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BOARD CHARACTERISTICS AND THE LIKELIHOOD OF FINANCIAL STATEMENT FRAUD

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Abstract: The study examines the effect of board characteristics on financial statement fraud likelihood of quoted manufacturing firms in Nigeria. The scope of the study covers board attributes such as board independence, board expertise and board diligence; and the beneish M-score was used as the measure of fraud likelihood. This study utilized a quantitative research design. The sample covered 39 manufacturing companies in the Nigerian Stock Exchange (NSE) as at 2019. Secondary data was utilized for this study and the data were extracted from the annual reports of corporate organizations for the period 2013-2019 financial years. The binary logit regression was employed as the method of data analysis in the study. The findings reveal that the odd ratio of board independence, board expertise and board diligence negatively and significantly reduce the log odds of financial statement fraud in manufacturing firms in Nigeria. The study concludes that there is a need for boards to be more effective in their monitoring roles to reduce the occurrence of fraud.

Introduction

The complexity of financial statement fraud has gained prominence in recent times. Most firm managers have found financial statement fraud as an enticing strategy to ensure the continued existence of their firms as well as their positions in management. Managers deliberately misstate and misrepresent elements in the financial statement to give a misleading picture of the financial health of their firms. The aftermath of this practice has not only led to the collapse of major firms around the world but also a loss of investors' wealth (Bhavani & Amponsah, 2017; Tangod & Kulkarni, 2015). Hence, the need for detecting financial statement fraud has been rigorously exclaimed by stakeholders including professional and regulatory bodies.

Several authors (Kozlov, Hurtalo-Guain & Trakulhon, 2018; Popoola, Che-Ahmad & Samsudin, 2014) acknowledged the quest for the detection of financial statement fraud following the release of the Statement on Auditing Standard (SAS) No. 99 "Consideration of Fraud in Financial Statement Audit" by the American Institute of Certified Public Accountants (ACIPA, 2002) requiring auditors to obtain reasonable assurance that financial statements are free from material misstatement whether due to fraud or error. The Institute of Chartered Accountant of Nigeria followed suit by publishing the Nigeria Standards on Auditing No. 5 to cater for the auditor's responsibility to fraud (Popoola et al., 2014). Although these standards have placed the responsibility of fraud prevention and detection on management and those in charge of governance, auditors have been required to increase their detection rate by probing further into any irregularities or material misstatement that may signify fraud.

The board of an-organizations as the highest governing body is saddled with the responsibilities of exercising leadership, enterprise, integrity and judgments of its oversight and control so as achieve the company's continued survival and prosperity. However, from the recent happenings in the corporate world this responsibilities is far from being achieved, as a result of the boards lack of independence, financial experts and also not being diligent in their day to monitoring and control function. These deficiencies pose a great threat on the survival of an organization, and thus leading to corporate fraud. Corporate fraud has significant financial and non-financial impacts on businesses. The aftermaths of corporate fraud affect not only affect the companies and their shareholders, but also employment, social stability and the public at large. Among those that suffer from corporate fraud are those that rely on published information to assess company performance and make investment decisions, such as stockholders and the general public. The serious consequences of corporate fraud have prompted strong control and monitoring mechanisms to be enacted, with the goal of overseeing corporate and management activities.

This current study was motivated by a couple of gap found in literature. First, there exist inconsistent findings on the nexus between, board independence and the likelihood of financial statement fraud; board expertise and the likelihood of financial statement frauds. Secondly, there is paucity in empirical literature on the nexus between board diligence and the likelihood of financial statement fraud in Nigeria listed firm. This thus throws up a vista of opportunity for further research. Against the above backdrops, the following research questions were raised.

- What is the impact of board independence on the likelihood of financial statement fraud?
- What is the influence of board expertise on the likelihood of financial statement fraud?
- What is the effect of board diligence on the likelihood of financial statement fraud?

The remainder of the paper is organised as follows: Section two focuses on the literature review and hypotheses development. Section three addresses the methodology with emphasis on theoretical framework and model specification. Section four presents data analysis, interpretation and discussion of findings. Section five concludes.

Literature Review

Financial Statement Fraud

Fraud is generally any act that applies deception as its principal technique. It manifests in different forms and magnitudes. Albrecht, Albrecht, Albrecht and Zimbelman (2012) identified fraud in three broad categories: asset misappropriation; corruption; and fraudulent statement. Whereas asset misappropriation and corruption occur in greater frequency, fraudulent statement seldom occurs. According to Gupta and Gill (2012) and Omoye and Eragbhe (2014), financial statement fraud is an intentional misstatement of material facts in books of accounts by management with the aim of deceiving investors and creditors. This misstatement can occur through deliberate manipulation of any of the elements in a financial statement including income, expenses, assets, and liabilities. ACFE (2011) defined financial statement fraud as a deliberate misrepresentation of the financial condition of an enterprise through intentional misstatement or omission of amounts or disclosures. Albretch et al. (2012) sees financial statement fraud as a fraud committed by executives on behalf of an organization usually to make a reported financial statement look better than they actually are. From the above definitions, it can be deduced that financial statement fraud involves an intentional misstatement or misclassification of items in the financial statement in order to influence decision making of users. It is perpetrated by those in top management positions such as the Chief Executive Officers (CEOs) and Chief Financial Officers (CFOs) who have access and control over financial records of a firm (Bishop, Dezoort & Hermanson, 2017).

Financial statement fraud usually starts with little adjustments to accounts but the need to maintain the deception often lead to escalated fraudulent practices. Brennan and McGrath (2007) and Omoye and Eragbhe (2014) submitted that financial statement fraud generally begins with violation of Generally Accepted Accounting Principles, especially in jurisdictions with lack of prescriptive accounting standards, and ambiguities which allow accountants to choose between accounting policies. The ACFE (2011) identified five ways in which financial statement fraud is commonly perpetrated as improper recognition of revenue; improper treatment of expenses and cost; improper valuation of assets; improper recording of liabilities; and inadequate disclosures. Practically, financial statement fraud is achieved by falsifying or overstating assets, sales

and profit, or understating liabilities, expenses or losses (Dalnial, Kamaluddin, Sanusi & Khairuddin, 2014) in order to show a favourable picture of the firm's health. Items such as sales, account receivables, inventories have been observed to be more susceptible to fraud (Albretch et al., 2012; Kozlov et al., 2018; Tangod & Kulkarni, 2015).

The classification of a financial statement as being fraudulent depends on the motive behind the act (Brennan & McGrath, 2007). Whereas most misstatement may occur as a result of an error lack of expertise and negligence (Albrecht & Hoopes, 2014), several other factors have been attributed to the motive behind financial statement fraud. Hogan, Rezaee, Riley and Velury (2008) noted that the pressure to meet analyst forecast, incentive structure, the need for external financing, and poor performance are motivating factors for financial statement fraud. The opportunity to engage in fraud also increases as firm control structure becomes weak coupled with an ineffective corporate governance system and a deteriorated audit function (Aris, Othman, Arif, Malek & Omar, 2013; Gupta & Gill, 2012). Omoye and Eragbhe (2014) attributed financial statement fraud to the need to secure investor's interest, financing needs, bonus salaries, and shareholders expectations. A firm's manager who is unable to achieve a similar growth as recorded in the past or the desire to grow may be prone to financial statement fraud (Tangod & Kulkarni, 2015). These motives are surmised in the fraud triangle and fraud diamond theory where several authors have empirically tested their effect on financial statement fraud (see Mahdi, Qingfei, Vahab & Muhammad, 2019; Supri, Rura & Pontoh, 2018). Notwithstanding, Lotfi and Chadegani (2017) opined that the presence of these factors may not necessarily mean fraud exists but a drive to incite auditor's sensitivity towards the possibility of fraud.

The effect of manipulating financial statements is not borne by firms alone. It has a telling effect on stakeholders and the capital market of a given country. West and Bhattacharya (2015) noted that when financial statements are manipulated, managers unjustifiably improve the public appearance of their firms, thus, creating an unrealistic picture of the firms status. This, in turn, hinders the effective assessment of the future value of the firm (Bhavani & Amponsah, 2017) and significantly affects investor's confidence (Tangod & Kulkarni, 2015). In the end, firms either end up bankrupt, insolvent or liquidated (Unegbu & Tasie, 2017). Hence, it is pertinent that manipulations are identified early and further investigation should be carried out to detect the presence of fraud.

Board Characteristics

Board independence and the likelihood of financial statement fraud

Ilaboya and Lodikero (2017) described independence as an abstract state of the human mind which lacks a precise definition and too complex to be reduced to a legal code. It is simply the ability of an individual to live his/her live without being influenced by other people in an action. Board independence or independent directors are internal governance mechanism premeditated to reduce the agency cost arising from the conflict of interest between the principal and the agent. In support of the above suggestion, scholars have submitted that there exist a significant and negative nexus between board independence and the likelihood of financial statement fraud. That is, as the proportion of non-executive directors increases, the likelihood of financial statement fraud decreases (Ilaboya & Lodikero, 2017; Rezaee, Crumbley & Elmore, 2010; Peasnell, Pope & Young, 2005; Wang, 2006). This empirical evidence supports the assertion of (Fama & Jensen, 1983) that independent directors in the board help to strengthen the internal control mechanism of the board.

In partial support of the above empirical findings, Mahama (2015), Eneh (2018), Anichebe, Agbomah and Agbagbara (2019), and Park and Shin (2004) reported a positive relationship between board independence and the likelihood of financial statement fraud, that is, as the proportion of non-executive directors increases, so also the likelihood of financial statement fraud. This position however negates the assertion of (Fama & Jensen, 1983). While Yang and Buckland (2010) and Agrawal and Chadha (2015) found no evidence on the nexus between board independence and the likelihood of financial statement fraud. Thus, as a result of this mixed findings we hypothesize that:

> ***Ho_1:*** *Board independence has no significant impact on the likelihood of financial statement fraud.*

Board Expertise and the likelihood of financial statement fraud

Onourah and Imene (2016) asserted that when a board is comprised of experts, there is a high level of confidence in the financial statement, thus they have the likelihood of significantly reducing the likelihood of financial statement fraud

in an organization. Hence, the expertise of the board members (educational and professional experience in area of finance, accounting and auditing) will positively affects the quality of financial reports (Aifuwa & Embele, 2019). Empirical studies have substantiated this fact. Klein (2002), Carcello, Hollingsworth, Klein and Neal (2006), Abbott, Parker and Peters (2004) find a significant negative relationship between the presence of a member of board with financial expertise and the incidence of financial statement fraud. That is, the inclusion of a financial expert in the board reduces the likelihood of financial statement fraud in an organization. However, a recent empirical work by Anichebe et al. (2019) submitted that the inclusions of a financial expert in the board will increase the likelihood of financial statement fraud in an organization. This finding follows the trivial strand in literature as envisaged by (Aifuwa & Embele, 2019), that directors who are expert experts may be influenced to carry out various forms of creative accounting intended to mislead users of financial reports. Hence we hypothesizes that:

> ***Ho_2:*** *Board expertise has no significant impact on the likelihood of financial statement fraud.*

Board Diligence and Financial Statement Fraud

Board diligence is a reflection of the frequency of board meeting in carrying out their monitoring roles (Baba & Abdul-Manaf, 2017). Vafeas (1999) asserted that the frequency of board meeting is a significant proxy for measuring the effectiveness and intensity of board monitoring and discipline. The Nigeria corporate governance code of 2018 sounded that board meetings is the principal vehicle for conducting the business of the board and successfully fulfilling the strategic objectives of the company. Rodríguez-Ariza, García-Sánchez and Frías-Aceituno (2012) noted that regardless of the frequency of board meetings on corporate transparency, two opposing positions exist. The first argument advanced by scholars was that frequent board meeting may be a sign of weakness on the board, as it limits their performance (Vafeas, 1999). The second argument was in support of frequent board meetings, they were of the view that it enables board members to carry out their board functions effectively and efficiently leading to disclosing more information to the stakeholders (Lipton & Lorsch, 1992).

Leaning on the second argument, it is right to say that frequent board meetings will lead to improved financial reporting and also reduce the likelihood of financial statement fraud as board members will have the opportunity to discuss and resolve any financial reporting issue that may arise. Thus, making the board more diligent to reducing the likelihood of financial statement fraud.

However, empirical findings on the nexus between frequency of meeting in the board and the likelihood of financial statement fraud seem to be few. Zainal, Rahmadana and Zain (2013) investigated the impact of internal mechanisms of corporate governance and the likelihood of financial statement fraud in Indonesia public listed companies. They employed a sample forty-seven fraud firm and forty-seven non-fraud firm form 2007-2012. The result of the logit regression revealed that there is no significant impact of board diligence (meeting) on the likelihood of financial statement fraud, hence no relationship exists. Therefore we hypothesize that:

> ***Ho_3:*** *Board diligence (Meetings) has no significant impact on the likelihood of financial statement fraud.*

Theoretical Framework

Studies on the nexus between hoard characteristics and the likelihood of financial statement fraud have subjected to different Theoretic ranging from the Agency theory by Jensen and Meckling (1976), Stakeholder's theory by Freeman (1984), New Institutional Theory and Resource dependency theory by Pfeffer and Salancik (1978), Fraud Diamond theory, fraud triangle theory and Managerial Hegemony theory. This current study was hinged on the Agency theory to explain the influence of board characteristics on the likelihood of financial statement fraud in listed firms in Nigeria Stock Exchange.

The Agency theory explains the relationship between the principal (owners of the firm) and the agent (board of directors) (Aifuwa, Embele & Saidu, 2018), in which the principal delegates work to the agent but not able to monitor the behaviour of the agent (Hesselink, 2017). The theory is centred on the separation of ownership and control in the relationship between the principal and the agent. Based on the fact that the principal cannot continually oversea the behaviour of agents as regards of information disclosure, there could exist an agency problem which could lead to information asymmetry and opportunistic

behaviour. In financial reporting issue, the principal provide decision making authority to the agents, this decision might negate the board's stance on the report (Hesselink, 2017). This clearly show that board will not be working in the interest of the principal, hence to remedy this situation, the principal will incur monitoring cost or bonding cost to establish incentives for agents in order to work in their best interest. Therefore, a diverse board is needed.

The research methodology and the course of the research process

Model Specification

Our study adapted the model of Anichebe et al. (2019) in explaining the determinants of financial statement fraud likelihood in listed firms in Nigeria. Their model was stated as:

In functional form:

FRAUD=f(BOARDS,AUDCOM,BODIND, BODFE) (1)

In econometric form:

Where: FRAUD = Fraud likelihood; BOARDS = Board size; AUDCOM = Audit committee effectiveness; BODIND = Board independence; BODFE = Board members financial expertise, FSIZE = Firm size and ROA= Firm performance. $\beta_0$is the constant, β_1, β_2, β_3, β_4, are the coefficient of the explanatory variables for the model. e is the error term that captures the stochastic variables in the model. i = is the collection of the firms. t is the time factor. Two variables (board size, audit committee effectiveness) was removed and replaced with board diligence (BODDG) from their model to suit our study. Also, the relationship between the dependent and explanatory variables was controlled with auditor's independence (AIND) and firm size. Therefore, our model is specified as:

In functional form:

FRAUD= f(BODIND, BODFE, BODDG) (2)

In econometric form:

$$FRAUD_{it} = \beta_0 + \beta_1 BODIND_{it} + \beta_2 BODFE_{it} + \beta_3 BODDG_{it} + \beta_4 AUDIND_{it} + \beta_5 FSIZE_{it} + e_{it}. \quad (3)$$

A priori expectations in line with extant literature to be $\beta_1, \beta_2, \beta_3 < 0$

Variable Measurement

Table 1. Measures of variables

S/N	Variable	Type	Measurement	Supporting Scholars
1.	Likelihood of financial statement fraud	Dependent	Using Beneish M-score model. Beneish M-score model that was developed by Beneish (1999) to estimate the probability of financial statement manipulation. If the predictive M-score is greater than -2.22, the score of "1" was given if the companies had red flags indicating that there was a possibility of financial statement fraud and "0" if otherwise.	Anichebe et al. (2019), Ilaboya & Lodikero (2017)
2.	Board Independence	Explanatory	Percentage of independent and non-executive directors divided by the actual executives on the board yearly	Aifuwa & Embele (2019), Saidu & Aifuwa (2020)
3.	Board Expertise	Explanatory	Use of dummy variable 1 for expert, otherwise 0 An expert in the board must have both educational and professional qualifications with 5 years' experience in financial matters	Aifuwa & Embele (2019), Kankanamage (2015)
4.	Board Diligence	Explanatory	The total number of meeting held by the board of a company	Ofoegbu, Odoemelam & Okafor (2018)
5.	Auditors independence	Control	The ratio of audit fee to the company's revenue	Aifuwa & Embele (2019)
6.	Firm Size	Control	The natural logarithm of the total assets of the selected companies	Saidu & Aifuwa (2020)

S o u r c e : authors' compilation, 2019.

Research Methods

The multi-method quantitative research design was adopted in the study. The design examines nexus between variables, which are measured numerically and analysed using a range of statistical and graphical techniques (Saunders, Lewis & Thornhill, 2016). The population consisted of all listed firms in Nigeria Stock Exchange (169 listed companies as at 31st May, 2018) while the target population was forty-three (43) manufacturing firms listed on the Nigerian stock exchange. The manufacturing sector was studied due to emerging positive impact on the economy. The sample size was scientifically derived using the Yamane's (1967) sample size formula, which yielded thirty-nine (39) from the target populations. The stratified random sampling technique was employed in selecting companies under each sectors of the manufacturing industry (Consumer goods, industrial goods and conglomerates sector) via lottery system, so as to ensure that all sampled listed manufacturing firms have equal chances of being selected (Aifuwa, Saidu, Enehizena & Osazevbaru, 2019). Secondary data was hand-picked from the annual reports (2013-2019) of the sampled listed manufacturing firms so as to have enough periods to validate our generalization. The choice of the period i.e 2013-2019 is due to the availability of data in the data pool whereas as at the time of the studies, the data for the year 2020 is not yet published since it is practically by law that result of activities of the companies is submitted to the authority after the declaration of profit on preceding year basis.

Method of Data Analysis

The study employed both descriptive and inferential statistics. The Binary Logistic Regression was selected to test our hypotheses because our dependent variable was measured indichotomous scale (Ilaboya & Lodikero, 2017; Wooldridge, 2013). The analysis was done using e-views 8.

Data Analysis, Interpretation and Discussion of findings

Our data was summarized using descriptive statistics and inference which was drawn from them using inferential statistic.

Univariate Analysis

Table 2. Descriptive Statistics

	FRAUD	BODIND	BODFE	BODDG	AUDIND	FSZE
Mean	0.785983	0.633897	0.670085	3.491453	0.007323	6.949884
Maximum	1.000000	0.888900	1.000000	6.000000	0.164200	10.00530
Minimum	0.000000	0.272700	0.000000	1.000000	0.000000	5.171500
Std. Dev.	0.492134	0.160355	0.170717	0.663205	0.019715	1.014100
Obs	234	234	234	234	234	234

S o u r c e : authors' computation, 2020.

Multivariate Analyses

This section presents the result of the of the Hosmer-Lemeshow Test of Goodness fit and Binary Logistic Regression. Our hypotheses were tested at 5% level of significance (that is, if p-value < 0.05 reject **Ho**, else do otherwise) (Aifuwa & Okojie, 2015).

Table 3. Hosmer-Lemeshow Test of Goodness of Fit

Goodness-of-Fit Evaluation for Binary Specification
Andrews and Hosmer-Lemeshow Tests
Equation: UNTITLED
Date: 03/01/20 Time: 14:48
Grouping based upon predicted risk (randomize ties)

	Quantile of Risk			Dep=0		Dep=1	Total
	Low	High	Actual	Expect	Actual	Expect	Obs
1	0.1312	0.3691	17	16.3438	6	6.65621	23
2	0.3693	0.3868	12	14.2381	11	8.76192	23
3	0.3868	0.3965	18	14.5916	6	9.40840	24
4	0.3965	0.4035	12	13.7936	11	9.20643	23
5	0.4035	0.4108	14	14.2207	10	9.77929	24
6	0.4112	0.4191	16	13.4677	7	9.53227	23
7	0.4193	0.4281	14	13.2493	9	9.75072	23
8	0.4282	0.4365	14	13.6205	10	10.3795	24
9	0.4367	0.4493	10	12.8435	13	10.1565	23
10	0.4495	0.5654	12	12.6313	12	11.3687	24
		Total	139	139.000	95	95.0000	234
H-L Statistic			6.4023		Prob. Chi-Sq(8)		0.6023
Andrews Statistic			9.6757		Prob. Chi-Sq(10)		0.4694

S o u r c e : authors' computation, 2020.

Table 4 presents the result of the Hosmer-Lemeshow test and Andrews statistics of goodness of fit. The difference between both statistics are not large, which means that our model is sufficiently fitted (Hosmer & Lemeshow, 1989; Andrews, 1988a; 1988b). Buttressing this fact, the Chi-square estimation of the goodness of fit for both test reported, H-L(8) = 6.4023, p = 0.6023 & A(10) = 19.6757, p = 0.4694 show that there is no evidence of poor fit which means the regression model is correctly specified (Saidu & Aifuwa, 2020; Greene, 2008).

Table 4. Results of the Binary Probit Least Square

Dependent Variable: FRAUD
Method: ML - Binary Logit (Quadratic hill climbing)
Date: 03/01/20 Time: 14:42
Sample: 2014 2019
Included observations: 234
Convergence achieved after 5 iterations
Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	2.962174	1.806257	1.639952	0.1010
BODIND	-4.416061	1.860170	-2.374009	0.0286
BODFE	-8.490876	1.101560	-7.708046	0.0059
BODDG	-3.138242	1.203728	-2.607102	0.0174
AUDIND	3.113012	6.693604	0.465073	0.6419
FSZE	0.051082	0.133989	0.381242	0.7030
McFadden R-squared	0.050655	Mean dependent var		0.405983
S.D. dependent var	0.492134	S.E. of regression		0.494144
Akaike info criterion	1.387616	Sum squared resid		55.67255
Schwarz criterion	1.476214	Log likelihood		-156.3510
Hannan-Quinn criter.	1.423338	Deviance		312.7021
Restr. Deviance	316.0699	Restr. log likelihood		-158.0350
LR statistic	9.367850	Avg. log likelihood		-0.668167
Prob(LR statistic)	0.021281			
Obs with Dep=0	139	Total obs		234
Obs with Dep=1	95			

S o u r c e : authors' computation, 2020.

The result of Binary Logit Least Squares as presented in table 4 shows that there exist a significant and negative relationship between Board independence and the likelihood of financial statements fraud, $Z(1, 233) = -2.37$, $\beta_1 = -4.42$, $p = 0.028$. This implies that a unit increase in the percentage of independent and non-executive directors in the board will reduce the likelihood of financial statement fraud by -4.42. The result failed to reject the null hypoth-

esis that Board independence has no significant impact on the likelihood financial statement fraud. This findings is in tandem with works of Ilaboya and Lodikero (2017), Rezaee et al. (2010), Peasnell et al. (2005), and Wang (2006), that as the number of non-executive directors or independent directors increases so the likelihood of financial statement fraud decreases. This study is also in line with the agency theory, which emphasises the monitoring role of the board. However, our finding is in dissonance with work of Mahama (2015), Eneh (2018), Anichebe et al. (2019), and Park and Shin (2004), that reported a positive relationship between board independence and the likelihood of financial statement fraud, that is, as the proportion of non-executive directors increases, so also the likelihood of financial statement fraud. Likewise, submission of Yang and Buckland (2010) and Agrawal and Chadha (2015) found no evidence on the nexus between board independence and the likelihood of financial statement fraud.

We found out that presence of experts in the board negatively and significantly has an impact on the likelihood of financial statements fraud, $Z(1, 233) = -7.71$, $\beta_2 = -8.50$, $p = 0.06$. This simply means board experts have the likelihood of reducing the log odds of financial statement fraud by -8.50. Hence, we fail to reject the null hypothesis of that board expertise has no significant impact on the likelihood of financial statement fraud. Our finding is not consistent with work of Anichebe et al. (2019), they submitted that the inclusions of a financial expert in the board will increase the likelihood of financial statement fraud in an organization.

Board diligence was found to be significantly and negatively related to the likelihood of financial statements fraud, $Z(1, 223) = -2.61$, $\beta_3 = -3.14$, $p = 0.02$. This suggests that a unit increase in the number of meetings in the board, will decrease the likelihood of financial statements fraud. The study, therefore, rejects the null hypothesis Board diligence (Meetings) has no significant impact on the likelihood of financial statement fraud. Our result supports the argument that frequent board meetings would enables board members to carry out their board functions effectively and efficiently leading to disclosing more information to the stakeholders (Lipton & Lorsch, 1992). This finding is in dissonance with work of Zainal et al. (2013), who found no evidence on the nexus between board diligence and the likelihood of financial statement fraud.

In addition to our explanatory variables, two control variable introduced; Auditors independence and Firm size. Both of them provided no evidence on the relationship with audit quality, $Z(1, 233) = 0.47$, $\beta_4 = 3.11$, $p = 0.64$, and $Z(1, 233)$

= 0.38, β_5 = 0.05, p = 0.70 respectively. The McFadden R-squared stood at 0.0506 suggesting that about 5.1% of the systematic variation in the dependent variable was explained by the independent variables. LR statistics value of 9.367 was statistically significant at 5% - all slope coefficients except the constant are zero, this simply implies the joint significance of our model in the study.

Conclusion, Recommendations and Suggestions for Future Research

Conclusions

Based on the findings of the study, we concluded that board characteristics have an impact on the likelihood of financial statement fraud in listed manufacturing companies in Nigeria. Thus, our study validates the agency theory on the monitoring functions of the board in reducing financial statements fraud.

Recommendations

However, it is on the above conclusion with respect to the discussion of findings the following recommendations were made;

- Regulatory authorities of manufacturing firms should promote an independent board composition;
- Experts in the board should not only rely on the knowledge of finance and accounting alone, they should also be knowledgeable on forensic accounting; tax and computer technology as well; and
- The number of board meeting should be looked at by regulatory authorities in order to achieve its aim.

Limitations and Suggestion for further studies

The current study is subject to some limitations. First our study is limited first by the micro-numericity of the research data that is the sample of this study may not be fully representative of the population of listed manufacturing firms; secondly, the study ignored unlisted manufacturing firms. Thirdly, the study was carried out only with listed manufacturing companies in Nigeria. Thus, any generalization of the results of this study cannot be made with-

out caution. These limitations identified did not, however, vitiate the generalisation of our research findings.

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