

CORPORATE BOARD DIVERSITY AND AUDIT QUALITY

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ABSTRACT

The aim of this study was to empirically evaluate corporate board diversity and audit quality in Nigeria. The study covered a period of six (6) years (2012 – 2017). The objectives of this study were to ascertain the relationship between board gender diversity (female representation on board), ethnic diversity of the board, foreign directorship of the board, male audit committee membership and audit quality. Fifty (50) quoted companies on the Nigerian Stock Exchange were conveniently selected as the sample size of this study. Panel Least Square (PLS) regression technique was employed in testing the hypotheses. Based on the analysis, we find that there is a significant relationship between board gender diversity (female representation on board) and audit quality; that there is a significant relationship between ethnic diversity of the board and audit quality; that there is a significant relationship between foreign directorship of the board and audit quality; and that there is no significant relationship between male audit committee membership and audit quality. In line with the findings, it is therefore recommended that corporate organization should consider the increase of the proportion of board gender (i.e. female representation) in order to sustain and maintain the significant relationship between gender diversity and audit quality.

Key words: board gender diversity, audit quality, ethnic diversity, foreign, audit committee

Introduction.

Audit involves performing procedures to obtain evidence about amounts and disclosures in the financial statements so as to evaluate the appropriateness of accounting estimates made by management (Mgbame, Eragbhe & Osazuwa, 2012). The Audit quality therefore, is a basic ingredient in enhancing the credibility of financial statements to users of accounting information. Audit quality is defined by Chalaki, Didar and Riahinezhad (2012) as the precision with which financial reporting conveys information about the firm's operations, in particular its expected cash flows that inform equity investors.

According to Musa and Hassan (2014), audit quality plays an important role in maintaining an efficient market environment. An independent quality audit underpins confidence in the credibility and integrity of financial statements which is essential for well-functioning markets and enhanced audit quality. Achieving quality financial reporting depends on the role that the external audit plays in supporting the quality of financial reporting of quoted companies. It is an important part of the regulatory and supervisory infrastructure and thus an activity of significant public interest. Audit quality is one of the most important issues in audit practice today as several individuals and groups; both internal and external, have an interest in the quality of audited financial information (Musa and Hassan, 2014).

Audit report quality according to Aliyu and Ishaq (2015) can be influenced by three variables namely, standard setters' decision; accounting method used by management; and management judgment and estimates in applying the selected substitutes. Therefore, enforcement is an important mechanism of enhancing audit report quality whose absence will make the best accounting standards incapable of providing credible and reliable accounting information to various users (Barde, 2009).

The board of directors is charged with oversight of management on behalf of shareholders. Agency theorists argue that in order to protect the interests of shareholders, the board of directors must assume an effective oversight function. It is assumed that board performance of its monitoring duties is influenced by the effectiveness of the board, which in turn is influenced by factors such as board composition and quality, size of board, duality of chief executive officer, corporate board diversity, information asymmetries and board culture (Brennan, 2006). The issue of corporate board as a corporate governance mechanism has received considerable attention in recent years from academics, market participants, and regulators. It continues to receive attention because theory provides conflicting views as to the impact of board structure on the control and audit report quality of firms, while at the same time the empirical evidence is inconclusive (Uadiale, 2010).

In literature, corporate board characteristics have been linked to audit quality (Okafor and Ibadin, 2011) these include the variables of board size, chief executive officer duality, audit committee independence, board composition. However, it is suggested that when audit reports are handy and timely, such information is said to be of high quality (Ibadan & Dabor, 2015). But what role do the corporate board diversity variables play in improving audit report quality. Several studies on corporate board diversity and audit quality have been conducted by various researchers in Nigeria and the world over. The conclusion drawn from their empirical findings were not without inconsistencies.

For example, in a research conducted by Monks and Minow (1995) and Lipton and Lorsch (1992) suggest that larger boards are able to commit more time and effort to monitor management. Beasley (1996) reports that board size has positive relationship with the likelihood of financial statement fraud. Also, Camfferman & Cooke (2002) and Naser, Al-Khatib and Karbhari, (2002) found a positive and significant relationship between the size of the audit firm and audit quality.

In the same vein, Uzun, Szewczyk and Varma, (2004), Carcello and Nagy (2004) and Farber (2005) found negative relationship between audit quality and board size. Jensen (1993) and Lipton and Lorsch (1992) report that large boards of directors are less amenable to effective monitoring and easier to be controlled by the CEO. Xie, Davidson and Dalt (2003) document an inverse relationship between the size of the board and the quality of audit report. Eisenberg, Sundgren and Wells (1998) and Yermack (1996) also found a negative relationship between the size of the board and the value of the company.

More worrisome is that, the literature on how corporate board diversity shape the level of audit quality is, as far as we know, scarce in Nigeria despite the growing studies mostly in developed countries. This considerably limits our understanding of how corporate board diversity might promote or impede the informational properties of audit quality.

Consequently, the inconsistencies and mix findings in prior studies and the dearth of empirical studies on corporate board diversity and audit quality in Nigeria has informed this study. Hence this study is aimed at filling the knowledge gap and boosting empirical evidence from Nigeria with respect to the aforementioned.

The main objective of this study is to examine corporate board diversity and audit quality in Nigeria, while the specific objectives are:

1. To ascertain the relationship between board gender diversity (female representation on board) and audit quality.

2. To determine the relationship between ethnic diversity of the board and audit quality.
3. To examine the relationship between foreign directorship of the board and audit quality.
4. To ascertain the relationship between male audit committee membership and audit quality.

Research Hypotheses

The following hypotheses stated in null form were tested in the course of the study;

- H₀₁: There is no significant relationship between board gender diversity (female representation on board) and audit quality.
- H₀₂: There is no significant relationship between ethnic diversity of the board and audit quality.
- H₀₃: There is no significant relationship between foreign directorship of the board and audit quality.
- H₀₄: There is no significant relationship between male audit committee membership and audit quality.

Literature Review

Concept of Audit Quality

Auditing adds to the informational value of financial statements and this makes it extremely important that the opinion of auditors reflect as much information as possible and this is why the auditor must exercise due professional skills, diligence and care in the course of his work (Arrunada, 2000). According to him, this exercised professional judgment by the auditor is a vital feature of audit quality. However, Riyatno (2007) in his work, opines audit quality as an abstract term, which is difficult to evaluate, and may only be perceived by those who receive audit services and according to him, the definition of audit quality is not uniform.

Salehi and Azary (2008) see audit quality as how well an audit is able to protect the interest of users by detecting and reporting material misstatements in financial statements and reducing information asymmetry between management and users of financial statements. In their opinion, financial statements devoid of information asymmetry and misstatements prove the existence of audit quality.

Salehi and Kangarlouei (2010) argue that audit quality can be viewed from two angles viz-financial statements users' perception and auditors' ability and expertise. The financial statements users' perception describes the manner in which users see the audit report. That is, does it reflect reliability? While the auditors' ability and expertise addresses the ability of the auditor to detect and report material misstatements. They assert that since users do not have access to know the evidence gathered during the audit process, they cannot really assess actual audit quality directly except they rely on the reputation and ability of the auditor giving the opinion.

Yuniarti (2011) claims that when talking about audit quality, some fundamental characteristics to watch out for include Significance (what importance is attached to the audit), Reliability (is the findings by the auditor a true representation of the affairs of the audited entity or is management claims about the company accurate), Objectivity (what level of independence was displayed during the course of the audit), Scope (was the entire length and breadth of the audit duly covered), Timeliness (minimal audit delay in presenting report), Clarity (was the audit work done well communicated in terms of findings and recommendations), Efficiency (was the cost incurred in tangent with the benefits accrued), and Effectiveness (was the objectives of the audit achieved). According to him, these characteristics combined confer quality to the audit. That is, where these features can be identified, audit quality is eminent.

Concept of Corporate Board Diversity

Diversity means having a range of many people that are different from each other. There is, however, no uniform definition of board diversity. Traditionally speaking, one can consider factors like age, race, gender, educational background and professional qualifications of the directors to make the board less homogenous (Isa & Farouk, 2018). Van der Walt and Ingleby (2003) define diversity in the composition of the Board as the varied combination of attributes, characteristics and skills that their members have.

Diversity in a board can determine the level of innovation brought into an organization on one hand as a result of (creativity, diverse perspective, background and industrial experience) heterogeneous composition. On the other hand, a board can also be a principal source of disadvantage to a firm based on conflict and as a result of differences, intolerance, and disagreements based on social identity theory predictions. For these reasons, the board is crucial in making certain key economic and financial course of actions. Diversity, though its benefits have relatively been under-examined in academic literature, is an important characteristic of any corporate board (Broome, Conley, & Krawiec, 2011). The most emphasized view of board diversity have been the size of board as well as director independence (Coles, Daniel & Naveen, 2007; Anderson, Bates, Bizjak, & Lemmon, 2000; Dennis & Sarin, 1999).

Corporate Board Diversity and Audit Quality

Board Gender Diversity (female representation on board) and Audit Quality

Women representation on boards and top management has become an on-going debate and an emerging area of research in various parts around the world. This is mostly evident in countries where the share of women on boards and top positions are low. The feminist conflict theory argues that women have been systematically oppressed by men in the society because of control over limited natural and man-made resources enjoyed wholly by men. The theory holds that, wealth, power or position and status are valuable resources but scarce; the inherent nature of men and the scarcity of these resources means domestication of the role of women in society. This is against the background that women on board of companies are essential assets (Agyapong & Appiah, 2015).

Women corporate governance has come to mean many things, traditionally and at a fundamental level, the concept refers to corporate decision making and control, particularly the structure of the women leaders and its working procedures. Okioga (2013) defines women corporate governance as a set of interlocking rules by which corporations, shareholders and management govern their behaviour. In each country, this is a combination of a legal system that sets some common standards of governance and systems of behaviour determined by firms themselves. According Okioga (2013) women representation on the boards of companies around the world remains uneven.

Abu, Okpoh and Okpe (2016) indicate that women are specialized in different tasks as a result of the requirements of nature. As a result, there have been arguments and counter arguments about women exhibiting important characteristics necessary for good governance. Specifically, it has been argued that women are meticulous, risk averse, skilled in accounting and finance, and good decision-makers.

Empirically, Damagum, Oba, Chima and Ibikunle (2014) empirically examine the impact of women in corporate boards on audit quality. Using a sample of 20 firms representing the various sectors of the Nigerian Stock Exchange, they conduct panel regressions of discretionary accruals on a set of explanatory variables constituting gender mix. Results provide robust evidence to suggest that the presence of a female director does not particularly improve the quality of audited corporate report however audit report quality credibility improves as the proportion of women in the board increases.

Oba (2014) investigate the ability of certain board dynamics to influence management attitude in relation to audit quality in Nigerian listed firms. Accruals, a proxy for audit quality is estimated using the Dechow and Dichev model. Using a panel data obtained from annual reports of 69 listed Nigerian firms from 2008 to 2012, the study documents that board independence, board tenure, gender diversity and directors' shareholding are significant predictors of audit quality in Nigeria. The board size was found to have a neutral effect on audit quality.

Ethnic Diversity of the Board and Audit Quality

Empirically, Enofe, Iyafekhe, and Eniola (2017) investigate board ethnicity, gender diversity in relation to audit quality in non-financial firms. It specifically examined the impact of foreign directorship, female gender, board size, board independence and firm size on audit quality. The study employed quantitative and a cross sectional survey data of non-financial institution quoted in the Nigeria Stock Exchange as at 2014. Data were analyzed using

descriptive statistics, correlation and multiple Least Square (MLS) regression. This study found that foreign board members, female gender in the board and board independence were negatively related to audit quality.

Zainal, Zulkifli, and Saleh (2013) examine the trend of gender and nationality diversity of corporate board in top 300 Malaysian public listed firms over a five-year period from year 2005 to 2009. It also identifies any significant difference in characteristics of firms with women and foreign directors and those without women and foreign directors. Based on the secondary data derived from firms' annual report, a longitudinal descriptive analysis on the trend of board diversity is presented. Mann-Whitney U test is conducted to identify several characteristics that differentiate between firms with women and foreign directors and those without women and foreign directors. This study found little change in the presence of women directors and foreign directors over the five-year period, which reflects a slow progress in board diversity in Malaysia. Other than that, several characteristics that differentiate between firms with women and foreign directors and those without women and foreign directors were highlighted. Overall, this study indicates the need for more efforts to encourage board diversity in Malaysia.

Omoro and Okiro (2015) examine the effect of demographic diversity in Top Management Team (TMT) on audit quality in commercial state corporations. The study adopted correlational and longitudinal research design and stepwise regression analysis of FRQ variables on a set of demographic diversity variables in TMT. The findings provide considerable evidence to suggest that TMT demographic diversity are associated with audit quality measured by fundamental qualitative characteristics of accounting information, earnings management, timeliness in reporting and disclosure quality. The research implication is that; in general, demographic diversity in TMT-gender, age, education, tenure and functional background may have important implication for audit quality under different measures.

Foreign Directorship of the Board and Audit Quality

Reggy, Niels, Oxelheim and Rand (2015) examined the effects of the presence of a foreign board member on earnings management by using a sample of 3,249 firm-year observations representing 586 non-financial listed Nordic firms during 2001–2008. The study revealed that the presence of a non-Nordic, foreign director is associated with significantly higher levels of earnings management and recommended that it may not necessarily be beneficial to appoint a foreign director to the board. However, Forbes and Milliken (1999) revealed that the presence of foreign directors may help prevent too high levels of cohesiveness of the board.

Male Audit Committee Membership and Audit Quality

Ilaboya and Iyafekhe (2014) assert that the audit committee plays crucial role in assisting the Board in fulfilling its responsibilities by overseeing the accounting and financial reporting processes. They (Ilaboya and Iyafekhe, 2014) posited that one mechanism that has been widely used in worldwide corporate organizations to monitor the financial reporting process and corporate governance is the establishment of an audit committee comprising a majority of independent directors.

Sharinah, Mohd and Azlina (2014) maintain that an audit committee is a sub-committee of a corporate governance structure. The committee plays a significant role in monitoring the financial reporting process as delegated by the Board of Directors. According to them, there are four fundamental responsibilities of an audit committee – assessing risk and control environment, overseeing financial reporting, evaluating the audit process and reviewing conflict of interest and related party transaction. These roles and responsibilities require the members of the audit committee to have specific characteristics and background to effectively and efficiently perform their task.

Ibadin and Afensimi (2015) opine that, in Nigeria, the Companies and Allied Matters Act, 1990 states that a public limited liability company should have an audit committee (maximum of six members of equal representation of three members each representing the management/ directors and shareholders) in place. The members are expected to be conversant with basic financial statements. The committee has the following objectives:

(i) Increasing public confidence in the credibility and objectivity of published financial statements. (ii) Assisting the directors, especially the non- executive directors, in meeting their responsibilities of financial reporting. (iii) Strengthening the independent position of a firm's external auditors by providing an additional channel of communication.

According to Moses (2016) the exact sum of members of audit committee is particularly important as it affects the commitment of memberships to monitor management and detect deceitful behaviours. A bigger size of the audit committee can alleviate material differences throughout the tested equity submissions.

Jerubet, Chepng'eno and Tenai (2017) establish the effects of audit committee characteristics on quality of financial reporting among firms listed in Nairobi Securities Exchange, Kenya. The study was guided by the agency theory. Explanatory research design was used. A survey of all firms was done and only 46 firms were extracted because they were operating in NSE at the year 2014. This study utilized secondary data which was collected by use of a document analysis guide. Data collected was analyzed by using both descriptive and inferential statistical methods. The findings indicated that audit committee size has a positive and significant effect on the quality of financial reporting. However, findings showed that audit committee independence had a negative and significant effect on the quality of financial reporting. The findings indicated that increase in audit committee size increases quality of financial reporting. This implies that an increase in the audit committee size enables the members to distribute the workload and dedicate more time and resources in monitoring. These findings will also have policy implications as regulators around in Kenya continue to define and refine the desired characteristics and behavior of audit committees. Therefore, the findings of this study will ensure future platforms changes regarding audit committees are adequately

METHODOLOGY

The study focuses on corporate board diversity and audit quality. The study utilized a sample of fifty (50) companies listed on the Nigeria Stock Exchange market as at December, 2017. The length of period cover by the study is six (6) years – 2012 – 2017.

Model Specification

The econometric model that will be employed in this study is a multiple regression model. A multiple regression model is that which seeks to express relationships between dependent variable and the independent variables.

In the light of the methodological knowledge gathered and empirical literature for far studied, we specify a multiple regression model. The study attempted to examine corporate board diversity and audit quality.

Consequently, our model is shown thus:

$$\text{AUDQUA} = f(\text{BGDER}, \text{ETHDER}, \text{FORDIR}, \text{MAUDC})$$

Expressing equation in econometric form, we have

$$\text{AUDQUA}_{it} = \beta_0 + \beta_1 \text{BGDER}_{it} + \beta_2 \text{ETHDER}_{it} + \beta_3 \text{FORDIR}_{it} + \beta_4 \text{MAUDC}_{it} + U_{it}$$

Where:

AUDQUA = Audit Quality (proxy for discretionary accrual)

BGDER = Board Gender Diversity

- ETHDER = Ethnic Diversity of the board
 FORDIR = Foreign Directorship of the Board
 MAUDC = Male Audit Committee Membership

Operationalization of Variables

Variable Labels in the OLS	CEO's Attributes	Measurement	Source
AUDQUA	Audit Quality	This was measured as dummy variables, by assigning “1” if audited by Big 4 or “0” – for Non-Big 4.	
BGDER	Board Gender Diversity	This is measured as the percentage of female directors on the board	Kibiya, Ahmad and Amran (2016)
ETHDER	Ethnic Diversity of the board	Ethnic diversity, measured as a dummy variable taking the value of 1 if the board consists of both northerners and southerners, and 0 otherwise	Enofe, Iyafekhe, and Eniola (2017); Omoye, Alade and Eriki, (2013)
FORDIR	Foreign Directorship of the Board	This is measured as a dummy variable taking the value of 1 if the director is a foreigner, and 0 otherwise	Reggy, Niels, Oxelheim and Rand (2015)
MAUDC	Male Audit Committee Membership	This is measured as the percentage of male directors on the audit committee	Kibiya, Ahmad and Amran (2016)

Method of Data Analysis

The main statistical tool to be employed in this research is “Panel Least Square Technique (OLS)” which helps us to estimate the value of the dependent variables, when we are given the value of one or more independent variables. Other statistical test like descriptive statistics, correlation matrix will also be used to analyze the data.

The Ordinary Least Square is a statistical tool that enables the researcher to establish if there is any relationship between two variables. The computation of Ordinary Least Square is based on the outcomes of the regression which is used to test the various hypotheses formulated previously in chapter one of this study.

DATA PRESENTATION AND ANALYSES

The presentation of the results is as follows; firstly, the descriptive statistics result is presented. Secondly, the correlation result and analysis is also presented. Next, the ordinary least squares regression result is presented and analyzed.

Descriptive Statistics

The results of the descriptive statistics are analyzed in the table below:

Table 4.1: Descriptive Statistics

	AUDQUA	BGDER	ETHDER	FORDIR	MAUDC
Mean	0.570000	0.906667	0.620000	0.580000	4.690000
Median	1.000000	0.000000	1.000000	1.000000	5.000000
Maximum	1.000000	5.000000	1.000000	1.000000	7.000000
Minimum	0.000000	0.000000	0.000000	0.000000	3.000000
Std. Dev.	0.495903	1.396827	0.486197	0.494383	0.954079
Skewness	-0.282785	1.538469	-0.494451	-0.324176	0.189229
Kurtosis	1.079967	4.370994	1.244482	1.105090	2.956909
Jarque-Bera	50.07993	141.8396	50.74714	50.13805	1.813586
Probability	0.000000	0.000000	0.000000	0.000000	0.403817
Sum	171.0000	272.0000	186.0000	174.0000	1407.000
Sum Sq. Dev.	73.53000	583.3867	70.68000	73.08000	272.1700
Observations	300	300	300	300	300

Source: Authors computation using E-views, 8.0.

Table 4.1 above presents the results for the descriptive statistics for all the variables. As observed, the dependent variable Audit Quality (AUDQUA) has a mean value of 0.570000 and a median value of 1.000000 with a maximum and minimum value of 1.000000 and 0.000000 respectively. The median and the mean values are not far apart. The standard deviation 0.495903 is low and suggests that Audit Quality (AUDQUA) over the years did not exhibit deviation from the mean.

For the independent variables, the results indicate that the mean value of Board Gender Diversity (BGDER) is 0.906667 with a median value of 0.000000 and a maximum and minimum value of 5.000000 and 0.000000 respectively. The median and the mean values are apart. The standard deviation 1.396827 is high and suggests that Board Gender Diversity (BGDER) over the years exhibits high deviation from the mean.

The mean value of Ethnic Diversity of the board (ETHDER) is 0.620000 with a median value of 1.000000 and a maximum and minimum value of 1.000000 and 0.000000 respectively. The median and the mean values are not far apart. The standard deviation 0.486197 is not high and suggests that Ethnic Diversity of the board (ETHDER) over the years did not exhibits high deviation from the mean.

For the other independent variables, the results indicate that the mean values for Foreign Directorship of the Board (FORDIR) and Male Audit Committee Membership (MAUDC) are 0.580000 and 1.000000 respectively. The standard deviation for Foreign Directorship of the Board (FORDIR) and Male Audit Committee Membership (MAUDC) are 0.494383 and 0.954079 respectively.

Table 4.2: Correlations Analysis

	AUDQUA	BGDER	ETHDER	FORDIR	MAUDC
AUDQUA	1.000000				
BGDER	0.163967	1.000000			
ETHDER	0.152308	-0.288780	1.000000		
FORDIR	0.052111	0.098024	-0.499235	1.000000	
MAUDC	-0.035273	-0.204983	-0.211540	0.113024	1.000000

Source: Authors computation using E-views, 8.0.

The initial patterns of relationship among the variables can be observed based on the correlation among the variables.

Table 4.2 shows the co-efficient of correlation of all the variables examined. However, of particular interest is the correlation between the dependent variable – Audit Quality (AUDQUA) and the explanatory variables. As observed from the correlation analysis, a positive association is observed between Audit Quality (AUDQUA) and Board Gender Diversity (BGDER) ($r = 0.163967$). The coefficient is low and the direction of correlation suggests that an increase in Board Gender Diversity (BGDER) may be associated with an increase in Audit Quality (AUDQUA).

A positive association is also observed between Audit Quality (AUDQUA) and Ethnic Diversity of the board (ETHDER) ($r = 0.152308$), the coefficient is low but the direction of correlation suggests that an increase in Ethnic Diversity of the board (ETHDER) may lead to upward movement in Audit Quality (AUDQUA).

Foreign Directorship of the Board (FORDIR) is positively correlated with Audit Quality (AUDQUA) ($r = 0.052111$). The low coefficient implies that an increase in Foreign Directorship of the Board (FORDIR) may be associated with an increase in Audit Quality (AUDQUA).

And lastly, a negative correlation exist between Male Audit Committee Membership (MAUDC) and Audit Quality (AUDQUA) ($r = -0.035273$), the coefficient is very low indicating that an increase in Male Audit Committee Membership (MAUDC) may be associated with a decrease in Audit Quality (AUDQUA).

On the association among the independent variables, we can observe that both positive and negative correlation exist between all the variables. Three out of the four explanatory variables (Board Gender Diversity (BGDER), Ethnic Diversity of the board (ETHDER), Foreign Directorship of the Board (FORDIR)) are positively correlated with audit quality, while, Male Audit Committee Membership (MAUDC) exhibits a negative and low coefficient ($r = -0.035273$) respectively.

However, correlation analysis does not necessarily imply the existence of functional relationship but a mere association.

Estimation and Hypothesis Test

Table 4.3: OLS Regression Analysis

Dependent Variable	Independent	Coefficient	Standard Error	T-Stat.	Prob.
	BGDER	0.090720	0.021398	4.239753	0.0000
	ETHDER	0.339549	0.070047	4.847466	0.0000
	FORDIR	0.186311	0.064046	2.909017	0.0039
	MAUDC	0.034584	0.030641	1.128683	0.2599
AUDQUA	C	0.006969	0.179160	0.038897	0.9690
R-Squared	=	0.69	F-Stat.	=	8.18
R-Bar Squared	=	0.68	DW-Statistic	=	1.76

Source: Authors computation using E-views, 8.0.

From 4.3 above, it can be seen that the R^2 statistic is 0.69, while the adjusted R^2 statistic is 0.68%. This is an indication that about 68% of systematic variations in Audit Quality (AUDQUA) are explained by changes in the

explanatory variables of the model. Similarly, the F-statistic, 8.18 is statistically significant at the 5% level (probability value of 0.000003). These statistics indicate that our model satisfies the overall goodness of fit statistical test.

The Durbin-Watson statistic of 1.76 shows the absence of autocorrelation. Thus, our econometric model meets both statistical and diagnostic criteria and represents a good and consistent estimator that can be useful for policy direction.

In addition to the above, the specific finding from each explanatory variable from the OLS regression model is provided as followings:

Board Gender Diversity (BGDER), based on the coefficient 0.090720 and p-value of 0.00, appears to have a positive influence on Audit Quality (AUDQUA) and was statistically significant. This result, therefore, suggests that we should reject the null hypothesis one (H_0) and accept the alternative hypothesis, which means that there is a significant relationship between board gender diversity (female representation on board) and audit quality.

Ethnic Diversity of the board (ETHDER), based on the coefficient of 0.339549 and p-value of 0.0000 was found to have a positive impact on Audit Quality (AUDQUA) and this was statistically significant. This result, therefore, suggests that we should also reject the null hypothesis and accept the alternative hypothesis, which suggests that there is a significant relationship between ethnic diversity of the board and audit quality.

Foreign Directorship of the Board (FORDIR), based on the coefficient 0.186311 and p-value of 0.0039, appears to have a positive influence on our sampled quoted companies' Audit Quality (AUDQUA) and was statistically significant. This result, therefore, suggests that we should reject the null hypothesis and accept the alternative hypothesis, which means that there is a significant relationship between foreign directorship of the board and audit quality.

Male Audit Committee Membership (MAUDC), based on coefficient of 0.034584 and p-value of 0.2599 appears to have a positive influence on our sampled quoted companies' Audit Quality (AUDQUA) and was statistically insignificant. This result therefore suggests that we should accept the null hypothesis, which means there is no significant relationship between male audit committee membership and audit quality.

Conclusion

This study examines corporate board diversity and audit quality in Nigeria. The model was regressed to analyze the existence of significant relationships between the dependent (Audit Quality (AUDQUA)), and independent variables (Board Gender Diversity (BGDER), Ethnic Diversity of the board (ETHDER), Foreign Directorship of the Board (FORDIR) and Male Audit Committee Membership (MAUDC). The selected fifty (50) companies in this study were drawn from agricultural sector, manufacturing sector, financial service, industrial goods and consumer goods sector quoted Nigerian companies that have maintained 2012 to 2016 annual financial reports. In identifying the possible corporate board diversity that would influence audit quality; we conducted descriptive statistics, correlation and firm observable estimation of the regression result. Specifically, we studied the relationship between Board Gender Diversity (BGDER), Ethnic Diversity of the board (ETHDER), Foreign Directorship of the Board (FORDIR), Male Audit Committee Membership (MAUDC) and Audit Quality (AUDQUA).

Of all the variables examined, Board Gender Diversity (BGDER), Ethnic Diversity of the board (ETHDER) and Foreign Directorship of the Board (FORDIR) were found to be statistically significant hence influencing audit quality for the period under review, while Male Audit Committee Membership (MAUDC) exhibited insignificant relationship with audit quality. The study therefore concluded that there is a significant relationship between corporate board diversity and audit quality in Nigeria for the period under review.

Recommendations

In light of the foregoing discussions, it is our opinion and recommendation that the following should be put in place.

1. Corporate organization should consider the increase of the proportion of board gender (i.e. female representation) in order to sustain and maintain the significant relationship between gender diversity and audit quality as observed in this study.
2. Since we observed a positive and insignificant relationship between board independence and audit quality. It is therefore recommended that the appointment of independent directors on the companies' board should be based on the previous records of those directors in term of performance rather than emphasizing on the proportion to total number of directors on the board.

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APPENDIX

Dependent Variable: AUDQUA

Method: Panel Least Squares

Date: 11/05/18 Time: 03:03

Sample: 2012 2017

Periods included: 6

Cross-sections included: 50

Total panel (balanced) observations: 300

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BGDER	0.090720	0.021398	4.239753	0.0000
ETHDER	0.339549	0.070047	4.847466	0.0000
FORDIR	0.186311	0.064046	2.909017	0.0039
MAUDC	0.034584	0.030641	1.128683	0.2599
C	0.006969	0.179160	0.038897	0.9690

R-squared	0.699935	Mean dependent var	0.570000
Adjusted R-squared	0.687731	S.D. dependent var	0.495903
S.E. of regression	0.473651	Akaike info criterion	1.359833
Sum squared resid	66.18175	Schwarz criterion	1.421562
Log likelihood	-198.9749	Hannan-Quinn criter.	1.384537
F-statistic	8.188564	Durbin-Watson stat	1.762692
Prob(F-statistic)	0.000003		

	AUDQUA	BGDER	ETHDER	FORDIR	MAUDC
Mean	0.570000	0.906667	0.620000	0.580000	4.690000
Median	1.000000	0.000000	1.000000	1.000000	5.000000
Maximum	1.000000	5.000000	1.000000	1.000000	7.000000
Minimum	0.000000	0.000000	0.000000	0.000000	3.000000
Std. Dev.	0.495903	1.396827	0.486197	0.494383	0.954079
Skewness	-0.282785	1.538469	-0.494451	-0.324176	0.189229
Kurtosis	1.079967	4.370994	1.244482	1.105090	2.956909
Jarque-Bera	50.07993	141.8396	50.74714	50.13805	1.813586
Probability	0.000000	0.000000	0.000000	0.000000	0.403817
Sum	171.0000	272.0000	186.0000	174.0000	1407.000
Sum Sq. Dev.	73.53000	583.3867	70.68000	73.08000	272.1700
Observations	300	300	300	300	300

	AUDQUA	BGDER	ETHDER	FORDIR	MAUDC
AUDQUA	1.000000	0.163967	0.152308	0.052111	-0.035273
BGDER	0.163967	1.000000	-0.288780	0.098024	-0.204983
ETHDER	0.152308	-0.288780	1.000000	-0.499235	-0.211540
FORDIR	0.052111	0.098024	-0.499235	1.000000	0.113024
MAUDC	-0.035273	-0.204983	-0.211540	0.113024	1.000000