International Journal of Advanced Studies in Economics and Public Sector Management | IJASEPSM
p-ISSN: 2354-421X | e-ISSN: 2354-4228
Volume 12, Number 2 October, 2024

Effect of Board Gender and Nationality Diversity on Sustainability Reporting Quality of Listed Firms in Nigeria

[1]Helen N. Obi-Okonkwo, [2]John U. Ihendinihu & [3]Joseph U. B, Azubike
Department of Accounting
Michael Okpara University of Agriculture, Umudike

Article DOI: 10.48028/iiprds/ijasepsm.v12.i2.20

Abstract

The study examined the effect of board gender and nationality on the sustainability reporting quality of listed firms in Nigeria. The population of the study comprised listed firms on the Nigerian Stock Exchange. The study used secondary data, extracted from published financial statements of entities listed on the Nigerian Stock Exchange (NSE), the NSE Libraries, and the Central Bank of Nigeria (CBN) statistical bulletin. Sustainability Reporting Quality (SRQ) was used to proxy the dependent variable while Board Gender Diversity (BGD), board nationality (ND), Firm Size (FSize), and Firm Age (Fage) were used as the explanatory variables. The study adopts a panel generalized method of moments (GMM) for data analysis. The results showed that there is a significant effect of gender diversity and board nationality on the sustainable reporting quality of the listed firms. The study equally found that there is significant moderating effect of firm age and firm size on the relationship between board diversity and sustainability reporting quality of listed firms in Nigeria. The study concluded that there is a significant effect of board gender diversity on sustainability reporting quality. The study recommends that firms in Nigeria should adopt gender diversity at every level of operations and most importantly at the top management spheres. This is because gender diversity will enhance decision-making, bring varied perspectives, and lead to more comprehensive discussions and better decision-making. Board nationality should be adopted by listed firms for significant improvement in governance practices. This will enable management to prepare board members with the skills to identify potential risks early enough and implement appropriate strategies to mitigate them. This approach will equally enable board members to understand emerging leadership trends and skills critical for effective succession planning.

Keywords: *Board Gender, Diversity, nationality, Sustainability Reporting Quality, Listed Firms, Nigeria*

Corresponding Author: **Helen N. Obi-Okonkwo**

https://internationalpolicybrief.org/international-journal-of-advanced-studies-of-economics-and-public-sector-management-volume-12-number-2

Background to the Study

A board of directors is very important in the smooth running of a business. They are expected to perform different functions, such as monitoring management to reduce agency costs, formulation of corporate policy, approval of strategic plans, recruiting of management, compensating and removal of management, arrangement for succession, provision and access to resources, determining the size of boards and nomination of new members subject to the approval of the shareholders (Oyedokun, 2019). The board structure is very important to the financial service sector in Nigeria because of the financial fraud, failures, and questionable practices that have affected the stakeholders' confidence in the firm. Therefore, the effectiveness of the board of directors in monitoring and controlling the managers on behalf of the shareholders depends on certain factors such as the role of board size on the financial performance, the impact of board independence on financial performance, the impact of board gender diversity on performance, impart of board ethnicity, board nationality, and others. It is the responsibility of a company's board of directors to oversee the actions and decisions of management (Rupley, Brown, & Marshall, 2012).

According to Conger & Lawler (2001), the best boards are composed of individuals with different skills, knowledge, information, power, and time to contribute. It has been observed that women perform well in top management positions. All over the world women have occupied various exalted positions like president, prime ministers, Governors, and Ministers to mention but a few, they have always displayed an act of integrity in managerial positions more especially in the way they handle the finances of the organizations. In Nigeria, despite the commitment of the government to gender equality, the practical situation is characterized by sexual stereotyping of social roles, discriminatory traditions, and cultural prejudices (Lincoln & Adedoyin, 2012). This could also be attributed to the national cultural perspective of the country, which places 'men as the leaders of the society' as one of the crucial factors which limits female participation in top leadership positions (Şener & Karaye, 2014). Nigeria is a highly patriarchal society with men dominating, thus women are mostly under-represented in managerial roles, because of the socio-cultural traditions that inhibit them (Lincoln & Adedoyin, 2012).

A sustainability report is a medium through which organization reaffirm their commitment to meeting the needs of stakeholders, as well as gaining a competitive advantage in the global business sphere. The purpose of the report is to achieve the mandate of the United Nations (2015) sustainable development goals in business and government across the globe (Saidu, Gold, & Aifuwa, 2020). The UN (2015) envisaged that these goals would be achieved before the year 2030. However, it is unfortunate that Sustainability Reporting (SR) is not generally adopted or recognized as part of a business model for good production and longevity by businesses worldwide (Johari & Komathy, 2019). This is because the report is voluntary for most firms across the globe and compliance by reporting entities is generally low across the globe. Again, sustainability reports are non-mandatory for entities.

According to research conducted by Şener, & Karaye, (2014), the inclusion of women among Board members of a company has been noticed to have a good consequence on a company's financial performance. Women have better attendance records at board meetings compared to men thereby increasing the assurance of all parties to a company (Lincoln &Adedoyin, 2012). The call for more women on the Board of companies is increasing (Damagun, Oba, Chima, & Ibikunle 2014). The representation of women on boards of Directors is a significant issue because it increases the source of qualified human resources' thus, contributing to increased competitiveness among firms European Union 2016. The gender diversity of the Board influences the quality of financial reporting. This could largely be attributable to female executives' socio-psychological characteristics reflected in their aversion to fraud, risk, and earnings manipulation (Garba & Abubakar 2014).

Existing empirical literature on the relationship between gender diversity and firm performance is inconclusive. For example, (Garba *et.al.,* 2014 and Carter *et al.,* 2003) found in their studies a positive link between gender diversity and firm performance; Daunfeldt and Rudholm (2012), Adams and Ferreira (2007), and Rose (2007) found that gender diversity does not significantly contribute to firm performance. Aladejabi (2021) investigated the relationship between gender diversity and quoted deposit money banks' performance in Nigeria. The study found no strong relationship between the number of female board members and bank performance and there is a weak negative relationship between earnings per share (EPS) and female board members percentage. In his conclusion he asserts that the inclusion of women on the board of a company does not necessarily translate into an improvement in a company's financial performance. This present study *examines the effect of board gender and nationality on the sustainability reporting quality of listed firms in Nigeria.*

Literature Review

Focus on board diversity.

The key obstacles for women in the appointment process may include unclear selection criteria and subconscious bias in the selection process, lack of diversity in current boards and nomination committees, or selection practices that emphasize existing typically male-dominated board cultures rather than actual skills (Doldor et al., 2012). Boardrooms have been dominated by male executives for a long time. While including women on boards was often seen as a bad business decision because of hypothesized lower performance, today, the business case for women on boards implies that women may have unique attributes that increase the performance of the board, and ultimately the performance of the firm (Simpson et al., 2010). Indeed, Adams and Ferreira (2009) argue that women directors, usually being a minority and thus more of an outsider, increase the ability of the board to monitor CEO performance. Also, McInerney-Lacombe et al. (2008) suggest that women tend to positively change group dynamics, personal interactions, and decision-making, therefore leading to more creativity and, as a result, better board performance. McKinsey and Company (2007) focus on female advancement in the US workplace and show that companies with a higher proportion of women at the board level usually exhibit greater corporate performance benefits. In particular, they have found that companies with the most gender-diverse top management teams outperformed the industry average by 10% higher return on equity and 48% higher EBIT margin. Carter et al. (2003) have found that gender diversity is positively related to Tobin's Q. Adams and Ferreira (2009) found that women have better board meeting attendance and a significant contribution to board inputs. Overall representation of women in top executive positions remains low when considering the overall percentage of women in the workforce.

Board Gender Diversity and Advantages

Board diversity can be referred to as a structural phenomenon consisting of Gender, age, and ethnicity, while others refer to board diversity as a structural phenomenon comprising board independence, CEO duality, and director ownership Hoang, Abeysekera and Ma (2016). The Board's composition could be according to Gender, nationality, age of the directors, or ethnicity (Ogboi, Aderimiki & Enilolobo, 2018). Board diversity can be defined as variety amongst the Board of Directors about characteristics such as kinds of expertise, personality, age, managerial background, learning style, Gender, values, and education (Swartz & Firer, 2005). Eulerich, Velte and Uum (2014) asserted that board diversity represents a major corporate governance (CG) mechanism. One way of enhancing corporate governance is board diversity Leung (2015).

According to Anazonwu, Egbunike, and Gunardi (2018), there is a positive correlation between board diversity and sustainability reporting and performance (Rao et al., Michelon et al., & Post et al.). According to Robbins & DeCenzo (2005), Board gender diversity depicts the varied personal characteristics that make the workforce heterogeneous. According to Imade (2019), board gender diversity is part of board diversity. It refers to the difference in the number of women on the Board of corporate firms. Reducing the gender divide is a matter of fairness effective governance, and inclusive economic growth, Deloitte Global (2017). Central Banks of Nigeria (CBN) regulations direct a minimum of 30 percent female representation on the boards of Nigerian commercial (deposit) banks, International Finance Corporation (IFC) (2019). According to WIMBIZ (2018), there are many arguments in favor of gender diversity of the Board: redress of injustice, better decision making, improved corporate performance and innovations, maximum utilization of pool of talent, and mirror of the market as women make about 80.5% of consumer decisions. Gender diversity and the addition of more women in top executive management positions and boards of directors can add value to organizations, Suleiman, Modar & Fida (2018). Gender diversity can lead to more social sensitivity.

Nationality Diversity

The inclusion of international directors from various nations in the boardroom represents a variety of nationalities. According to Oxelheim and Randy (2001), international directors are strongly committed to the firm's openness, accountability, and credibility in the global sector. In the same vein Zaid et al., (2020), opine that ethnic diversity is one of the modern drivers of corporate sustainability reporting in today's business world. A board with a high presence of international directors of various nationalities brings a diverse set of ideas and perspectives to the table (Ferrero-Ferrero, Fernandez-Lzquierdo & Munoz-Torres, 2015).

Research by Zaid, et al., (2020), suggested that nationality diversity does not affect the extent of sustainability reporting. This was justified by using the number of female foreign directors on the board, the proportion of females to males and the proportion of foreign directors to the total directors of the board, and the Blau index and Shannon index formulae to investigate the effects of nationality and gender diversity on the extent of corporate sustainability (CS) performance in Palestine non-financial listed companies over the period 2013 to 2018 and such study adopted dichotomous approach to scoring the CS and the use of several proxies to measure the diversity level in terms of gender and nationality.

Anazonwu, Egbunike, and Gunardi (2018) examined the influence of corporate board diversity on sustainability reporting on a sample of quoted manufacturing firms in Nigeria. The study adopts a panel research design. Conglomerates, consumer goods, and industrial goods sector firms in 2017 were investigated. Sustainability reporting was measured using an Economic, Social Governance (ESG) index, while corporate board diversity was measured using board member nationality, the proportion of women directors, the proportion of non-executive directors, and multiple directorships. They used fixed effects panel regression analysis to test the hypotheses. They found out that board members' nationality did not influence sustainability reporting, while the proportion of women directors positively influenced the extent of sustainability reporting in Nigeria.

Onyeali and Okafor (2019) examined the influence of foreign directors on sustainability reporting of 21 listed consumer goods firms in Nigeria from 2011 to 2017. The study found a significant influence of foreign directors on the economic, social, and governance disclosure without studying environmental reporting which is the focus of this research.

Musa et al. (2020) used nationality, age, and educational level to proxy board diversity and its effect on sustainability reporting of listed industrial goods firms on the Nigeria Exchange from the period 2014 to 2018. The authors found no evidence of the nexus between nationality diversity and sustainability reporting. Also, the finding is consistent with the work of (Zaid et al., 2020; Fuente et al., 2017; Sharif & Rashid, 2014): they found no evidence of the nexus between a nationally diverse board and sustainability reporting. However, it sharply deviates from the findings of Khan et al. (2019); Ibrahim and Hanifah (2016); Khan et al. (2019); and Berger (2019) which found a positive and significant relationship between foreign directors on the board of an organization and sustainability reporting.

Sustainability Reporting Quality

According to Nazim Hussain (2015) since the early 1990 the term sustainability has been used as a synonym for the ability of a corporation to survive under growing social and environmental pressures. Sustainability Accounting or triple bottom line was first coined in 1994 by John, the founder of a British Consultancy called Sustain-Ability (Elkington, 2004). The motive behind developing this concept was that companies concentrating on one aspect of the business whilst leaving out the others especially those that have a direct bearing on outsiders is not in the best interest of the business. He argued that companies should rather be preparing three different (and quite separate) bottom lines or profit and loss statements or analyses. He argued that there should be a corporate account measure – profit and loss statement; People account – a measure in some shape or form of how socially responsible an organization has been throughout its operations; and as well as the "Planet" account – a measure of how environmentally responsible it has been, hence the term Triple bottom line (Elkington, 2004). The triple bottom line or sustainability accounting consists of three "Ps" profit, people and planet aim to measure the financial, social, and environmental performance of the business entity over some time. It also explains the social, environmental, and economic factors of the business activities. Thus, this concept has been adopted by organizations including during the Anglo-Dutch oil company Shell's first sustainability report and presentation in 1997. Ever since then though, researchers and corporate social responsibility analysts and advocators have considered and hence concluded that it rightly fits into the corporate social responsibility (CSR) of organizations.

Aifuwsa (2019), reports sustainability reporting as a synthesis of two concepts: sustainability and reporting Brundtland (1987) defines sustainability as addressing the needs of the present generation without jeopardizing future generations' capacity to fulfill their own needs. Reporting entails completely or partly revealing an organization's details to clients (Aifuwa, 2019). Sustainability monitoring entails sharing knowledge about an organisation's everyday operations as it impacts the atmosphere and consumers of the communities in which it works. According to the Global Reporting Initiative [GRI] (2019), sustainability reporting efficiency, or transparency is the mechanism by which an organisation offers knowledge about the fiscal, environmental, and social effects of its daily activities.

Stakeholders Theory

The stakeholder's theory is an extension of the agency theory which explains the tripartite relationship that exists between the owner (principal), manager (agent), and other stakeholders of the firm (customer, suppliers, community, employee, and so on) (Aifuwa, Embele &Saidu, 2018). The theory was developed by Freeman (1984). The theory addresses the expectations of specific stakeholder groups within society and considers the effect of stakeholders' expectations on information disclosure as some stakeholder groups are more powerful than others (Font, Guix & Bonilla-Priego, 2016). The theory stresses the importance of different stakeholders to a firm, as their support is crucial to long-term business survival; therefore, companies must adjust their business activities to address stakeholders (Ngu & Amran, 2018). The stakeholder theory suggests that boards of directors, being major control mechanisms in the company are both responsible and accountable to a wider group of stakeholders. Extending this theory to the concept of sustainability reporting, it can be stated that the board of directors identifies the most important stakeholders by issuing quality sustainability reporting to hold their interest and boost their confidence in the firm.

Empirical Review

Aladejabi (2021) investigated the relationship between gender diversity and quoted deposit money banks' performance in Nigeria between 2015 and 2019. Descriptive statistics, trend, and correlation analysis were the research methods used. They found no strong relationship between the number of female board members and bank performance, there is a weak negative relationship between earnings per share (EPS) and female board members percentage. In his conclusion he asserts that the inclusion of women on the board of a company does not necessarily translate into an improvement in a company's financial performance

Imade (2019) researched board gender diversity among 72 quoted companies on the Nigerian stock exchange between 2006 and 2016; the results revealed that board gender diversity has a significant effect on corporate performance (Return on Asset) quoted companies Nigerian stock exchange. Temile, Jatmik and Hidayat (2018), examined the impact of gender diversity, earnings management practices, and quoted companies' corporate performance in Nigeria. The researchers used secondary data from the annual financial reports of the selected 50 firms over 5 years (2010-2014). The study showed a negative but insignificant relationship between female memberships on audit committees and female chief executive officers and their financial performance in Nigeria. Meanwhile, the proportion of females on the Board, female chief financial officer, and leverage had a positive impact on the firms' corporate performance in Nigeria.

In an overt by Ogboi and Enilolobo (2018), to investigate the effect of board diversity on bank performance for the period: 2011-2015 using the fixed effect Generalized Least Square Regression, the result showed that gender diversity and board composition were positively linked to financial performance. Melia and George (2014) examined the percentage of women on company boards and women's perceptions, as these two areas are considered key to determining what drives the implementation of gender diversities in companies as evidenced by CAC 40 in the UK spanning seven years. It was found that companies with a higher proportion of women on their board outperform those with a lower proportion in terms of return on sales and EBITDA margin. The questionnaire survey indicates that increased board gender diversity leads to better corporate governance and increased corporate value. Also, women perceive that board gender diversity is a performance enhancer.

In a study by Garba and Abubakar (2014) among 12 quoted insurance firms using ROE, ROA, and TOBIN's Q as measures of firm performance for 6 years (2004 to 2009) and applying Feasible Generalized Least Squares (FGLS) and random effects estimators, the findings showed that gender diversity has a positive influence on insurance companies performance. Ujunwa (2012) performed research on Firm corporate diversity on 122 quoted Nigerian companies adopting the panel data method. The data was from 1991 to 2008. The areas tested in the research are board ethnicity, nationality, and gender. While gender diversity was negative both Board nationality and ethnicity were positive.

The position of Curtis, Schmid and Struber (2012) was shared by Willows and Van Der Linde (2016) that women's representation on the board of companies was associated with good financial performance. In research conducted by McKinsey and company (2012) on 1007 firms from America, Australia, Asia, Africa, Europe, and South America, it was discovered that 25% of firms with gender diversity among management cadre performed better than their counterparts by 21% on profit level and in terms of creation of value on long term basis by 27%. Peterson Institute for International Economics (2014), conducted research titled "Is gender diversity profitable" Evidence from a global survey among 21,980 firms headquartered in 91 countries. Part of the conclusion was that for profitable firms, a move from no female leaders to 30% female representation is associated with a 15% increase in net revenue.

Methodology

The study adopted the *ex post facto* or causal-comparative research design. This design allowed the investigator to study cause-and-effect relationships between the gender diversity of board members and the profitability of the companies investigated under conditions where experimental manipulation is difficult. Returns on Assets were used to proxy profitability, while firm size and leverage (a measure of financial risk) were considered critical as influencing the financial performance of listed entities in Nigeria, hence their inclusion as control variables. The gender of board members was used as the focused independent variable. Panel data on the variables were extracted for the period 2010 to 2019 from published audited financial statements of all the six companies listed under the conglomerate sector of the Nigerian Exchange Group as of 31st December 2019.

This study adopted two model approaches. First is the panel data regression model which followed after the model of Saidu, *et al.* (2020) which was used in investigating the influence of diverse boards on sustainability reporting amongst listed industrial goods firms in Nigeria with specifications as:

$$SNR_{it} = \beta_0 + \beta_1 BMN_{it} + \beta_2 BMA_{it} + \beta_3 BME_{it} + \beta_4 FAGE_{it} + \beta_5 FSZE_{it} + \varepsilon_{it} \quad .. (1)$$

Where,

SNR = Sustainability Reporting;

β_0 = Constant;

BMN = Board Member Nationality;

BMA = Board Member Age;

BME = Board Member Education;

FAGE = Firm Age; and

FSZE = Firm Size.

The above model was adapted for this study with modification. One new dimension of board diversity (gender) was added while board member age was excluded from the model. The parameters used in measuring board member age and education were considered immaterial and a potential source of bias to the study. In the present study, firm size and firm age were used as moderators rather than control variables to which they were applied in Saidu, *et al.* (2020). Thus, the model to be used in the presented study is specified in its implicit form as follows:

$$Yi = \int(Xi) \quad (2)$$

This can be explicitly expressed as:

$$Yit = \beta o + \beta i X_{it} + \varepsilon_{it} \quad (3)$$

Where:

Y_{it} = the dependent variables measuring sustainability reporting disclosure and sustainability reporting principal index of company i in year t.

X_{it}	=	the independent or predictor variables covering two dimensions of board diversity, and two moderator variables of company i in year t
$β_1$	=	coefficients (rate of change) in each of the independent variables
βo	=	the constant term
$ε_{it}$	=	the error term.

The panel data regression was used in testing $H0_1$ to $H0_4$. The four hypotheses evaluate the effect of board diversity on sustainability reporting quality measures based on the following stochastic econometric equations:

$$SRQ_{it} = β_0 + β_1GD_{it} + β_2BN_{it} + β_6Fsize_{it} + β_7Fage_{it} + ε_{it} \quad (4)$$

Where:

SRQ_{it}	=	Index for sustainability reporting quality of company *i* in year *t,*
BGD_{it}	=	Board Gender Diversity of company *i* in year *t*
$Fsize_{it}$	=	Size of firm *i* in year *t,* with proxy as the natural log of total assets of the firm.
$β_0$	=	the constant term
$β_{1-}β_8$	=	coefficients (rate of change) in the explanatory variables
$β_i$	=	the error term.
i	=	Cross sectional (Companies)
t	=	Time Series

A priori expectations in with extant literature to be $β_{1,} β_{2,} β_4 >0; β_3 < 0$. The data for this study was analyzed using panel generalized method of moment (GMM) approach since the study involved panel data.

Results and Discussion

The statistical data used for this study was analyzed following their trend within the scope of the study. Sustainability reporting quality (SRQ) was used as the dependent variable while Board Gender Diversity (BGD), (Fsize) and Firm Age (Fage) were used to measure board diversity. Size of firm (Fsize) and Firm Age (Fage) were equally used as moderating variables.

Prior data analysis, this study used Breusch-Godfrey serial correlation LM test to established the absence of serial correlation among the variables. The tests result is presented in table 1.

Table 1: Serial correlation test

Test order	m-Statistic	rho	SE(rho)	Prob.
AR(1)	-0.001326	-1079.806216	814267.502784	0.9989
AR(2)	-0.002699	-188.449904	69830.732709	0.9978

Source: Computed by the author using E-view 10.0

The serial correlation test was carried out to investigate the problem of serial auto-correlation in the model. As depicted in Table 1, there was no evidence of serial correlation since the probability of the AR is 1 (that is 0.99), greater than the 0.5 benchmark (critical value). Hence, the null hypothesis of no serial correlation was accepted. In other words, the parameter estimates in the model have no autocorrelation problem.

Furthermore, the first differences transformation GMM (Generalized Method of Moments) regression is a statistical method that is commonly used for analyzing panel data and addressing issues such as endogeneity, unobserved heterogeneity, and autocorrelation. The first difference transformation refers to the process of differencing the variables in an econometric model. This involves subtracting each variable's value at time t from its value at time t-1. The purpose of this transformation is to eliminate individual-specific effects (multicollinearity) that are often constant and focus on changes within entities over time. The result is presented in Table 2.

Table 2: First differences transformation GMM regression result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SRQ(-1)	**0.771504**	0.004467	7.7187	0.0000***
GD	3.276716	0.145965	4.44867	0.0000***
ND	-1.040081	0.173008	-6.011754	0.0000***
FSIZE	-1.237459	0.083318	-4.85229	0.0000***
FAGE	0.052168	0.003367	5.49359	0.0000***

Source: Computed by the author using E-view 10.0; Note: ***, **.and * represent 1%, 5% and 10% levels of significance respectively.

The result in table 2 showed that all the variables in the model were statistically significant in explaining the changes in the sustainability reporting quality of the listed firms in Nigeria within the studied period. For instance, the coefficient (3.2767) of gender diversity and the probability (0.0000) indicated that a unit increase in gender diversity will lead to 3.27% proportionate increases in the sustainability reporting quality of the listed firms in Nigeria.

Firm size equally indicated negative (coefficient = -1.2374) but significant (p-val = 0.0000) influence on the dependent variable with about 1.23% decreases in the dependent variable where there is any decrease in the independent variable (FSIZE). Consequently, firm age was positive (coefficient = 0.0521) and statistically significant (p-val 0.0000) in explaining the changes in the reporting quality of the studied firms. The variable indicated that a percentage change in the firm age will lead to 5.2% increase in the sustainability reporting quality of the referenced firms in Nigeria.

Table 3: Moderating effect of firm size and firm age on sustainability reporting quality of listed firms

					Change Statistics					
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**R Square Change**	**F Change**	**df1**	**df2**	**Sig. F Change**	**Durbin-Watson**
1	.626[a]	.391	.386	3.607	.391	73.854	7	804	.000***	
2	.641[b]	.411	.402	3.560	.020	4.522	6	798	.000***	.333

a. Predictors: (Constant), Firm Size, Firm Age, Nationality Diversity, Gender Diversity

b. Predictors: (Constant), Firm Size, Firm Age, Nationality Diversity, Gender Diversity, fsize_FAGE, fsize_ND, fsize_GD,

c. Dependent Variable: Sustainability Reporting Quality

Source: Computed by the author using SPSS; Note: ***, **.and * represent 1%, 5% and 10% levels of significance respectively

To test for the moderating effect of the control variables on the sustainability reporting quality of the listed firms in Nigeria, the study adopted Pearson's product-moment correlation coefficient approach. As indicated in Table 3 above, there are positive and statistically significant interactions between the control variables (Fsize and Fage) and other variables included in the model. For the first observation, the test showed a correlation coefficient (r) value of 0.626 and a P-value. of 0.000 indicating a strong correlation (moderation) between firm size and sustainability reporting quality of the listed firms within the period of study. Again, the correlation coefficient (r) value of 0.641 and p-val. of 0.000 implied that there was a strong correlation (moderating effect) of firm age on the sustainability reporting quality of the listed firms in Nigeria within the referenced period.

Based on the result of the study found that the t-stat for gender diversity was [4.44] greater than the critical value of 2.0 while the p-value is 0.0000 less than the critical value (0.05). The study therefore rejected the null hypothesis of no significant effect of gender diversity on the sustainable reporting quality of listed firms and concluded that there is a significant effect of gender diversity on the sustainable reporting quality of listed firms in Nigeria.

In the test of hypothesis, the result showed the t-cal value for national diversity to be [6.011] greater than the critical t-tab at 2.0 while the p-value is 0.0000 less than 0.05. The study accepted the alternative hypothesis of the significant effect of national diversity on the sustainability reporting quality of listed firms and concluded that there is a statistically significant effect of national diversity on the sustainability reporting quality of listed firms in Nigeria.

Discussion of findings

This study examined the moderating effect of board gender diversity on the sustainability reporting quality of listed firms in Nigeria. The generalized method of moments (GMM) dynamic panel data analysis approach was adopted. Hence, the result of the analysis indicated clearly that all the variables of the study; such as Sustainability reporting quality (SRQ), Board Gender Diversity (BGD), Size of the firm (Fsize), and Firm Age (Fage) were all statistically significant. In addition, serial correlation result was carried out to guarantee that serial correlation was not a problem.

Furthermore, the coefficient of board diversity is positive and significant (p-value 0.000 > 0.05). The null hypothesis was rejected and the alternate accepted; thus, 'there is a significant positive influence of board gender diversity on sustainability reporting quality of listed firms in Nigeria. To this effect, while some related studies have shown conflicting results on board gender diversity and sustainability reporting, others were consistent with the current study. For instance, Carter et al. (2003) found a significant positive relationship between the fraction of women or minorities on the board and firm value. The study found a significant positive influence of the proportion of women directors on economic, social, and governance disclosure, Fernandez-Feijoo et al., (2014) and Frias-Aceituno et al., (2013) found an insignificant positive influence of board gender diversity on economic, social, and governance disclosure, Zaid et al., (2020) found consistent result in a study of boardroom gender diversity and sustainability reporting.

The effect of Board Nationality on the sustainability reporting quality of firms in Nigeria was confirmed statistically significant. The coefficient of board nationality was positive and significant (p-value 0.000 < 0.05). The null hypothesis was rejected for the alternate; thus, 'there was a significant and positive effect of board nationality on sustainability reporting quality of listed firms in Nigeria. Fernandez-Feijoo *et al.* (2014) using data from a survey conducted by KPMG, and the Women on Boards Report from Governance Metrics International, found that board nationality are determinant of sustainability reporting disclosure and informs more on CSR strategy. Another study by Handajani *et al.* (2014) reported a negative effect of board nationality on corporate social disclosure. The study found a significant positive influence of the proportion of national directors on the economic, social, and governance disclosure of firms. This result became consistent with the study by Ong & Djajadikerta (2017) in Australia; and Akhtaruddin et al. (2009) in Malaysia, which confirmed a positive correlation between the proportion of nationality of directors and sustainability/voluntary disclosure. Post et al. (2011) found that a higher proportion of national board directors associated with more favorable environmental corporate social responsibility (ECSR) and natural environment ratings.

Conclusion and Recommendations

The study examined the effect of board diversity on the sustainability reporting quality of listed firms in Nigeria. Empirical studies have shown support for board gender diversity as one of the drivers of sustainability reporting quality. Such diversity could be reflected, in the number of female directors, the nationality of the directors which determines their individual beliefs and values, and presence or absence of professional diversity and multiple directorships, the size of the firm, and the age of the firms among others. Moreover, sustainability reporting quality has emerged as a new form of reporting in both public and private sectors all in a single document to aid stakeholders make informed short and long-term decisions. However, the study revealed using least squares regression analysis that there is a statistically significant effect of board gender diversity on the sustainability reporting quality of the studied listed firms in Nigeria. Board nationality should be adopted by listed firms for significant improvement in governance practices. This will enable management to prepare board members with the skills to identify potential risks early enough and implement appropriate strategies to mitigate them. This approach will equally enable board members to understand emerging leadership trends and skills critical for effective succession planning.

The findings of this study have contributed to the existing empirical evidence on the effect of board gender diversity on the sustainability reporting quality of listed firms in Nigeria. The study recommends that firms in Nigeria should adopt gender diversity at every level of operations and most importantly at the top management spheres. This is because gender diversity will enhance decision-making, bring varied perspectives, and lead to more comprehensive discussions and better decision-making. Companies with gender-diverse boards often outperform their peers in financial performance. Better representation of customers, attraction, and retention of talent, compliance, and risk management as well as long-term sustainability.

References

Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics, 94*(2), 291–309. https://doi.org/10.1016/j.jfineco.2008.10.007

Aifuwa, H. O., & Embele, K. (2019). Board characteristics and financial reporting quality. *Journal of Accounting and Financial Management, 5*(1), 30-49.

Aifuwa, H. O., Embele, K., & Saidu, M. (2018). Ethical Accouting practice and financial reporting quality. *EPRA International Journal of Multidisciplinary Research, 4*(12), 31-44

Aladejebi Olufemi (2021). Board Gender Diversity and Performance of Listed Deposit Banks in Nigeria. *European Business & Management,* 7 (1), 14-23. doi: 10.11648/j.ebm.20210701.13

Anazonwu, H. O., Egbunike, F. C., & Gunardi, A. (2018). Corporate board diversity and sustainability reporting: A study of listed manufacturing firms in Nigeria. *Indonesian Journal of Sustainability Accounting and Management, 2*(1), 65-78.

Berger, A. (2019). Sustainability disclosure and the limits of diversity. *Journal of EU Business School, 2*, 41-60.

Brundtland (1987) Report of the World Commission on Environment and Development: Our Common Future.

Carter, D. A., Simkins, B. J., & Simpson, W. G. (2003). Corporate Governance, Board Diversity, and Firm Value. *The Financial Review, 38*(1), 33–53.

Conger, J. A. & Lawler III, E. (2001). Building a High Board: How to Choose the Right Members. *Business Strategy Review*; 12 (3), 11-19

Damagum, Y, M., Oba, V. C., Chima, E. I & Ibikunle, J. (2014). Women in corporate boards and financial reporting credibility: Evidence from Nigeria. *International Journal of Accounting and Financial Management Research, 4*, 1-8. Retrieved from www.tjprc.org.

Daunfeldt, S. & Rudholm, N. (2012). Does gender diversity in the boardroom improve firm performance? HUI Working Paper the Swedish Retail Institute, 60. Retrieved from www.ideas.repec.org.

Deloitte Global (2017). Deloitte Global finds gender diversity on boards doubled in organizations with female leadership. Press release (June 6) retrieved from www2.deloitte.com.

Deloitte Global (2018). Data-driven change Women in the boardroom. A global perspective Sixth edition. Retrieved from global.corpgov.deloitte.com.

Elkington, J. (2004) Enter the Triple Bottom Line. http://www.johnelkington.com/archive/TBL-elkington-chapter.pdf

Eulerich, M., Velte, P. & Uum, C. U. (2014). The impact of management board diversity on corporate performance - An empirical analysis for the German two-tier system. *Problems and Perspectives in Management, 12,* 25-39. Retrieved from www.businessperspectives.org.

Ferreiro-Ferrero, I., Fernandez-Lzquierdo, M. A., & Munoz-Terres, M. J. (2015). Integrating Sustainability into Corporate Governance: An Empirical Study on Board Diversity. *Corporate Social Responsibility and Environmental Management*, 22(4), 193-207

Font, X., Guix, M., & Bonilla-Priego, M., J. (2016). Corporate Social Responsibility in Cruising: Using materiality analysis to create share value. *Tourism Management, Elsevier, 53©, pages 175-186*

Fuente, J. A. Gaecia-Sanchehz, I, M., & Lozano, M, B. (2017), the role of the board of directors in the adoption of GRI guidelines for the closure of CSR information. *Journal of Cleaner Production, 141*, 737-750

Garba T. & Abubakar B. A. (2014). Corporate Board Diversity and Financial Performance of Insurance Companies in Nigeria: An Application of Panel Data Approach. *Asian Economic and Financial Review, Asian Economic and Social Society, 4(2), 257-277*

Hoang, T. C., Abeysekera, I., & Ma, S. (2016). Board Diversity and Social Disclosure: Evidence from Vietnam. *Journal of Business Ethics, 1-20*

Ibrahim, A. H., & Hanefah, M. M. (2016). Board and corporate social responsibility in Jordan. *Journal or Financial Reporting and Accounting, 2,* 279-298

Imade, O. G. (2019). Board gender diversity, non-executive director's composition and corporate performance: Evidence from listed firms in Nigeria. *African Journal of Business Management, 13* (9), 283-290. doi: 10.5897/AJBM2019.8766.

Johari, K., & Komathy. (2019). Sustainability reporting and firm performance: Evidence in Malaysia. *International Journal of Accounting, Finance and Business, 4*(17), 1-7.

Kkyaw, K., Olugbode, M., & Petracci, B. (2017). Cand board gender diversity promote corporate social performance? *Corporate Governance. The International Journal of Business in Society, 175*(5), 789-802.

Khan, I., Khan, I., & Saeed, B. (2019a). Does board diversity affect quality of corporate social responsibility disclosure? Evidence from Pakistan. Corporate Social Responsibility and Environmental Management.

Lincoln A. A. & Adedoyin O. (2012). Corporate Governance and Gender Diversity in Nigerian Boardrooms. *World Academy of Science, Engineering and Technology,* 71, 1853,2012

McKinsey and Company (2018). Delivering through diversity: Diversity and inclusion. Retrieved from www.mckinsey.com

Mclnerney-Lacombe, N., Billimoria, D., & Salipante, P. (2008). Championing the discussion of tough issues: How women corporate directors contribute to board deliberations. In S. Vinnicombe, V. Singh, R. J. Burke, D. Billimora, & M. Huse (Eds), *Women on Corporate boards* (pp. 123-139). Edward Elgar: Northampton, MA, USA

Michelon, G., & Parbonetti, A. (2012). The effect of corporate governance on sustainability disclosure. *Journal of Management & Governance, 16* (3), 477-509. doi: 10.1007/s10997-010-9160-3.

Musa, S., Gold, N., O., & Aifuwa, H., O., (2020). Board Diversity and Sustainability Reporting. Evidence from Industrial Goods Firms. *Izyestiya Journal of Varna University of Economics, 64* (4), 377-398.DOI:10.36997/IJUEV 2020.64.4377

Nazim, H. (2015). Impact of Sustainability Performance on Financial Performance: An Empirical Study of Global Fortune (N100) Firms (June 10, 2015). Department of Management, Universita Ca Foscari Venezia Working Paper No. 2015/01, Available at SSRN: https://ssrn.com/abstract=2616835

Ngu, B, S., & Amran, A. (2018). Board diversity and materiality disclosure in sustainability reporting: A proposed conceptual frame work. *International Academic Journal of Economics, 5*(1), 105-118.

Ogboi, C., Aderimiki, V. O. & Enilolobo, O. S. (2018). Corporate board diversity and performance of deposit money banks in Nigeria. *International Journal of Humanities and Social Science, 8,* 112-120. Retrieved from www.ijhssnet.com.

Onyali, C.I. & Okafor, T. G. (2019). Assessment of the Influence of Foreign Directors on Integrated Sustainability Reporting of Consumer Goods Firms Listed on Nigerian Stock Exchange. *Indonesian Journal of Sustainability Accounting and Management, 3* (1).

Oxelheim, L. and T. Randoy, 2001. The impact of foreign board membership on firm value. Working paper No. 567. The Research Institute of Industrial Economics, School of Economics and Management, Lund University, Sweden

Oyedokun, G. O. (2019). Board characteristics and financial performance of commercial banks in Nigeria. In: *Accounting and Taxation review 3* (2), S. 31-48.

Post, C., Rahman, N., &Rubow, E. (2011). Green governance: Boards of directors' composition and environmental corporate social responsibility. *Business & Society, 50* (1), 189-223. doi: 10.1177/0007650310394642.

Rao, K., & Tilt, C. (2016b). Board Diversity and CSR Reporting: An Australian Study. *Meditari Accountancy Research, 24*(2), 182–210.

Robbins, S. & DeCenzo, D. (2005). *Fundamentals of Human Resource management*. Pearson Education.

Rose, C. (2007). Does female board representation influence firm performance? The Danish Evidence. Corporate Governance: An *International Review, 15* (2), 404-413. doi: 10.1111/j.1467-8683.2007.00570.x.

Rupley, K. H., Brown, D., & Marshall, R. S. (2012). Governance, Media and the Quality of Environmental Disclosure. *Journal of Accounting and Public Policy*, 31(6), 610–640.

Saidu, M., Gold, N. O., & Aifuwa, H. O. (2020). Board Diversity and sustainability reporting: Evidence from industrial goods firms. Izvestiya *Journal of Varna University of Economics, 64*(4), 377-398

Saidu, M., & Aifuwa, H. O. (2020b). board characteristics and audit quality: The moderating role of gender diversity. *International Journal of Business and Law Research, 8*(1), 144-155.

Sanna-Lena Backstrom Jenny Karisson (2015). Corporate sustainability and financial performance – The influence of board diversity in a Swedish context. Uppsala University

Sener I. & Karaye A. (2014) Board Composition and Gender Diversity: Composition of Turkish and Nigerian Listed Companies. *Procedia Social and Behavioral Sciences, 150,* 1002-1011

Sharif, M., & Rashid, K. (2014). Corporate governance and corporate social responsibility (CSR) reporting: An empirical evidence from commercial banks (CB) of Pakistan. *Quality and Quantity, 5,* 2501-2521.

Suleiman, J. M., Modar, A. & Fida, Z. (2018). The effect of gender diversity on the financial performance of Jordanian banks. *Academy of Accounting and Financial Studies Journal, 22* (2), 1-11. Retrieved from www.abacademies.org.

Swartz N. P. & Firer, S. (2005). Board structure and Intellectual capital performance in South Africa. *Meditari Accountancy Research, 13(2), 145-166.*

Uwuigbe, U., Obarakpo, T., Uwuigbe, O, R., Ozordi, E., Asiriuwa, O., Eyitomi, G. A., & Taiwo, O. S. (2018). Sustainability reporting and firm performance: A bi-Directional approach. *Academic of strategic management journal, 17*(3), 1-16.

Van Knippenberg, D., De Dreu, C. K. W., & Homan, A. C. (2004). Work group diversity and group performance: an integrative model and research agenda. *Journal of Applied Psychology, 89,* 1001-1008

Widyaningsih, I. U., Gunardi, A Rossi, M., Rahmawati, R. (2017). Expropriation by the controlling shareholders on firm's value in the context of Indonesia: Corporate governance as moderating variable: *international journal of managerial and financial accounting, 9*(4), 322-337.

Wiersema, M., F., & Bantel, K.A. (1992). Top management team demography and response to sustainability initiatives: Evidence from the carbon disclosure project. *Journal of business ethics, 142* (2), 369-383.

WINBIZ (2018). Women in Management, Business & Public Service Annual Report 2018. www.wimbiz.org

Yasser, Q. R., Al Mamun, A., & Ahmed, I. (2017). Corporate Social Responsibility and Gender Diversity: Insights from Asia Pacific. *Corporate Social Responsibility and Environmental Management*, 24(3), 210–221.

Zaid, M. A., Wang, M., Adib. M., Sahyouni, A., & Abuhijleh S. T. F. (2020). Boardroom nationality and gender diversity: Implications for corporate sustainability performance, *Journal of Cleaner Production,* (pre-proof) http://doi.org/10/1016/jclepro.2019.119652.