Research Paper

Board Structure and Financial Reporting Quality in Quoted Non-Financial Firms in Nigeria

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ABSTRACT

This study investigated board structure and financial reporting quality among quoted non-financial companies in Nigeria. The broad objective was to determine the relationship between, board independence, board expertise, board meetings and audit committee size and financial reporting quality among quoted companies in Nigeria. The study employed ex-post facto research design, covering a period of six years (2013 to 2018). The population size is one hundred and fourteen (114) non-financial companies in Nigeria, while fifty-nine (59) quoted companies constituted the sample size. Content analysis of financial statements of sampled companies were carried out and data were analysed using descriptive and inferential statistics, like correlation matrix and panel least square regression. The study found that board independence, board expertise and audit committee size have significant and positive relationship with financial reporting quality, which by implication, board independence, board expertise and audit committee size were critical factor enhancing financial reporting quality among quoted companies in Nigeria. The research also found board meetings to have negative relationship with financial reporting quality. The study recommended that board of companies should consists of more independence board members made up of male and female with professional financial expertise capable of enhancing financial reporting quality.

Keywords: *Board independence, Board expertise, Board meeting, Audit committee size, financial reporting quality, Panel Least Square Regression*

INTRODUCTION

Financial reporting quality among firms has been an issue of concern in accounting. It is an important aspect of accounting system of any organization. This is because practice of financial reporting quality promotes transparency, truthfulness, credibility, fairness and accountability of the reported statement of comprehensive income, financial position and others information in annual report for the interest of users. The need for financial reporting quality was necessitated by concern raised about misleading financial reports, especially during and after global financial crisis (Okaily, Dixon & Salama, 2019). High profile accounting scandals and collapse of corporate firms around the world such as Enron, WorldCom, Xerox, Aldelphia, Tyco, Parmalat, One-Tel, HIH, Cadbury, Africa Petroleum etc (Okaily et al. 2019), have shown the importance of financial reporting quality. Again, the sack of five Chief Executive Officers of banks and some directors by the Central Bank of Nigeria in 2010 have exposed the need to have effective board structure capable of enhancing financial reporting quality in firms (Masoyi, Aliyu, Ebong & Ogere, 2014).

In Nigeria, every corporate organisation has two main decision making organs, namely; the Annual General Meeting (AGM) and Board of Directors (BOD) which are vital for the existence of the firm (CAMA, 2004). Board of Directors is an essential instrument

and a central body in the internal corporate governance mechanisms of a firm (DeBoskey, Luo & Zhou, 2019). The board of directors basically is saddled with the responsibility of monitoring management on behalf of the dispersed shareholders and stakeholders of companies. The workability of an effective board of directors depends on its composition or structure like board independence, board expertise, audit committee and board meetings are vital in promoting corporate governance capable of enhancing financial reporting quality.

According to Adebiyi (2017), the process of financial reporting involves transmitting financial information to the various users; and a quality process would be contingent on the board structure. The contemporary board of director's structure such as board independence, board meeting, audit committee and board expertise are charged towards monitoring the performance of management and ensure that they act according to the best interests of the owners and promote quality financial reporting (O'Connell & Cramer, 2010). Weak board structures may provide an opportunity for managers to engage in behavior that would eventually result in personal gain. Poor board structure gives room for questionable activities, fraudulent dealings that could lead to an inverse effect on the firm (DeBoskey et al. 2019; Ogbechie & Koufpoulos, 2010). Jensen (1993) believes that board structure is an important internal governance mechanism designed by the firm to counter managerial opportunistic behaviors. It gives an overview of the standard of such organization, which also influences its public image and quality of financial reporting to the stakeholders.

In times past, there have been concerns raised on the effectiveness of the board of directors structure in relation to financial reporting quality. However, several studies have been conducted in developed countries in relation to board structure and financial reporting quality (Bradbury, Mak & Tan (2006) in Singapore; Myring & Shortridge (2010) in US; Gois (2014) in Portugal) but few of these studies were conducted in developing countries like Nigeria (Akeju & Babatunde, 2017; Onuorah & Imene, 2016; Uwuigbe, Erin, Uwuigbe, Igbinoba, & Jafaru, 2017). Their studies in relation to financial reporting quality were basically on banks. Outcomes of their studies were inconsistent and inconclusive due to methodological approach applied like the use of analysis of variance (ANOVA), multiple least square regression and ordinary least square regression (Akeju & Babatunde, 2017 and Echobu, Okika & Mailafia, 2017), hence the need to validate these studies.

This study will adopt the Modified Jones Model proposed by Dechow, Sloan and Sweeney (1995) for assessing financial reporting quality which is characteristics of level of earnings management practiced by firms (Holtz, & Alfredo, 2014) . This study was motivated by the choice of our independent variables (board structure – board independence, board meeting, board expertise and audit committee). This mix has not been used in prior studies to the best of the researcher's knowledge. Other methodological approach which this study adopts to the best of the researcher's knowledge have not been applied by studies from Nigeria, includes panel least square regression with application of diagnostics tests like variance inflation factor, Breusch Pagan Godfrey, Ramsey Reset and Hausman Test. Against the above backdrops, the following research questions were raised

(1) To what extent does board independence influence financial reporting quality among quoted non-financial firms in Nigeria?

(2) To what extent does board meeting influence financial reporting quality among quoted non-financial firms in Nigeria?

(3) What is the influence of board expertise on financial reporting quality among quoted non-financial firms in Nigeria?

(4) What is the influence of audit committee size on financial reporting quality

among quoted non-financial firms in Nigeria?

The remainder of the paper is organized 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

METHODOLOGY
Research Design
This study employed ex-post facto type of research design. It is a panel data covering a time period of six years that is from 2013 to 2018. This is because it is a combination of cross section and time series data. The design covers all data of non-financial companies quoted on the Nigeria Stock Exchange. The design will cover board structure as independent variable which is proxied with board independence, board meeting, board expertise and audit committee, while financial reporting quality as dependent variable will be proxied with discretionary accrual.

Population of the Study
The population of this study cut across quoted non-financial firms on the Nigeria Stock Exchange as at 31st December 2018. A total of one hundred and fourteen (114) firms will constitute the population of this study (Nigeria Stock Exchange Fact-Book 2018). Different firms in non-financial sectors quoted on the stock exchange in both First and Second-Tier securities will form the population of study. These firms comprise those in Agriculture, Automobile and Tyre, Breweries, Building Materials, Chemicals and Paints, Computer and Office equipment, Conglomerates, Construction, Engineering technology, Food/Beverages, Health Care, Petroleum (Marketing), Packaging, Industrial and domestic hard wares.

Sample Size And Sampling Technique
The sample size entails a total of fifty-nine (59) non-financial companies quoted on the Nigerian Stock Exchange. The sample size was derived from Burley's formula propounded and popularized by Yamane (1967) for the determination of sample size in a finite population. Due to heterogeneous nature of firms quoted on the Nigeria Stock Exchange, stratified-purposive sampling technique was employed in selecting the constituted sample size. Stratified-Purposive sampling as a non-probability sampling technique permits the researcher to use knowledge and professional judgement to select required sample size from the population whose financial statement and accounts are up to 31st December, 2018

Source of Data
This study focused on secondary source of data collection. Historical data would be obtained from the financial statements and accounts of sampled firms. In effect content analysis would be employed for the purpose of obtaining the panel data for the periods under study.

Method of Data Analysis
Data collected for the purpose of this study were analysed using descriptive and inferential statistics.
a) **Descriptive statistics:** The descriptive statistic to be employed in this study will entail the measure of dispersion and central tendency like mean, standard deviation will help to see the degree of difference, while the Jacque-Bera test shows if results are normally distributed or not.
b) **Inferential Statistics:** Inferential statistic to be employed in this study will include Pearson correlations analysis and Panel Least Square Regression. Pearson correlation analysis will be used to ascertain the direction, strength, and significance of a bivariate relationship, and to determine the presence of multi-collinearity among a set of variables values over 0.900 will be

considered to be a sign of multi-collinearity. Variance inflation factor as a diagnostic test will also be applied to further check if there exist presence of multi-collinearity problem. Similarly, Hausman test as a diagnostic test is employed whether to use fixed effect or random effect panel least square regression. The Hausman test will be conducted primarily under a random effect model, and if the test says reject, then the fixed effect model will be accepted, otherwise H0 of Hausman test proves that it will be random effects model. Data collected will be estimated using computer software known as E-views 8.1.

Theoretical Framework: Agency Theory

Agency theory provides a framework for the study of the relationship between the board structure and financial reporting quality in quoted non-financial firms in Nigeria. The agency theory was initiated and traced by Jensen and Meckling in 1976. The rationale towards the theory is that the company is handled by management (executive directors) who transacts as agent on behalf of the principal who own the business (Clarke, 2004). The agent is mandated with power and authority to take decisions that can be of benefits to the organization. Agency theory sees the organization as a link of contracts in which stakeholders to the firm can carry out transactions (Jensen & Meckling, 1976). Problems are bound to arise between principal (owners) and agent (management) in the cause of making personal decision on use of productive assets of the firms. Instituting board and respective structure is an attempt to resolve agency problem. The dissimilar between owners and control promotes conflict of interest (Aguilera, Filatotchev, Gospel & Jackson, 2008). This is because owners believe that managers (executive directors) could take decisions that are favourable to their selfish interest and not the ownerships' personal gain (Padilla, 2002).

Board structure helps to promote agency theory concepts, because the board facilitate monitoring and controlling management of the firms (Fama & Jensen, 1983). Agency theory helps to strengthening the board of directors in proper governing of the firm and ensuring performance of the organization (Jackling & Johl, 2009). Agency theory helps in reducing managers and owners conflicts especially when good corporate governance practices exist for the interest of stakeholders (Dey, 2008).

In this regard, board structure ranging from board independence, board expertise, board meetings and audit committee size are to ensure reduction of agency problems by way of monitoring and controlling management and enhance financial reporting quality.

Model Specification

The model specification of this study will be adopted from the Modified Jones Model by Dechow, Sloan and Sweeney (1995), used to calculate the discretionary accruals which is a proxy for financial reporting quality. This will be specified as follow:

$$TA_t / TA_{t-1} = a_1 1/TA_{t-1} + a_2(\Delta REV_t - \Delta REC_t)/TA_{t-1} + a_3(PPE_t/TA_{t-1}) + \varepsilon_t \dots\dots\dots\dots (1)$$

Where, $TA_{ci,t}$ = Total Accruals, calculated as firm i's income before extraordinary items and discontinued operations, minus cash flows from continuing operations plus extraordinary items and discontinued operations in year t;

$TA_{si,t-1}$ = Total Assets for firm i in year t - 1;

ΔRev = Change in net revenue for firm i from year t - 1 to t;

$\Delta ARec_{i,t}$ = Change in accounts receivable for firm i from year t - 1 to t;

$PPE_{i,t}$ = Gross property plant and equipment;

DAC (FRQ) $= EARNQ_{it}^{DA} = \varepsilon_{i,t} = \left| \dfrac{TA_{ci,t}}{TA_{si,t-1}} - \dfrac{\hat{TA}_{ci,t}}{TA_{si,t-1}} \right| \dots(2)$

This was specified in Jones Model [1995] form as:

$DAC = \eta_0 + \eta_1 BIND_{it} + \eta_2 BM_{it} + \eta_3 BE_{it} + \eta_4 ACS_{it} + \mu \dots (3)$

Where;

DAC= absolute discretionary accrual used as a proxy for financial reporting quality (FRQ)

η_0 = Constant

η_1 to η_4 = Coefficients of the independent variables

BIND = Board Independence which is measured as the ratio of Non-Executive Director/ Total Board Size of firm (i) at time (t).

BE= Board expertise measured in dummy as 1 where there is board member with accounting and related qualification, otherwise 0 of firm (i) at time (t).

BM=Board meetings measured as number of meetings held of firm (i) at time (t).

ACS=Audit committee size measured as number of members that constituted the committee of firm (i) at time (t).

Our apriori expectations are as follow: $\eta_1 > 0$, $\eta_2 > 0$, $\eta_3 > 0$, $\eta_4 > 0$ which means that:

$\eta_1 > 0$: suggests that a unit increase in board independence will lead to an increase financial reporting quality;

$\eta_2 > 0$: suggests that an increase in the board meeting will lead to a increase in financial reporting quality;

$\eta_3 0$: suggests that a unit increase in the board expertise, will lead to an increase in the financial reporting quality.

$\eta_4 > 0$: suggests that an increase in the audit committee size, will lead to an increase in the financial reporting quality.

Measurement of the Variables
The Variables for this study will be measured as follows:

Table 1: Operationalisation of Variables

SN	Variables	Measurement	Sources	Apriori Sign
1	FRQ	Financial reporting quality proxied with discretionary accrual (DAC) measured by deducting nondiscretionary accruals from total accruals. (A higher FRQ value indicates higher accruals quality and higher financial reporting quality)	(Dechow, et al., (1995): Kothari, Leone & Wasley, 2005; Oba, 2014).	
2	BI	It is the number of non-executive directors divided by total board size.	(Htay *et al.,* 2013; Chakroun & Hussainey, 2014; Soheilyfar *et al.,* 2014)	+
3	BM	Board meeting is measured as the total number of meetings held in a financial year	(Echobu, et al., 2017)	+
4	BE	Board expertise measured as '1' when a board member possesses accounting qualification, otherwise 0	(Onourah & Imene, 2016)	+
5	ACS	Audit committee size is measured as total number of member that constituted the committee.	(Eyenubo, Mohammed & Ali, 2017)	+

Source: Author's Compilation (2019)

Data Analysis, Interpretation and Discussion of findings
The process of the analysis involved descriptive Statistics, diagnostics tests (Serial correlation, Normality, Heteroskedasticity and Multicollinearity) and inferential statistic (Panel Least Regression Analysis) to explain variables used in the study

Table 1: Descriptive Statistics

	DAC	BIND	BM	BE	ACS
Mean	0.040888	0.660370	4.603989	0.669516	5.433048
Median	-0.049000	0.670000	4.000000	1.000000	6.000000
Maximum	5.037000	0.940000	10.00000	1.000000	6.000000
Minimum	-0.710000	0.000000	1.000000	0.000000	3.000000
Std. Dev.	0.603357	0.145785	1.141371	0.471059	0.991646
Skewness	6.494142	-0.898640	1.267125	-0.720749	-1.389729
Kurtosis	46.91146	4.765722	5.714096	1.519479	3.350747
Jarque-Bera	30667.33	92.83939	201.6603	62.44668	114.7829
Probability	0.000000	0.000000	0.000000	0.000000	0.000000
Observations	351	351	351	351	351

Source: Authors Computation (2020) (E-Views 8.1) (See appendix section for detailed results)

From table 4.1, it is deduced that discretionary accrual (DAC) as a proxy for financial reporting quality stood at maximum and minimum values of 5.037 and -0.710 units respectively. Its mean value of 0.041 and high standard deviation value of 0.603 unit which is above the mean signified that on average financial reporting quality of some of the sampled companies for the periods were very low. The positive skewness value of 6.494 implied that the curve spreads across greater range of values towards the right hand side (RHS) direction, while kurtosis with a value of 46.9 units showed that the curve is peaked at approximately 47 unit (mersokurtic). Discretionary accrual (DAC) with Jarque-Bera test value of 30667.3 and at probability value of 0.000 (0%) which is less than critical value of 0.05 (5%) significance level , implied that discretionary accrual (DAC) as a proxy for financial reporting quality is not normally distributed for the purpose of regression analyses.

Board independence which showed maximum and minimum values at range of 0.940(approximately over 94%) and 0.00 (0%), leaving the mean value at 0.660 units (over 66%) and minimal standard deviation of 0.145 units (about 15%), implied that by average greater proportion of the board members of some sampled firms were non-executive members (non-executive members were greater than executive members). The negative skewness value of -0.898 units showed that graph moves towards left hand side (LHS) direction, while kurtosis value of 4.76 units indicates that the curve is peaked at approximately above 5 units (leptokurtic) implication is above normal distribution level. Its Jaeque-Bera value of 92.839 at probability value of 0.0000 (0%) which is less than 0.05 (5%) critical significance level, implied that the variable is not normally distributed.

Board expertise (BE) of the sampled companies measured in dummy stood of a maximum of 1 and minimum of 0, while the mean value of 0.669 and standard deviation value of 0.471 indicated that on average most of the board members possessed professional qualifications in accounting and financial related areas. Its negative skewness value of -0.7207 means that it curve moves towards left hand side direction, while the kurtosis value of 1.519 shows that the curve is peaked at approximately 2 (playtokurtic position). Similarly, the Jarque-Bera test value of 62.446 with a probability value of 0.000(0%) which is less than critical value at 0.05 (5%) significance level, suggested that the variable is not normally distributed for the purpose of regression.

The board meetings which stood at maximum and minimum values of 10 and 1 respectively, coupled with mean value of 4.60 (5 times) and standard deviation of 1.141, showed that by average greater number of the sampled companies held board meetings 5 times annually. The positive skewness value of 1.267 units indicates that the curve moves towards right hand side (RHS) direction, while kurtosis value of 5.71 indicates that the curve is peaked at approximately above 6 units (leptokurtic position). The Jaeque-Bera value of 201.660 at probability value of 0.0000 (0%) which is less than 0.05 (5%) critical significance level, showed that the variable is not normally distributed.

Audit committee size which stood at maximum and minimum values of 6 members and 3 members respectively, coupled with mean value of 5.433 (5 members) and standard deviation of 0.991, showed that by average greater number of the sampled companies audit committee size stood within 5 to 6 members. The negative skewness value of -1.389 units indicates that the curve moves towards left hand side (LHS) direction, while kurtosis value of 3.350 indicates that the curve is peaked at approximately above 3 units (leptokurtic position). The Jaeque-Bera value of 114.782 with probability value of 0.0000 (0%) which is less than 0.05 (5%) critical significance level, showed that the variable is not normally distributed. Hence, the

researcher proceeds to carry out diagnostic tests from the perspective of the histrogram.
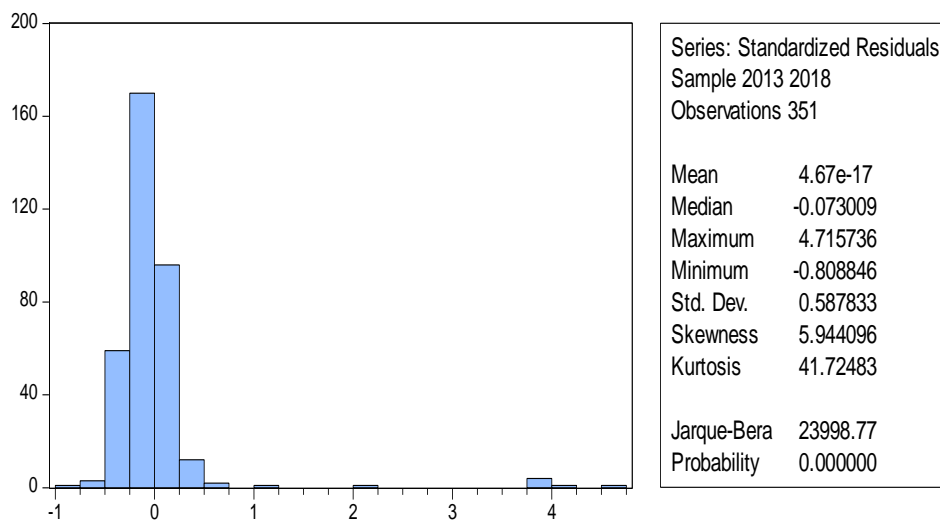
Diagnostic Tests

Series: Standardized Residuals	
Sample 2013 2018	
Observations 351	
Mean	4.67e-17
Median	-0.073009
Maximum	4.715736
Minimum	-0.808846
Std. Dev.	0.587833
Skewness	5.944096
Kurtosis	41.72483
Jarque-Bera	23998.77
Probability	0.000000

Figure 1 Histogram Test
Source: Researchers' computation (2020) E-views 8-1

The normality and other mean statistics of the regression variables are revealed in the histogram normality test in figure 1 above. The result of the histogram normality test revealed maximum and minimum of 4.7157 and -0.80888 with mean value of 4.67e-17 which is greater than standard deviation of 0.5878 suggesting that a mean value of most of the variables indicated high effect on financial reporting quality. The histogram showed skewness value of 5.94 indicating that it moves towards left, while the kurtosis value of 41.7248 was leptokurtic in nature (above 3) Engle and Patton (2001) asserted that kurtosis values ranging from 4 to 50 are considered to be very high and implied very extreme deviation from normality. The Jarque-Bera test of 23998.77 and associated probability value of 0.0000 (less than 1% which is less than 5% significance level). The result of the normality test revealed in overall that the results are not normal distributed Hence, we proceed to correlations matrix to examine associations among variables.

Table .2: Correlation Matrix

	DAC	BIND	BM	BE	ACS
DAC	1.000000				
BIND	0.062277	1.000000			
BM	-0.064283	-0.007186	1.000000		
BE	0.107825	0.135755	-0.004981	1.000000	
ACS	-0.171402	0.135255	-0.078085	0.215058	1.00000

Source: *Researchers Computation (2020) (See appendix section for detailed results)*

The correlation matrix in Table 4.2 shows associations with variables examined. It revealed mixed correlation coefficients of both negative and positive values between the dependent variable (financial reporting quality proxied with discretionary accrual) and the independent variables (board structure). When discretionary accrual (DAC) as a proxy for financial reporting quality is at a unit value of 1.0000, it is negatively correlated with board meeting (BM, r = -0.064 unit) and Audit committee size (ACS, r = -0.171 unit) while it exhibited positive association with board independence (BIND, r = 0.062 unit), and board expertise (BE, r = 0.107 unit).The correlation coefficients are relatively small which is a sign of low effect of board

structure (board independence ,board expertise, board meetings and audit committee size) in relation with financial reporting quality. Also, the low associations are indicative of absence of the problem of multi-collinearity in the regression variables, since none of the correlation results identified is above 0.90 as suggested by Meyers, Gamst and Guarino (2006). Hence we proceed to variance inflation factor test to further check if there is any presence of multicollinearity in the results for the purpose of regression as indicated in Table 4.3 below.

Table 4.3: Test of Variance Inflation Factor

Variable	Centered VIF
C	NA
BIND	1.101543
BM	1.088056
BE	1.128898
ACS	1.442587

Source: *Researchers Computation (2020) (See appendix section for detailed results)*

The value reported for variance inflation factor was relatively low with figures of centered variance inflation factors of 1.101 for board independence; 1.128 for expertise of the board, 1.088 for frequency of board meeting; 1.442 for audit committee size. The VIF test backed up the results of the correlation matrix in Table 4.2 which is an indication of absence of multi-collinearity in the regression model being studied as none of the values was above the threshold of 10 units (Hair, Black, Babin & Anderson, 2010).

Table 4.4: Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.978547	Prob. F(7,343)	0.2148
Obs*R-squared	0.211349	Prob. Chi-Square(7)	0.4153
Scaled explained SS	0.391026	Prob. Chi-Square(7)	0.4510

Source: *Researcher's Computation 2020. (E-View 8.1)*

Furthermore, the heteroskedasticity test was done using the Breusch-Pagan-Godfrey test. The test which reported F-statistic of 0.978547 and at a probability value of 0.0.2148 implied that there is no presence of heteroskedasticity and as such there is no

evidence for the presence of serial correlation.

Table 5: Ramsey RESET Test

Statistics	Value	Df	Probability
t-statistic	0.377793	342	0.5632
F-statistic	1.409487	(1, 342)	0.1978
Likelihood ratio	1.151865	1	0.2507

Source: Researcher's Computation (2020) E-views 8.1 (See appendix section for detailed results).

Another diagnostic test employed in this study was the Ramsey reset test of model specification which was used to justify the model adopted for the study. The results indicated a t-value of 0.378 and a probability value of 0.5632, indicating that the model has been correctly specified and the regression analyses can be conducted.

Table 6: Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	17.65005	7	0.0045

Source: Researcher's Computation (2020) E-views 8.1

The Hausman test as a diagnostic tested is conducted to determine whether to use random effects or fixed effects panel least square regression. The decision rule is to accept random effects panel least square regression if the calculated chi-square statistical probability value is greater that critical value of 0.05 (5%) significance level, otherwise choose the fixed effects panel least square regression for the purpose of analyses and test of hypotheses.

Discussion of Findings and Test of Hypotheses

Having carried out various diagnostic tests, this section highlights and examines fixed effects panel least square regression in Table 4.7 below.

Table 7: Panel Regression Analyses

Variables	Coefficients	t-Statistics	Prob.
Constant	-0.926635	-1.364222	0.1736
BIND	0.210208	1.114549	0.2660
BM	-0.000398	-0.017463	0.9861
BE	0.002461	0.030339	0.9758
ACS	0.093878	2.087429	0.0377
R-squared (R^2)	0.725057		
Adjusted R-squared (R^2)	0.662350		
S.E. of regression	0.353692		
F-statistic (Prob.)	11.56272	0.000000	
Durbin-Watson statistic	1.891839		

Source: Researchers Computation 2020 (E-Views 8.1). (See appendix 11 for detailed results)

The result of the regression analysis presented in Table 4.7 shows the fixed effect panel regression results since the Hausman test supports it. Reported below the equation in parentheses were the t-statistics. The coefficient of determination R-square (R^2) of 0.725057 with discretionary accrual (DAC) which is the substitute for financial reporting quality (FRQ), showed that about 73% of the changes in the dependent variable (financial reporting quality) were explained by the independent variables of the board structure made up of board independence (BIND), board expertise (BE), board meeting (BM) audit committee size (ACS), while the remaining 27% were unaccounted for, hence captured by the error term. Also, after adjusting the degree of freedom, the adjusted coefficient of determination (adjusted R-squared) R^2 value of 0.662350 with discretionary accrual (DAC) which is the replacement for financial reporting quality, suggested that about 34% of the systematic variation in the dependent variable which is financial reporting quality were accounted by stochastic disturbance. Meanwhile, the F-statistics which is overall goodness of fit measure with a value of 11.56727 and the associated probability value (PV) of 0.000000 implied that there exists a significant linear relationship between the dependent and the explanatory variables. Also, the Durbin Watson value of 1.891839 suggested absence of autocorrelation problem in the results, hence outcomes are suitable for prediction and fundamental decision making.

Test of Hypotheses

Hypotheses formulated previously in chapter two are tested in this section. Results of fixed effect panel least square regression in Table 4.7 is applied for the purpose of testing hypotheses. Our decision rule is to accept hypothesis formulated earlier in chapter one which are restated in this section, if the calculated probability value (PV) is greater than the critical probability value at 5% significance level, otherwise we reject it.

Test of Hypothesis One

Hypothesis formulated: H_{01}: Board independence has no significant influence with financial reporting quality among quoted non-financial companies in Nigeria.

Test Statistics and decision: The result of board independence (BIND) in Table 4.7 indicated calculated positive coefficient value of 0.210208 and t-value of 1.114549 at a probability value of 0.2660 (26%) which is greater than critical probability value of 0.05(5%). The outcome suggested that board independence is statistically insignificant implying that it is a weak influencing factor, but is positively related with financial reporting quality. Following the decision rule, the hypothesis formulated is therefore accepted, signifying that board independence has no significant influence on financial reporting quality among quoted companies in Nigeria.

Test of Hypothesis Two

Hypothesis formulated: H_{02}: Board meetings has no significant effect with financial reporting quality among quoted non-financial companies in Nigeria

Test Statistics and Decision: The result of board meetings (BM) in Table 4.7 showed a negative coefficient of value of -0.000398 and t-value of -0.017463 at a probability value of 0.9861 (99%) which is more than critical probability value at 0.05 (5%) significance level. The result indicated that board meetings is statistically insignificant, implying that it is a weak enhancing factor and negatively related with financial reporting quality. Since the calculated probability value is greater than the critical probability value, the hypothesis formulated is therefore accepted, meaning that board meetings has no significant effect with financial reporting quality among quoted companies in Nigeria.

Test of Hypothesis three

Hypothesis formulated: $H0_3$: Board expertise has no significant influence with financial reporting among quoted non-financial companies in Nigeria.

Test Statistics and Decision: The result of board expertise (BE) in Table 4.7 revealed calculated positive coefficient value of 0.002461 and t-value of 0.030339 with a probability value of 0.9758 (98%) is greater than critical probability value at 0.05 (5%) significance level. It implied that board expertise is statistically insignificant with financial reporting quality. Following the decision rule, the hypothesis formulated is therefore accepted since the calculated probability value is less than critical probability value. This showed that board expertise has no significant influence, but positively related with financial reporting quality among quoted companies in Nigeria.

Test of Hypothesis Four

Hypothesis formulated: H_{04}: Audit committee size has no significant influence with financial reporting quality among quoted non-financial companies in Nigeria

Test Statistics and Decision: The result of audit committee size (ACS) in Table 4.7 showed a positive coefficient of value of 0.093878 and t-value of 2.087429 at a probability value of 0.0377 (4%) which is less than critical probability value at 0.05 (5%) significance level. The result indicated that audit committee size is statistically significant, implying that it is strong influencing factor and positively related with financial reporting quality. Since the calculated probability value is greater than the critical probability value, the hypothesis formulated is therefore rejected, meaning that audit committee size has significant influence with financial reporting quality among quoted companies in Nigeria.

DISCUSSION OF FINDINGS

The findings and discussions were achieved having analysed results from descriptive statistics, correlations, panel least square regressions and test of hypotheses. These are discussed as follows:

Relationship Between Board Independence and Financial Reporting Quality

The result of board independence in Table 4.7 fixed effect panel least square showed positive coefficient value of 0.210208 with financial reporting quality indicating that a unit increase in board independence could bring about over 21% increase in financial reporting quality which is in line with earlier stated apriori expectation. The hypothesis tested revealed that board independence has no significant effect on financial reporting quality, but positively related with financial reporting quality. By implication, board independence is a weak influencing factor, but has positive relationship with financial reporting quality among companies in Nigeria. The finding is consistent with Jaggi, Leung and Gul (2009), Cheng and Courtenay (2006), Hassan and Bello (2013), Htay, Said and Salman (2013), and Soheilyfar, et al (2014) who found significant positive relationship between board independence and financial reporting quality. The result indicated that presence of independent directors will assist in improving the quality of financial reporting. This study argued against related studies Chakroun and Hussainey (2014) show that board independence negatively affects financial reporting quality. However, Haji and Ghazali (2013), Fathi (2013), Asegdew (2016) and Al-Asiry (2017) showed an insignificant relation between board independence and financial reporting quality which by implication board independence does not lead to high quality financial reporting.

Relationship Between Board Meetings and Financial Reporting Quality

The study found that board meeting which stood at mean value of 4.6039 in Table 4.1 showed that most of the sampled firms held board meeting 4 to 5 times in a year. It negative coefficient value of -0.00039 as

shown in Table 4.7, implied that a unit increase in board meetings could bring about a decrease in financial reporting by about 0.004%. The result is against our apriori expectation that supported positive expectation. The hypothesis tested showed that board meeting has no significant effect on financial reporting quality but negatively related with financial reporting quality. This implied that board meetings is a weak influencing factor. By implication, board meetings are not directly a means of improving financial reporting quality, but are towards enhancing performance. The finding concurred Uzun (2004) who did not find any significant differences in board meeting frequency and financial reporting quality. However, .Carcello, et al. (2011) argued that diligent boards and meetings enhance the level of oversight and improved financial reporting quality.

Relationship between Board Expertise and Financial Reporting Quality

It is observed from the descriptive statistics as shown in Table 4.1, that board expertise indicated mean value of 0.669515 which means that about 67% of the sampled companies had board members with accounting and finance related professional and academic qualifications. Its positive coefficient as indicated in Table 4.7 with a value of 0.002461, implied that a unit increase in board expertise, could bring about corresponding increase in financial reporting quality of about 0.02%. The result is in line with our apriori expectation because of its positive coefficient relationship. The hypothesis tested indicated that board expertise has no significant influence, but positively related with financial reporting quality. This implied that board expertise or member of the board with professional qualification in accounting and finance related areas are weak factors, but has positive relationship in enhancing financial reporting quality. Meanwhile, the board expertise is majorly concerned in ensuring that financial transactions are credibly and accountably reported in the

annual reports. The finding corroborated with D'onza and Lamboglia, (2014), Kantudu and Samaila (2015), Onourah and Imene (2016) who revealed that board expertise has positive relationship with financial reporting quality. But was against Kankanamage (2015) who revealed that board expertise has significant and negative relationship with financial reporting quality.

Relationship between Audit Committee Size and Financial Reporting Quality

Finally, audit committee size with mean and median values of 5.4330 and 6.0000 respectively as shown in Table 4.1 suggested most of the sampled companies had 5 to 6 members as audit committee. Its positive coefficient value of 0.09387as shown in Table 4.7, implied that a unit increase in audit committee size could bring about an increase in financial reporting by about 9%. The result is in tandem with our apriori expectation that supported positive expectation. The hypothesis tested showed that audit committee size has significant influence and positive relationship with financial reporting quality. This implied that audit committee size is a critical factor enhancing financial reporting quality. The finding supported the deduction that audit committee size is said to be one of the most examined determinants of economic disclosure and many researchers recognized this element as positively connected to higher disclosure and financial reporting quality (Eyenubo, Mohammed & Ali, 2017). Kantudu and Samaila (2015) and Akeju and Babatunde (2017) showed that audit committees, is statistically significant with financial reporting quality. But Onuorah and Friday (2016) argued against that audit committee size (ADCMZ) has negative relationship with financial reporting quality.

CONCLUSION, RECOMMENDATION AND SUGGESTION FOR FUTURE RESEARCH

This study centres on the effect of board structure on financial reporting quality of quoted non-financial firms in Nigeria.

Detailed review of related empirical literatures of extant studies have shown that board structure of firms played crucial roles in financial reporting quality which can be either positively, negatively or no relationship. Agency theory from the theoretical framework upon which this study is anchored argued that an effective board structure is critical in monitoring management and facilitate financial reporting quality which as well lessen agency problem between management and owners.

Following the various reviews of related literatures, panel data was collected and subjected to series of tests like descriptive statistics, correlations matrix, other diagnostics tests, the study proved that board structures like board independence, board expertise and audit committee size have positive relationship with financial reporting quality. On the other board meetings have negative relationship with financial reporting quality. By implications, the results of the variables are either critical or weak influencing factors of financial reporting quality. The outcomes were in alignment with previous studies either for or against. In conclusion, board structure has influence which is either positively or negatively related with financial reporting quality among quoted non-financial companies in Nigeria.

Researchers in the accounting profession have looked for means of improving and restoring lost confidence in the profession due to incessant corporate scandals. Various recommendation have been made on how to improve the quality of financial reports including the application of corporate governance mechanisms, ethical compliance and government regulations. Based on the findings of this study we recommend the following:

I. It is always advised that the non-executive directors (board independence) should exceed the proportion of executive directors. Furthermore, the directors that are functioning as independent directors should exhibit high level of accountability, transparency and integrity such that they are able to influence the management and ensure high quality financial reporting for the benefit of shareholders.

II. Frequency of board meetings should be encouraged by non-financial companies in Nigeria. When there are regular meetings, issues of transparency and accountability will always linger on in course of taking decisions. This can help in checking earnings management practices of the management for personal gains and foster means that will promote financial reporting quality.

III. Constituted board of companies in Nigeria should be made up of experts in different human endeavours especially in financial and management areas capable of enhancing financial reporting quality. All boards of companies in Nigeria should be made of persons with technical, skills and experts in different areas. It should be combination of male and female and should be persons of sound financial backgrounds capable of detecting earnings management practices in corporate reports and accounts of companies in Nigeria.

IV. The audit committee size should be considerable large, representing equal number of directors and shareholders, constituting a greater number of those that have knowledge of accounting and finance which is to serve as a mechanism to promote financial reporting quality. Furthermore, the requirement of having a 6-member audit committee is sound and empirically proven to aid financial reporting quality.

The current study is subject to some limitations. First our study is limited by the researcher only covering non-financial companies and excluded financial companies in the Nigeria Stock Exchange considering the additional regulations financial companies are subjected to, which is believed that the outcome cannot be used for generalization for all firms in Nigeria.

Secondly, the study measured board independence using the ratio of non-executive directors to total directors in the board, as majority of the companies failed to identify the independent directors amongst the non-executive directors in the board.

These limitations identified did not, however vitiate the generalization of our research findings. Therefore, in order to improve on this study, we suggest the following for further research

(1) The current study examined the board structure as a whole, future study might choose to examine the firm characteristics and financial reporting quality. Future studies might also investigate other measures of financial reporting quality not examined in this study like earnings persistence model and timely loss recognition.

(2) Studies could be replicated in the financial sector taking into consideration the specific requirements that govern the sector. A comparative analysis can then be done looking at meeting points as well as divergent areas between from the angle of pre and post international financial reporting standard.

(3) The study used secondary data for six years (2013-2018), further research can be done currently (2019-2022) so as to ascertain the present effect of board structure on financial reporting quality

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