

Corporate Governance Determinants of Financial Statement Fraud Likelihood: Evidence from Quoted International Licensed Banks in Nigeria.

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Abstract: *Acting within the agency theory framework, this study focuses on the role of corporate governance as a system to monitor and predict fraud occurrence and magnitude. Specifically, this paper used a sample of eight (8) quoted deposit money banks in Nigeria that possess international operating license to explore corporate governance determinants of financial statement fraud likelihood during the period 2010 to 2018. Corporate governance determinants that were considered in this study include: Board Size, Board Independence and Audit Committee Independence which were also the independent variables while financial statement fraud likelihood (dependent variable) was proxy with Beneish M-score. In this study, regression analysis technique was employed to evaluate the panel data set that were collated from annual financial reports of the sampled deposit money banks. Major finding indicates that board independence does indeed curb the likelihood of managers committing fraudulent financial activities. This finding is in line with the agency theory which promotes higher board independence as a weapon for averting managers' self-interest which is detrimental to shareholder's interest. Therefore, we carefully recommend that regulatory agencies should ensure stringent policies towards maximizing board independence, which should serve as a watchdog over management excesses and activities.*

Keywords: Corporate Governance, Financial Statement Fraud, International Licensed Deposit Money Banks, Beneish M-score Model.

INTRODUCTION

Financial fraud has been a historically recorded challenge of human organizations, and its eradication has remained daunting issue in most parts of human society and civilization. Financial fraud is an act of deception motivated by the desire to make personal gain and cause a loss to another party. Financial statement fraud thrives in corporate organizations due to bad economic conditions, weak law enforcement, pre-emptive measures, and uncertainty (Egbunike and Ezeabasili 2013). However, internal factors such as ineffective corporate governance opens up the environment that allows for such activities. Hence, separation of control and ownership increases the need for effective monitoring and control over management in order to protect the interest of investors on the one hand and stakeholders on the other (Fama and Jensen, 1983). Particularly, investors and stakeholders' interests are often guarded using corporate governance system (Ramaswary, 2005) which also ensures that company policies are enforced, goals are met, performance is monitored, adequate disclosures are made, strict adherence to internal control system, procedures and independence, ethical standards, and quality control standards are followed. Efficient performance of these roles should guarantee lower incidences of financial fraud occurrence. In the instance where a firm is viewed as better performing, not only will its stock price rise, its rating by analysts will grow as well, and the firm will be able to get better lending terms. This way the firm will be able to attract cheaper financing and ultimately raise shareholder value. Notwithstanding, Weele (2011) argues that not all fraud may be due to weak corporate governance noting that even though corporate governance is a mechanism for controlling management not to act in their best interest, the kind of fraud that raises shareholder value may not be caught by strong corporate governance.

In the views of Law (2012) corporate fraud maybe beneficial to managers but at the expense of shareholder value, hence such acts should be caught by strong corporate governance. Corporate fraud has significant financial and non-financial impacts on businesses. The repercussions of corporate fraud affect not only the companies and their shareholders, but also employment, social stability and the public at large. Also, among those that suffer the effect of managers' fraudulent activities are those that rely on published information (stockholders and the general public) to assess company performance and make investment decisions. These

serious consequences have prompted strong control and monitoring mechanisms within the organization to be enacted, with the overall goal of overseeing management activities.

In many developing economies, Nigeria inclusive, there are no well-structured and focused organizational and management policies as found in most developed nations (Afolabi and Dare, 2015; Nardo and Francis, 2013). In most cases, these countries do not have formal reporting lines or heavy sanctions for violations of the rules and regulations. In Nigeria, only until recent times, organizations conducted their activities with little or no standardization or formal reporting lines (Yakasai, 2001) hence, the issue of bank failures and liquidation has been a problem since the emergence of domestic banks in 1892. Most of the earlier banks folded up due to mismanagement, poor financial reporting standards, and uncoordinated practices. However, the advent of a regulatory agency, (Central Bank of Nigeria, CBN) in 1959 led to some level of standardization in the banking sector which led to an improvement in financial activities of the banks. This is because the regulators pay attention not only to the running of organizations but also to the responsibilities of the board.

Previous empirical studies of Seamer & Psaros 2000; Cloninger and Waller, 2000; Shleifer and Vishny, 1997; Kumar and Sivaramakrishnan, 2008; and Jackling and Johl, 2009 examined the mechanisms of governance and financial statement fraud likelihood. Specifically, and within the Nigerian context, the studies of Law, 2012; Uadiale, 2012; Uwuigbe, Olorunshe, Uwuigbe, Ozordi, Asiriwuwa, Asaolu and Erin (2019) were seen to focus on corporate governance attributes that affects financial statement fraud of Nigerian non-financial firms. These studies did not pay attention to governance characteristics as possible determinants of accounting fraud likelihood in the banking industry especially among deposit money banks that have authorization to operate internationally. These set of banks operate an independent international division, which may include a network of foreign branches, subsidiaries, and affiliates. In this case they operate separate management and staff using distinct accounting systems and internal controls hence, governance monitoring and control is likely loose from the parent end and opens opportunities for managers' fraudulent practices. This study is also motivated by the position of Anichebe, Agbomah and Agbagbara (2019) whose study revealed that 52% of financial statement fraud likelihood can be attributable to corporate governance attributes. To this end, it is here intended to examine the likelihood of corporate governance attributes namely; Board Size, Board Independence and Audit Committee Independence to forestall the likelihood of financial fraudulent practices specifically taking samples from listed deposit money banks in Nigeria with international authorization.

Literature Review

Financial Statement Fraud

The definition of accounting or financial statement fraud is essentially the same as that of fraud, apart from a few additional aspects. The International Standard of Auditing (ISA) 240 (IAASB, 2007) defines corporate fraud as "an intentional act by one or more individuals among management, those charged with governance, employees or third parties, involving the use of deception to obtain an unjust or illegal advantage". Financial statement fraud is thus a fraud committed by the management of an organization with the goal to artificially improve financial performance and outcomes of the company as shown in the financial statements. This is done most often by means of overstating assets and revenue or by understating liabilities and expenses. To make it more difficult to trace, the perpetrator of fraud goes a great length to conceal intentional fraudulent misstatements. Sherman, Young and Collingwood (2003) compared fraudulent accounting entries to landmines in the books of account of a company. According to them the "landmines" are carefully hidden in the books and records of accounts of the companies and may never ever "detonate". They further posited that where such an "accounting landmine" is discovered or "detonated", its effects could be devastating on the confidence of investors, creditors, the public and many other interested parties.

Corporate Governance

Corporate governance consists of various sets of legal and institutional mechanisms aimed at safeguarding the interests of corporate shareholders and reducing agency costs attributable to separation of ownership (shareholders) from control (managers and/or controlling shareholders). One of the most important elements in any corporate governance system is its ability to provide shareholders with information about the activities and operations of the company, legal rules that establish management and board's responsibilities, as well as the penalties for irresponsible behavior. By separating ownership from operational management, corporate governance systems provide a set of mechanism designed to supervise insider managers effectively, and to resolve problems with agencies (Shleifer and Vishny, 1997; Kumar and Sivaramakrishnan, 2008; Jackling and Johl, 2009). The main issue in corporate governance is how management serves the long-term interests of shareholders and other stakeholders, as well as overseeing the duties of inside and outside directors (Fama and Jensen, 1983).

2.2 Hypotheses Development

Board Independence

An independent board is expected to be unbiased in carrying out its responsibilities (Hashim 2012). Lack of independency in the board may lead to agency problems as members in the board may not act in the best interest of shareholders (Fama and Jensen 1983). A study conducted by Abdullah (2006) found that board independence has significant positive relationship with earnings management. However, board independence is not sufficient enough to explain the pattern of the financial statement fraud. Independent directors are not involved in the day-to-day operation; it is therefore believed that the independent director will not be subjected to any pressure by the internal organization of the company. So, they are likely to act independently and act in the shareholders' interest. Consequently, an organization should have a majority of independent non-executive directors on its board for effective scrutiny of the activities of management (Siladi, 2006). In the light of the foregoing, this study hypothesizes that:

H₁: Higher board independence is not likely to curb financial statement fraud practices.

Board Size

Alzoubi and Selamat (2012) argue that boards of directors are important catalyst as they not only set organizational goals and strategies, but also ensure they are aligned with the interests of shareholders. They further posit that boards of directors ensure transparency and credibility of the published financial statements. This is consistent with the argument suggested by Fama and Jensen (1983) who indicated that boards of directors possess the ultimate power in decision making since they possess the highest level of control in any organization. When corporate board's membership expands beyond seven or eight members, they may be less likely to function effectively as a check on management (Lipton and Lorsch, 1992 and Jensen, 1993). Larger boards are less effective due to the need for larger coordination as well as process problems which can lead to less effective monitoring functions (Andres, Azofra and Lopez, 2005). However, on the flip side of the debate, Alzoubi and Selamat, (2012) believe that smaller boards are more effective because they are easy to manage and the directors can have effective communication among them whilst potential misunderstandings are reduced. Therefore, based on the conflicting arguments raised, this study hypothesizes that:

H₂: Higher board size is not likely to curb financial statement fraud practices.

Audit Committee Independence

As the board audit committee is really important in an organization, corporate governance code specifies that public companies to establish independent audit committees in order to help organizations enhance the independence and integrity of financial statements. According to Coram, Ferguson and Moroney (2006) effective board audit committee is a tool for preventing managers' fraudulent activities in organizations. According to Huang and Thiruvadi (2010), to ensure effectiveness of board's audit committee towards enhancing the quality of financial statements, such committee should consist of not less than three members; who should be mostly drawn from the group of independent non-executive directors. Inadequate membership of the audit committee might negatively influence its effectiveness in fulfilling its duties (Vafeas, 2005). It is expected that an independent audit committee should be able to not only provide unbiased assessment and judgment but should also be capable to effectively monitor the management team. Consequent upon the foregoing believe, this study hypothesizes that:

H₃: Higher audit committee independence is not likely to curb financial statement fraud practices.

Theoretical Framework

Agency Theory

The agency theory holds that the separation of ownership from management in companies often leads to a misalignment of interests between shareholders (the principal) and the management (the agent). This scenario arises because the shareholders aim at maximizing the share value and creating value for the company; management's main goals comprise reinforcing its position and power within the firm, and increasing its remuneration and personal benefits at the expenses of the shareholders (Jensen and Meckling, 1976; Seal, 2006). As Berls and Means (1931) pointed out management could become a self-perpetuating body even though its share in the ownership is negligible. Sequel to the foregoing, the company owners and managers' agency relationship is characterized by conflicts of interests and information asymmetry. If the conflict of interests is not controlled, the self-interested behavior of the manager can take place through activities or decisions aiming to favor personal interests, such as the consumption of firm's resources and assets, the avoidance of risky investments and, in the worst case, the manipulation of financial statement figures. This can be worsened where there is no form of control activity operated by the shareholders. Recently, it has also been demonstrated that in case there is a high complexity-based information asymmetry the likelihood of fraud occurrence due to the self-interested behavior on part of the manager is even higher (Ndofor, Wesley and Priem, 2015). Therefore, the owners have a duty to set up some mechanisms to control managerial actions and checkmate bad managerial behaviours (Jensen and Meckling, 1976). Along this perspective, scholars suggest that corporate governance structure should help in mitigating agency conflicts (Dey, 2008). Specifically, agency theory x-rays the contractual association between the managers (who are the preparers and manipulators of the financial statements) and the shareholders (who majorly rely on the information). Consequently, we espoused

this theory in scrutinizing the place of corporate governance in the detection and prevention of fraudulent financial statement information.

Empirical Review

Moses (2019) examined the relationship between corporate governance and commission of corporate fraud among quoted companies in Nigeria. The study utilized eighteen (18) companies selected after content analyses based on the availability of requisite information in their annual reports and other media publications. Binary logit multiple regression analysis was used to analyze the data. The study found that there is a negative relationship between the independence of the board of directors and corporate fraud. It further revealed that there is a negative relationship between the commitment of the audit committee to its duties and corporate fraud.

Anichebe, Agbomah and Agbagbara (2019) investigated the nexus between financial statement fraud and corporate governance elements using data collected from firms quoted the agricultural sector of the Nigeria Stock Exchange within the 2013 to 2017 financial years. Longitudinal research design and binary logit regression technique were employed in analyzing the data. The study revealed that about 52% of financial statement fraud likelihood could be attributed to corporate governance variables. Hence, agricultural companies should improve on the effectiveness of their board's audit committee, as well as on the number of corporate governance members with accounting and or financial knowledge and independence

Agbaje and Oloruntoba (2018) examined the impact of financial statement fraud on profitability of some selected Nigerian manufacturing firms within the period 2002 to 2016. The study focused on ascertaining the effect of incorrect asset valuation on return on assets as well as the relationship between improper expense recognition and return on assets. Secondary data were collected from the financial reports of the selected firms and website of Security and Exchange Commission. The analysis revealed that there is a significant positive relationship between financial statement fraud and profitability of firms in Nigerian manufacturing industry. Furthermore, improper expense recognition also has significant impact on return on asset income which serves as a proxy for its profitability. The implication of these results is that distortions of asset valuation and expense recognition lead to decreasing profit in the long run.

Ogbodo & Okenwa (2015) examined corporate governance and earnings management practices in Nigeria. Primary data was used for the study through structured questionnaire and was tested with Z-test statistical tool. The study revealed that there is a negative correlation between outside directors and earnings management. Corporate board dominated by outside directors makes manipulative accounting difficult; curbs the fraud tendencies of managers and reduces the likelihood of earnings management. However, boards dominated by inside directors tend to increase transfer of wealth to managers at the expense of the stakeholders, and increase the tendencies of fraudulent reporting.

Guisepe and Lamboglia (2014) analyzed the relationship between corporate governance characteristics and financial statement fraud among Italian listed companies during the period 2001 to 2011 with the intention to establishing whether certain governance characteristics have favored the commission of accounting irregularities. Results from the logit regression analysis showed that the existence of an audit committee that was compliant with the requirements of the Italian Corporate Governance Code reduced the likelihood of frauds. Additionally, the probability of financial statements frauds decreases with increases in the number of audit committee meetings.

Huang and Thiruvadi (2015) examined the relationship between audit committee characteristics (number of meetings, audit committee size and occurrence of member) and fraud. Using a sample of 218 firms from S&P and audit committee characteristics data collected from the Security and Exchange Commission database, the investigation revealed that audit committee meeting's frequency was not associated with fraud prevention while audit committee size did not significantly affect fraud prevention. However, fraud occurrence of audit committee members significantly correlated with fraud prevention.

METHODOLOGY

In this study, *ex-post facto* research design is employed. The population is made up of all deposit money banks that were listed on the floor of the Nigeria Stock Exchange market for the period between 2010 and 2018. As at 31st December, 2018 the total number of listed deposit money banks were thirteen (13). To obtain the sample, this study focused on listed deposit money banks that possess international authorization. Hence, eight (8) international licensed deposit money banks that are quoted on the floor of the Nigeria Stock Exchange during the periods 2010 to 2018 were selected and used. Logistic Regression analysis technique was employed in the analysis of the corporate governance characteristics determinants for accounting fraud likelihood among the banks.

Measuring Financial Fraud Likelihood

In this study, the extent of accounting fraud likelihood is measured using the Beneish M-score model. Beneish M-score model was developed by Beneish (1999) to estimate the probability of financial statement manipulation. If the predictive M-score is greater than -2.22, it indicates a red flag meaning that there is a possibility of accounting fraud occurring in the organization, or it could also indicate a strong likelihood of the firm engaging in accounting fraud. The predictive M-score was calculated for the various banks over the years covered by the study. The score of “1” was given if the banks had red flags indicating that there was a possibility of accounting fraud and “0” if otherwise. We modified the study of Uwuigbe, et al (2019) to express the econometric equation as:

$$Accfraud_{it} = \beta_0 + \beta_1 Boardin_{it} + \beta_2 Boardsize_{it} + \beta_3 Audind_{it} + \beta_4 Revgrwth_{it} + \beta_5 Numsub_{it} + e_{it}$$

Where:

- Accfraud = Accounting Fraud
- Boardin = Board Independence
- Boardsize = Board Size
- Audind = Audit Committee Independence
- Revgrwth = Revenue Growth
- Numsub = Number of Subsidiaries
- “{i}” = Cross Section (Sample Companies)
- “t” = Time Frame (2010 to 2018)
- e_{it} = Stochastic error Term

Results and Discussion of Findings

To ascertain corporate governance determinants of accounting fraud likelihood, we first conducted some pre-regression statistics analysis such as descriptive statistics. The descriptive statistics gives insight into the nature of the sampled firms in this study. The result is shown below:

Table 1 Descriptive Statistics Result

Variable	Obs	Mean	Std. Dev.	Min	Max
accfraud	72	.6666667	.4747127	0	1
boardin	72	59.61611	13.33214	36.84	90
boardsize	72	14.68056	3.13915	6	21
audind	72	50.39417	6.368823	42.86	100
revgrwth	72	14.33667	24.07201	-34.25	99.44
numsub	72	8.027778	6.018685	0	24

The Table 1 above shows that on average, the likelihood of accounting fraud is 67%, indicating that about 67% of the sampled deposit money banks engage in financial fraud. Also, it is seen that that board independence is 60% on average with the lowest independent board being 37% and the highest 90%. Board size is seen to be about 15 members on average with a minimum of 6 and a maximum of 21. Audit committee independence on average is observed to be about 50% with a minimum of 43% and maximum of 100%. The control variable of revenue growth on average is 14.34% while the average number of subsidiaries is seen to be eight (8) for the period under study.

Table 2 Multivariate Logistic Regression Estimates

Variables	Board Independence	Board Size	Audit Com. Independence	Revenue Growth	Numb. of Sub.
Accounting Fraud Model					
Coefficient	-0.0525	-0.0468	0.1187	0.00239	-0.0681
t_Statistics	(-2.09)	(-0.50)	(0.92)	(1.84)	(-1.34)
Probability t	{0.037}**	{0.614}	{0.357}	{0.066}	{0.180}
No. of Obs = 72					
Prob. > chi2 = 0.0548					
Pseudo R-Square = 0.1182					

Note: t-statistics and respective probabilities are represented in () and {}

Where: ** represents 5% level of significance

The Table 2 above displays results obtained from the logistic regression model employed to test the possible corporate governance determinants of financial fraud likelihood in Nigeria. The result above reveals a **Pseudo R²** value of 0.12 which indicates that about 12% of the variation in dependent variable is being explained by all the independent and control variables in the model. This also suggest that about 88% of the variation in the dependent variable is left unexplained but have been captured in the error term. The model goodness of fit as captured by the Wald statistics (10.83) with the corresponding probability value 0.0548 which shows at 5% statistically significant level reveals that the entire model is fit and can be employed for discussion and policy recommendation (see Appendix I). The model goodness of fit is justified by the result obtained from the Hosmer-Lemeshow goodness of fit value of 11.08 with probability value of 0.1972 which confirms the logistic model of financial fraud as fit. Particularly, the classification table shows that out of 60 cases that fell into the group of manipulation, 45 cases were predicted correctly with 93.75% sensitivity accuracy while 9 out of 12 cases that fell into the group of no manipulation were predicted correctly but with 37.50% specificity accuracy. However, we find that the overall accuracy rate is seen to be roughly 75% which suggest that the model is free from any significant bias hence can be can be employed for interpretation and policy recommendation.

From the table above, we find that the probability of financial fraud likelihood decreases with an increase in board independence. This implies that as the board becomes more and more independent the chances that managers will commit financial fraud becomes smaller. We opine that an independent board is expected to be unbiased in fulfilling its responsibilities and would not be subjected to any pressure by the internal organization of the company. This finding is consistent with prior studies of Sharma (2004) and Xie, Davidson III and DaDalt (2003). Furthermore, we found that our result aligns with those of Alves (2011) and Crutchley, Jensen and Marshall (2007) who provided evidences that independence of the board of directors facilitates effective corporate governance towards reducing agency problem hence boosting financial information quality.

This result however, contradicts that of Abdullah (2006) who found a positive significant relationship between board independence and accounting fraud. The results also show that board size has no likelihood of curbing nor promoting managers' tendencies of committing financial statement fraud during the period under review. This result contradicts the expectation that since the main function of the board is to provide monitoring; then the likelihood to commit fraud would be reduced as the board size increases. Our findings also fall away from those of Alzoubi and Selamat (2012) who argue that boards of directors are important catalyst as they are responsible for not only setting organizational goals and strategies, but aligning them with the interests of shareholders. In their views, boards of directors ensure transparency and credibility of the published financial statements which is consistent with the argument of Fama and Jensen (1983) who indicated that boards of directors possess the ultimate power in decision making since they possess the highest level of control in any organization. However, the result obtained here is seen to be consistent with the opinion of Lipton and Lorsch (1992) and Jensen (1993) who documented that when corporate boards expand beyond seven or eight members, they are less likely to function effectively as a curb on management. We also document that audit committee independence had no likelihood of curbing nor promoting financial fraud likelihood of bank managers during the period under investigation.

Conclusion and Recommendations

Corporate governance system ensures that company policies are enforced, goals are met, performance is monitored, adequate disclosures are made, effective internal control system are adhered to, procedures and independence, ethical standards, and quality control standards are followed. By performing these roles, effective corporate governance system is guaranteed and the incidence of financial statement fraud likelihood is extinguished. This study examined corporate governance determinants of accounting fraud likelihood of quoted international licensed banks in Nigeria for the period 2010 to 2018. The study documents that higher board independence has the likelihood of curbing sharp practices by bank managers thereby lowering the incidences of committing financial fraud. Succinctly, we carefully recommend that regulatory agencies should ensure stringent policies towards maximizing board independence which would invariably serve as a watchdog over management excesses and activities. This finding bears practical implications specific for shareholders of quoted deposit money banks in Nigeria that possess international authorization.

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APPENDIX I

Logistic regression Number of obs = 72
 LR chi² (5) = 10.83
 Prob > chi² = 0.0548
 Log likelihood = -40.412331 Pseudo R² = 0.1182

accrfraud	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
boardin	-.052505	.0251236	-2.09	0.037	-.1017464	-.0032636
boardsize	-.0468197	.0928334	-0.50	0.614	-.2287699	.1351304
audind	.118744	.1287932	0.92	0.357	-.133686	.3711739
revgrwth	.0238794	.012976	1.84	0.066	-.0015531	.049312
numsub	-.068188	.0508565	-1.34	0.180	-.167865	.031489
_cons	-1.093359	6.645509	-0.16	0.869	-14.11832	11.9316

estat gof, group (10)

Logistic model for accrfraud, goodness-of-fit test

(Table collapsed on quantiles of estimated probabilities)

number of observations = 72
 number of groups = 10
 Hosmer-Lemeshow chi2(8) = 11.08
 Prob > chi2 = 0.1972

. estat classification

Logistic model for accrfraud

Classified	----- True -----		Total
	D	~D	
+	45	15	60
-	3	9	12
Total	48	24	72

Classified + if predicted Pr (D) >= .5
 True D defined as accrfraud != 0

Sensitivity	Pr(+ D)	93.75%
Specificity	Pr(- ~D)	37.50%
Positive predictive value	Pr(D +)	75.00%
Negative predictive value	Pr(~D -)	75.00%
False + rate for true ~D	Pr(+ ~D)	62.50%
False - rate for true D	Pr(- D)	6.25%
False + rate for classified +	Pr(~D +)	25.00%
False - rate for classified -	Pr(D -)	25.00%
Correctly classified		75.00%