addition, Tarjo (2008) hypothesized that companies with high leverage will offer accounting standards to increase or decrease reported earnings. Results of the study are consistent with the hypothesis that firms with high leverage tend to engage in financial statement fraud by adjusting reported earnings by raising or lowering the profit compared with companies with low leverage levels. Similarly, research conducted by Widyastuti (2009) tend to also support the view that high leverage encourages management to engage in financial statement fraud.

Spathis (2002) developed a model for detecting factors related to falsified financial statements. The study provided evidence that the firm attributes such as firms with a low stock turnover ratio, low return on assets and low Z-scores are more likely to commit financial statement fraud. His study includes seventy-six firms and the results of the empirical analysis indicate that there is a great potential in detecting falsified financial statements through analysis of financial statements disclosed by firms.

Kaminski et al. (2004) investigate whether financial ratios of fraud firms differ from those of non-fraud firms. Their study includes seventy-nine firms and the results of the discriminant analysis indicate that there is not much difference between financial ratios of fraud firms and financial ratios of non-fraud firms. Only three financial ratios, fixed assets to total assets, total liabilities to total assets and working capital to total assets, are statistically significant.

Bell and Carcello (2000) estimate a logistic regression model that may help to detect fraud-firms. Their study includes 77 fraud firms and 305 non-fraud firms, they claim that weak control environment, ownership status, firm's management that lied to auditors, an interaction term between a weak control environment, the aggressive management attitude toward financial reporting process and inadequate profitability are significant risk factors related to accounting fraud. They provide support for the existence of the fraud triangle theory.

Kurniawan and Hermawan (2017) examine the effect of earnings management on fraud, and its subsequent influence on the probability of financial distress. Hypothesis testing is conducted using the logistic regression method with a sample of listed companies in Indonesia Stock Exchange from 2009 to 2013. The sample of fraudulent companies is based on sanction decisions of the Indonesian Financial Service Authorities applied from 2009 to 2013. The results of this study show that earnings management increases the probability of fraudulent action. However, this study does not find that the increase in the probability of fraud will also increase the probability of financial distress.

Corporate governance stands out as another vital firm attribute for financial fraud and has received attention in the literature. Indeed, in the context of the fraud triangle, it is not hard to see that governance though not a motive for fraud, its weakness or ineffectiveness provides an opportunity for financial fraud to occur. As noted earlier, financial statement fraud when it occurs, simply suggest that corporate governance defined as the corporate “gatekeepers” (Coffee, 2004) or “reputational intermediaries” (Tillman 2009) failed in their tasks of certifying the soundness of financial information provided by corporate insiders. In this regards, Uwuigbe, Olorunsho, Uwuigbe, Ozordi, Asiriwa, Asaolu & Erin (2019) focused on corporate governance as a firm attribute and its implication for fraud likelihood. The study investigated the association which exists amid financial statement fraud and governance among business organizations in Nigeria. A population of 122 non-financial companies registered on Nigeria stock exchange was limited to 20 firms employing the rule of thumb based on stratified and simple random technique for a period of 2012-2016. Findings show that an insignificant association exist amid audit committee independence, the composition of the board and financial statement fraud.

Focusing particularly on Agricultural firms, Anichebe, Agbomah and Agbagbara (2019), examines the nexus between financial statement fraud and corporate governance elements using panel data collected from firms under the agricultural sector of the Nigeria stock exchange between 2013 and 2017 financial year. Longitudinal design and binary logit regression technique were employed in analyzing the data. The results reveal that about 52% of financial statement fraud likelihood can be attributable to corporate governance variables in quoted agricultural companies in the Nigeria Stock Exchange.

Extending the coverage to gender diversity of boards, Capezio and Mavisakaly (2016) examined the relationship between women’s representation on corporate boards and fraud. They provide validation to our

conjecture through an empirical analysis of 128 publicly listed companies in Australia. The finding shows that the increase in women's representation on company boards is associated with a decreased probability of fraud. They demonstrated the consistency of this result across different robustness checks. The authors conclude that the findings could be of interest to policy makers interested in enhancing board governance and monitoring.

Abri, Arumugam and Balasingam (2019) analyzed the impacts of corporate governance system on the financial statement frauds particularly with companies in Tanzania. The design and approach of this study was chosen as a quantitative research which incorporates primary data. The primary data of the research includes questionnaires given to stakeholders of companies in Tanzania. The questionnaires were distributed in different forms such as through Emails and based on 68 respondents such as employees, senior managers, and other related parties of companies in Tanzania. The results indicate that board independence has a direct impact on the financial statement fraud.

Adopting a cross-country approach, Magnanelli, Pirolo, & Nasta (2017) examined corporate governance and financial fraud using a sample of 214 listed firms across the following countries: US, France, Germany, Italy, Belgium, United Kingdom, Switzerland, Netherlands, Russia, Ireland, and Sweden. To test the hypotheses of research, they used a multinomial logistic regression model on a cross-sectional analysis. The results suggest taking into account mostly the independence of the Board, element which reduces the likelihood and the level of the fraud. On the contrary, results by Mahesarani and Chariri (2017) did not find board independence as a significant driver of financial statement fraud likelihood. The study Population was companies listed in the Indonesia Stock Exchanges (IDX) which were suspected of being involved in financial statement frauds from 2008 to 2012. Data were then analysed using logistic regression method.

Ilaboya and Lodikero (2017) investigate the relation between board independence and financial statement fraud using female gender diversity as moderating variable. The data was sourced from a sample of seventy-five companies listed on the Nigerian Stock Exchange as of 31st December 2016. The sample was filtered from the one hundred and eighty-four firms listed on the Nigeria Stock Exchange as of 31st December of the same year. The regression analysis reveals a significant negative relationship between the explanatory variables of board independence, female gender diversity and financial statement fraud. However, the joint effect of board independence and financial statement fraud did not produce the desired result. The

relationship between the interactions of the two variables is positive and contrary to our apriori expectation of a negative relationship.

The mediating effect of CEO dominance is one perspective that holds huge potential in improving our understanding of the likelihood of financial statement fraud. Though not much has been done empirically in this regard, there is a wide consensus that CEO's are powerful and can wield enormous influence over corporate outcomes. Tang et al (2011) contend that what distinguishes dominant CEOs from less dominant ones is their capacity to make unilateral decisions despite other executives' significant disagreements.

Linck, et al., (2008) are of the view that CEO dominance is a symbol of entrenchment activity by the CEO. This will undermine the monitoring role of the board which invariably reduces the board activity and its resources provision roles (Brick & Chidambaran, 2010). The CEO would in this case monopolize board meetings and lean on his own agendas which are different from the interest of the owners of the firm (Kelton and Yang, 2008). More specifically, Amernic and Craig (2010) theoretically propose that dominant CEOs tend to make equivocal accounting choices to present their company's financial status in the best possible light.

Ndofor, Wesley and Priem (2013) examined the mediating effect of CEO dominance in the relationship between industry complexity and financial fraud likelihood. Using a sample of 453 matched pairs of firms that have and have not been identified as having committed financial reporting fraud, it was found that information asymmetries arising from industry- and firm-level complexities increase the likelihood of financial fraud. Moreover, dominant CEO's measured by stock options ownership, increase the likelihood of fraud when industry complexity is high, while aggressive monitoring by the audit committee reduces the likelihood of reporting fraud when firm-level complexity is high.

Khairul, Wan and Mas (2014) investigate the influence of CEO dominance measured by CEO duality on this relationship. Using a sample of 3,017 non-financial companies listed on Bursa Malaysia from 2005-2010, we find that earnings quality is positively associated with audit committee independence, but the relationship is weakened by the existence of CEO duality. Our results imply that when a CEO has excessive control over the decisions of the board of directors by holding the position of chairman, the monitoring

function of independent audit committees to assure high quality of earnings in financial statements becomes ineffective.

Frerich, Kerstin and Karen (2019) corroborating upper echelons theory, argued that dominant chief executive officers (CEOs) take advantage of accounting choices to enhance their firms track records. Using a set of 15 indicators, reflecting the narcissistic trait of 1126 CEOs for the period 1992 to 2012, we find evidence of dominant CEOs engaging in accrual-based earnings management (ABEM). In contrast to prior research, the results show evidence not only for income-increasing but also for income-decreasing ABEM. This indicates that highly dominant CEOs not only strive to influence stakeholders' perception of current performance. The results imply that highly dominant CEOs' accounting choices are driven by self-serving behavior. Empirical evidence supports the view that CEO dominance is likely to lead to more opportunistic managerial behaviour due to the reduction in effective board monitoring over executives (Gul & Leung 2004).

Financial Statement Fraud

Financial statement fraud is a form of “occupational fraud”, which involves the “deliberate misrepresentation of the financial condition of an enterprise accomplished through the intentional misstatement or omission of amounts or disclosures in the financial statements to deceive financial statement users” (ACFE, 2016).

Going further, KPMG (2006) defines financial statement fraud as majorly fraudulent financial statement reporting schemes which involve earnings management, arising from improper revenue recognition and overstatement of a justified and in line with their ethical beliefs. Some examples of perceived pressures that cause people to commit fraud are; financial needs, work frustration and a desire to beat the system. When there is an opportunity to commit fraud, combined with a control system that is weak or absent and the perception that the crime is ethically acceptable, fraud can easily be committed.

The consequences of corporate fraud are very damaging, going beyond monetary loss. Pricewaterhouse Coopers (2007) indicates that the collateral costs of fraud include business relationships, staff morale, share prices, brand image and reputation. These collateral costs are more damaging when the fraud is committed

by the management. According to Zahra, Priem and Rasheed (2007), fraud constitutes deliberate actions by management at any level to deceive, swindle or cheat investors or stakeholders.

Corporate fraud can be committed in many ways, including asset misappropriation, and accounting and auditing fraud. The results of the PwC (2009) crime survey show that for the types of fraud committed, asset misappropriation is more common than accounting and auditing fraud. However, the losses are higher for accounting and auditing fraud as compared to asset misappropriation. This shows that accounting and auditing fraud have more serious consequences especially, to capital market participants. Accounting and auditing fraud relate to companies' financial reports, so they are also known as fraudulent financial reporting. This type of fraud is a major concern to capital market participants as they use financial reports as important sources of information.

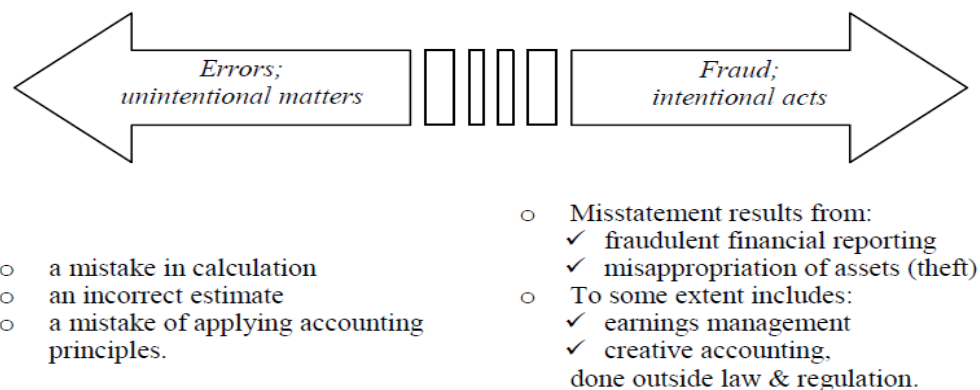
Arens, Best, Shailer, Fiedler, Elder & Beasley (2007) defines financial statement fraud as an intentional misstatement or omission of amounts or disclosures with the intent to deceive users', while misappropriation of assets is fraud that involves theft of an entity's assets. The severity of damages and losses due to accounting and auditing fraud became the motivation for this study. The goal is to analyse the ability of financial reports to indicate if a company is at risk of fraud. Rezaee (2005) stated that investors are able to make good decisions because of the reliability, transparency and uniformity of financial reporting as it is one of the important sources of information used in decision making, planning and control of economic resources (Harvey, Atrill, McLaney & Jenner, 2003).

Rezaee et al., (2010) notes that, financial statement fraud, is characterized by intentional misstatements or omissions of amounts or disclosures in financial reporting to deceive financial statement users. This is also known as fraudulent financial reporting and is a type of fraud that causes a material misstatement in the financial statements. More specifically, financial statement fraud involves manipulation, falsification, or alteration of accounting records or supporting documents from which financial statements are prepared. It also refers to the intentional misapplication of accounting principles to manipulate results. Fraudulent financial reporting involves intentional misstatements including omissions of amounts or disclosures in financial statements to deceive financial statement users. It can be caused by the efforts of management to manage earnings in order to deceive financial statement users by influencing their perceptions as to the

entity's performance and profitability. Such earnings management may start out with small actions or inappropriate adjustment of assumptions and changes in judgments by management.

Pressures and incentives may lead these actions to increase to the extent that they result in fraudulent financial reporting. Such a situation could occur when, due to pressures to meet market expectations or a desire to maximize compensation based on performance, management intentionally takes positions that lead to fraudulent financial reporting by materially misstating the financial statements. Financial statement frauds cause the highest number of losses at the company level and aim to distort the financial truth in order to obtain certain advantages or to hide the possible losses or negative performance.

As shown in figure 2.1, misstatements in financial statements, which are accounting irregularities, appear across an error-fraud continuum. That means accounting irregularities are part of a continuum from low levels of non-compliance with standards to outright fraudulent financial reporting (Smaili & Labelle 2009). At one end of the spectrum, accounting irregularities are misstatements caused by unintentional mistakes or errors causing material or immaterial misleading information. Financial restatement is usually the consequence for a listed company that has submitted such a report. At the other end of the spectrum, accounting irregularities are known as fraud, involving those charged with governance (management fraud) or only employees of the entity (employee fraud). The main factor that differentiates error from fraud is whether the underlying action that results in the accounting irregularities is unintentional or intentional. Unintentional misstatement in financial statements, or error, is the lowest level of accounting irregularity. Figure 2.1. Spectrum of financial statement fraud.



Source: AICPA (2011)

Though several definitions and perspectives on fraud and fraud likelihood has been given in the literature, in this study, in conceptualizing fraud, we align with the view of unjust or illegal advantage. This definition is consistent with AICPA (1997) definition which views fraud and fraudulent financial reporting as fraudulent acts that cause material misstatement.

Measurement of Financial Statement Fraud

Research in the last two decades of the twentieth century began to focus more on detection of fraudulent financial statements. Various models were created focusing on fraud detection in this section.

Altman Z-Score Model

Altman's model has been used in various sectors to predict bankruptcy in addition to its use in detecting fraudulent reporting. The model was developed by Altman (1968) and studies such as Hawariah et al. (2014) and Mehta et al. (2012) found that Z-scores, which measure the probability of bankruptcy, are sufficient to detect fraudulent reporting. Ofori (2016) noted that the Altman Z-score detected financial statement fraud in Enron Corporation before the solvency crisis that hit the company. The model is presented below;

$$Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 1.0X_5$$

Where: Z = "Overall index"

X₁ = "Working Capital / Total Assets"

X₂ = "Retained Earnings / Total Assets"

X₃ = "Earnings before Interest and Tax / Total Assets"

X₄ = "Market Value of Equity / Book Value of Total Liabilities"

X₅ = "Sales/ Total Assets"

The interpretation of the Z-score provided below:

Z > 2.67 "safe" zone

1.81 < Z < 2.67 "grey" zone

Z < 1.81 "distress zone

Beneish M-Score

The Fraud M-Score Model (Beneish 1999) contains a very similar approach to the Altman Z-score model. It directly seeks to extract information about the likelihood of accounting fraud from the financial statement

ratios. The Beneish model is a statistical model that uses financial ratios calculated with accounting data of a specific company in order to check if it is likely (high probability) that the presence of financial statement fraud.

The Beneish M-Score is calculated using 8 financial ratios. If M-Score is less than -2.22, the company is unlikely to be engaged in fraud. If M-Score is greater than -2.22, the company is likely to be engaged in fraud. Impink (2010) used the Beneish M-score models to examine the WorldCom scandal. The formula for computing the score is;

$$\text{M-Score} = -4.84 + 0.92 \times \text{DSRI} + 0.528 \times \text{GMI} + 0.404 \times \text{AQI} + 0.892 \times \text{SGI} + 0.115 \times \text{DEPI} - 0.172 \times \text{SGAI} + 4.679 \times \text{TATA} - 0.327 \times \text{LVGI}$$

Where: DSRI= Days Sales in Receivables Index, GMI= Gross Margin Index (GMI), AQI= Asset quality, SGI= Sales Growth Index, DEPI= Depreciation Index, SGAI= Sales General and Administrative Expenses Index, LVGI= Leverage Index and TATA= Total Accruals to Total Assets.

If M-Score is less than -2.22, the company is unlikely to be engaged in fraud.

If M-Score is greater than -2.22, the company is likely to be engaged in fraud.

Dechow F-Score

The F-model is developed by Dechow, Ge, Larson and Sloan. (2011). It is a general fraud risk assessment tool that generates an output (F-score), an indication of the probability of fraudulent financial reporting. Dechow et al. (2011) followed a methodology similar to Beneish (1999) in developing a score to predict which companies have material accounting misstatements. Following Dechow et al. (2011), F-score is computed as follows;

$$\text{F-SCORE} = -7.893 + 0.790 \times \text{ACC} + 2.518 \times \Delta \text{REC} + 1.191 \times \Delta \text{INV} + 1.979 \times \text{SOFTASSETS} + 0.171 \times \Delta \text{CASHSALES} - 0.932 \times \Delta \text{ROA} + 1.029 \times \text{ISSUE}$$

Where ACC= Accruals, ΔREC = Change in receivables, ΔINV Change in inventory, SOFTASSETS= Percentage of soft assets. This variable is defined as the percentage of assets on the balance sheet that is neither cash nor PP&E, CASHSALES= Cash sales, ROA= Return on Assets, ISSUE= Actual issue.

Dechow et al (2011) assume that companies with a high proportion of soft assets are more likely to manipulate their results as with soft assets there is more room to change assumptions about their valuation. An F-Score of 1.00 indicates that the firm has the same probability of misstatement as the unconditional

expectation and an F-Scores >1 , indicate higher probabilities of misstatement than the unconditional expectation while an F score <1 ” suggest lower probabilities.

Chief Executive Officer Dominance

The position of CEOs is always regarded as one of the most powerful positions in a firm (Hamori & Kakarika, 2009). Their power may come from the importance of this position since CEOs are expected to be capable of positioning their firms to create wealth (Papadakis, 2006). CEO dominance may vary with a CEO's involvement with the board as a director or even as the chair of the board (Voordeckers, Gils, & Heuvel, 2007). Moreover, CEO tenure can be an indication of CEO dominance (Shen, 2003; Voordeckers, Gils, & Heuvel, 2007). That is, CEO tenure – which indicates a CEO's knowledge of the policies and processes in his or her firm (Fisher & Dowling, 1999) – can affect a CEO's power (Shen, 2003), because once becoming CEO, he or she is in a position to enhance his or her own power (Pfeffer, 1981). Hence, CEO power increases with tenure (Hambrick & Fukutomi, 1991), and the longer CEOs stay in that executive position, the more power they accumulate and the more influence they have on the board's decision-making process. CEOs can manipulate the power distribution of the board of directors in favor of their own advancements and rewards: social network theory describes the mechanisms CEOs use to ‘accumulate power in order to reduce the relative monitoring power of the board’ (Plian & Lee, 2015). Hence, based on agency theory and social network theory perspectives, the length of service in a CEO position should be negatively related to firm performance because CEOs may use their power to reduce the monitoring power of the boards. (Plian & Lee, 2015).

Following Haleblian and Finkelstein (2013), dominance' (or 'power') is the capacity of the CEO to exert their will. Tang et al (2011) contend that what distinguishes dominant CEOs from less dominant ones is their capacity to make unilateral decisions despite other executives' significant disagreements. When facing significant disagreements from other executives, less dominant CEOs will either compromise their stance or postpone decisions; making unilateral decisions may not only be regarded as illegitimate but may also jeopardize their very position (Shen & Cannella, 2002; Zhang, 2006). In contrast, dominant CEOs are much less constrained by such disagreements. . Finkelstein (1992) proposed four dimensions of CEO power: structural, ownership, expert, and prestige power. Structural power pertains to the positional influence relating to the formal organizational structure of the firm. Ownership power accumulates to CEOs who maintain ownership within the firm and is further indicated by the individual's ability to act on behalf of

both management and shareholders alike (Ting, 2013). Expert power accrues to CEOs who are able to effectively manage the firm's uncertainty in the external environment through their experience and relevant expertise (Hamori & Koyuncu, 2015). Lastly, prestige power stems from the CEO's reputation within the market that shapes the perceptions others hold of him/her. CEO power is exercised across a wide range of strategic decisions that differentially impact organizational outcomes (Adams et al., 2005).

Conclusions and Recommendations

This study intends to enhance our understanding of the role of firm attributes in financial fraud likelihood focusing on firm structure and corporate governance attributes. Additionally, the research intends to also highlight the underlining mediating role of CEO dominance in this regard. Following the fraud triangle, our rationale is that firm structure variables such as firms' size, leverage, earnings, financial performance amongst others provides the motive or incentive for fraud occurrence while corporate governance provides an opportunity in the presence of dominant CEOs.

Aiming to find some ways to prevent frauds, researchers have started to analyse the factors that are related to them, in order to implement preventive actions and mechanisms to avoid, or at least reduce, the possibility of the fraud occurrence. CEOs have the opportunity to engage in self-serving behaviors detrimental to shareholders due to two main reasons; (i) CEOs know more about their firms' resources and operations than do their shareholders and (2) because the relationship between CEOs' behaviors and the resulting outcomes often is not clearly visible to the dispersed shareholders.

Based on the outcome of the review, clearly, studies on financial statement fraud have not received the expected research attention in the Nigerian environment despite the topical nature of the issue. What is known about how CEO dominance affects the likelihood of financial statement fraud is still very inadequate and conflicting and hence necessitating the need for more studies in this regard. The evidence in the Nigerian environment is largely elusive and demands for more thorough research in this regard. The study recommends the need for more studies to look into the how firm attributes drive financial statement fraud likelihood in Nigerian firms and how dominant CEO's either accelerate or decelerate this process via their mediating influence.

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