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Research Paper

Corporate Sustainable Growth Among Listed Non-Financial Firms in Nigeria During Financial Crisis: Does Board Characteristics Matter?

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Abstract

During the worldwide financial catastrophe and pandemic, non-financial firms faced several challenges. Corporate survival in these difficult times necessitates the agitation for the long-term growth of the companies. Sustainable growth is defined as growth witnessed by a company in a stand-alone position without any outside finance. Sustainability in a term of long-term growth is obtained through the existence of effective qualities of the board of directors. There is indeed the existence of fantastic research on the theme of our study. However, the studies were not only scanty, but they were of divergent results and did not cover all the countries. Against these loopholes, our study was conducted to investigate the influence of board qualities on the sustainable growth of non-financial firms in Nigeria. Listed firms other than financial ones on the Nigerian Exchange Group, between 2011 to 2020 were the population of the study. 60 companies were selected through the application of content analysis. The best multiple regression model adopted for the study, after the conduction of the Breusch-Pagan LM test and Hausmann test, was the random effect through e-view 8.0. The result obtained was that board qualities – size, independence, and meeting – had positive cum significant impacts on SGR (coefficients: 0.0659, 0.0405, 0.0508; p-values < 0.05). while board gender diversity was positively correlated with sustainable growth though insignificant at the 5% threshold of significance (coefficient: 0.0397; p-value > 5%). The study was in support of principal-agent theory because effective features of the board were seen to be a way of solving the principal-agent problem.

Keywords *board characteristics, sustainable growth rate, financial crisis*

INTRODUCTION

Frankly speaking, and without any sense of contradiction from any quarters, business ventures are established to operate in perpetuity. It means that they are not expected to fold up shortly. Corporate survival depends on its overall performance because it is a motivating factor that is very interesting to investors. Investors are the backbones of firms all over the world due to the reason that they finance the activities of the business with their money. The sustainability of a firm is a function of high-level management (Badawy, 2020). During the financial crisis period, not only the potential investors will be discouraged and incapacitated to make an investment decision, but the existing investors will be hindered from making additional investments, too. What is the way out of this mess for non-financial firms? Sustainability growth is required. The concept of business sustainability is no longer a novel one. Agreed. About one and a half decades or so ago, the issue of business sustainability has become a hot topic of discussion in scholars' research, among companies and within society in general. However, business sustainability growth which is a part of economic sustainability has not been given adequate attention like the other two aspects: social sustainability and environmental sustainability. What gives financial sustainability an edge over the other two concepts of sustainability is that the optimal motive of investors is profit maximization. Firms that are not able to make adequate profit will not be able to meet their corporate social responsibility.

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The importance of qualities of the corporate board – size, independence, gender diversity, and meeting – during financial upheaval cannot be over-emphasized (Dash & Raithatha, 2019; Aman et al., 2022; Kijkasiwat et al., 2022; Chen et al., 2022). Boards of Directors are the decision-making engine of all corporate entities all over the world. The board has to be of optimum size to be able to give room for different ideas from people of diverse skills. The board needs to be independent so that it will not be encroached upon by management (Pucheta-Martínez & Gallego-Álvarez 2020). Professionalism on the part of the board members is required because it will allow the board to use their expertise to make reasonable and timely decisions that will help their companies progress during a tough financial time. Board gender heterogeneity is also important because when a board is made up of both female and male counterparts, the board will be flexible in its decision-making. One may ask: what do board characteristics have to do with sustainable growth? The former is a decision-making engine room as well as a policy formulation center of an organization, while the latter is a policy made to move an organization forward. Effective board qualities will enhance sustainable growth (Mukherjee & Sen, 2019; Adebayo et al., 2021).

Since the occurrence of the demise of some high-profile corporate entities like Enron, Worldcom, Toshiba, etc., corporate governance has caught the attention of both practitioners and academicians. Since the early year 2000, many research works have been carried out linking corporate governance with firm performance (Larmou & Vafeas, 2010; Kyriazopoulos, 2017; Rahim, 2017). The previous proliferation of findings has documented that the rising cost of agency and asymmetry regarding corporate information are the bastard sons of misgovernance. A lot has been done, especially in the Nigeria context, by both the regulatory body and the researchers to see that compliance to the ethics of corporate governance is strictly adhered to (Akinkoye & Olasanmi, 2014; Hussain & Hadi, 2017; Maranho & Leal, 2018). Nevertheless, with this favorable level of compliance, corporate entities are still facing exogenous problems perpetrated by unfriendly investment atmospheric conditions as a result of the Covid-19 pandemic and the Russia-Ukraine war. Many works, such as Mukherjee and Sen (2019), Badawy (2020), Nor et al. (2020), Adebayo et al., (2021), and Asaolu et al (2022) were the extant literature linking corporate governance with sustainable growth.

Despite all these wonderful previous works, there is a need to carry out further research in this area, because the previous works are not only scanty, but the results presented by them are divergent. In addition, most of the previous research works have been carried out before the advent of the Covid-19 pandemic, which has impacted both household savings and purchasing power negatively. Moreover, there is no previous work that has been carried out to link board characteristics with sustainable growth of non-financial firms in Nigeria. Further study is required to confirm the divergent results of the previous studies. All the aforementioned gaps serve as justification for this study. Also, it has been seen that without mismanagement and perpetration of fraud in an organization, a company can still wind up because the management lacks the technical how to manage their internal fund to attain sustainable growth.

From the foregoing, we arrive at this research question: what is the influence of non-financial firms' board characteristics on their sustainable growth during the financial crisis in Nigeria? Against this backdrop, the objective of this study is to assess the influence of board characteristics on sustainable growth among listed non-financial firms in Nigeria.

LITERATURE REVIEW

Sustainable Growth

Companies' sustainable growth is a term fabricated to describe the optimal growth of publicly traded companies. A company's growth must be reasonable; it has not to be extremely large while also not being too small. The concept used to measure firms' long-term growth is the sustainable growth rate. The sustainable growth rate is long-run growth achieved by firms through

the making use of internally generated sources of funds during a period when external sources of finance are not available (Higgins, 1977; Mukherjee & Sen, 2019; Adebayo et al.,2021; Asaolu et al., 2020). The essence of this concept is that it teaches companies to be self-reliant.

Board Size

The size of the directors' board, as argued by Fauzi and Locke (2012), varies across the world due to three things. The first is the business kind. The extent of the company's resources is the second one. The third factor is the board's mindset. To enhance the value of the firm and, consequently, investor trust, the board of management has to hold the CEO and management of a company accountable. The size of a board differs based on criteria such as the type of firm, the size of the firm, and the attitude of the board. According to Adams and Ferriera (2007), the directors' board's critical tasks are twofold: the directors can serve as an advisory body to the company and oversee the company's affairs. An extended board is capable of running the company well since the Chief Executive Officer, in this regard, is not capable to overshadow them due to the nature of their size (Pfeffer, 1972; Zahra & Pearce, 1989; Yunos et al., 2014). This expansion in the size of the board enriches it authoritatively to jettison any illogical vision of the Chief Executive Officer. However, Yermack (1996), Larmou and Vafeas (2010), Nazar and Rahim (2015), Ali (2016), as well as Zabrie et al. (2016) argue that a larger board tends to decelerate the decision-making process, and eventually becomes a cog in the wheel of the progress of the business.

Furthermore, a large board hurts the firm's value because of the cost of monitoring, which is a subset of the agency cost, which may be lower on a small board (Yermack, 1996). Firms' values are affected negatively by a large board size in the sense that it reduces firms' performance (Guest, 2009) and, as a result, aggravates the incidence of financial distress (Bredart, 2014). Notwithstanding, Kyereboah (2008), as well as Reguera-Alvarado and Bravo (2017), posit that a widening in the size of the board enhances the wealth of the stock owners more favorably. Concerning the issue of sustainable growth, Mukherjee and Sen (2019) believe that larger board size has a powerful influence because larger boards are privileged to access and canvas limited external resources to create value for the firm (Zona et al., 2018; Murtaza et al., 2020).

Board Independence

The boards of corporate organizations, according to Zahra and Peace (1989), are one of the distinguished business governance devices. The composition of the board is the number of independent non-executive directors on the board about the total number of directors (Al-Matari, 2019). Contrary to this, the board of directors' composition is made up of the following outstanding actors: the Chief Executive Officer, the insider directors, and the outsider directors (Datta et al., 2020). The outsider directors who are not dependent are those managers who lack any traces of self-affiliation with the company (Abidin et al., 2009; Shaukat & Trojanowski, 2017). Management boards can help to improve corporate governance and increase the value of a company. Management boards, as posited by Mukherjee and Sen (2019), help to improve the company's governance system and increase the worth of the firm. A company's value will rise if the directors' board fulfills its trust obligations, like overseeing management activities and hiring employees. To demonstrate the board's importance, the board has the authority to hire and oversee the performance of a separate auditor, to prevent and resolve internal misunderstandings, to reduce the amount of costs associated with an entity's agency, and to report its decisions on the company's progress to the shareholders.

On the board of directors, there are two types of directors: external (independent) directors and insiders. Li et al. (2015), posited that there is a direct relationship between the independent directors' proportion and sustainable growth; the higher the number of independent directors, the more likely they are to achieve sustainable growth. The inadequacy of insider directors' monitoring

of the CEO, owing to job security and other benefits they receive from the CEO (Datta et al, 2020), advocates for the presence of external directors on the board. External directors are the shields that protect investors against management opportunism because they are well-placed to be unbiased in their dealings with the management.

The number of external directors on the board is predicted to have a favorable impact on the company's value and performance. External managers are in a position to call the CEO to order. In the United Kingdom and the United States, because independent directors are not easily influenced, the laws allow at least the presence of two independent directors to constitute the board (Bhagat & Black, 2001). A positive relationship is expected between firm value as well as performance and the proportion of outside directors sitting on the board. Unlike inside directors, outside directors are better able to challenge CEOs. Perhaps in recognition of the outside directors, a minimum of three outside directors are required on the board in the United Kingdom, and the United States, the regulation requires that they constitute at least two-thirds of the board (Bhagat & Black, 2001). This study believes that external directors' independence will contribute immensely to the improvement of corporate sustainable growth because external directors are free from familiarity threats.

Board Gender Diversity

The presence of disparities in the properties of a company's board of directors is referred to as board diversity. Diversity can take many forms. It can be diverse in terms of age, ethnicity, nationality, gender, and experience (Katmon et al., 2017). Among these categories of board diversity, gender diversity is the one that has been generating many interesting issues (Ben-Amar, Chang & Mcllkenny, 2015; Hoang et al., 2016; Fauver et al., 2022). This company management mechanism refers to the presence of a female director on the board of directors. The issue of gender heterogeneity is not a corporate matter. Gender is undoubtedly the most discussed diversity topic in the political arena, as well as in all human endeavor circumstances (Fauzi & Locke, 2012).

The importance of having a female director on board cannot be overstated. According to the study of Ali et al. (2019), there are three reasons why women should be involved. One, female directors possess the wherewithal to understand the process of managing the company more successfully than men. Two, the presence of female directors on the board gives the company a good societal image. This will help the firm to attract more patronage. The last one is that giving a woman an opportunity to become a director widens the scope of running the company's affairs successfully.

Existing literature supports the concept of board sex heterogeneity. For example, according to the theory of agency, an increase in diversity would result in a more diverse board, ensuring that no single person would control decision-making (Hampel, 1998). Increased gender diversity can offer links to supplementary resources from a resource dependency theory standpoint, and diversity provides representation for various stakeholders from a stakeholder theory position (Fauzi & Locke, 2012; Gul et al., 2011). Previous studies, such as the study of Francoeur et al. (2008), suggest that gender diversity provides a forum where an all-inclusive decision and conclusion will be made on the progress of the company. Despite all these discussions in favor of woman's directorship, the issue of gender diversity and sustainable growth is not addressed (Ain et al., 2021).

However, Shukaril et al. (2012) posited that the presence or absence of female directors had nothing to do with firm performance. Sluggishness in decision-making is one of the setbacks of female directorship (Azmi & Barrett, 2014; Ali et al., 2019; Wang et al., 2021). Looking at the issue of female gender diversity vividly, the presence of female directors on boards of non-financial firms is just a means to an end, but not the end itself. The utilization of the qualities associated with female directors is most important. In this regard, this study expects a positive relationship between board gender diversity and corporate sustainable growth because women have a greater ability to deal

with unpredictable and difficult conditions.

Board Meeting

The board is not constituted for fun. And at the same time, the board cannot make decisions without coming together with almost all the members to partake in the decision-making process. The effectiveness of a board is determined by the frequency of meetings being held in a fiscal year. The more the number of meetings held, the more the improvement in firm performance (Yakob & Hasan, 2021). Besides, frequent board meeting facilitates communication and good rapport among board members (Correia & Lucena, 2020), and they also serve as an arsenal where the discussion about the strength, weakness, opportunity, and threat analysis of the company is being made (Nguyen et al., 2021). It has been seen that board meetings play a positive role in firm performance. However, frequent board meeting signals that there is fire on the mountain in a company, and it affects the firm's performance negatively (Akpan, 2015; Hanh et al., 2018). Despite these contrary negative results concerning the board-meeting-firm-performance relationship, our study expected a positive relationship between board meetings and sustainable growth. The reason is that a board meeting is a place where the way forward for the company's progress is being addressed.

Empirical Review

Board Characteristics and Sustainable Growth

Based on the financial period between 2009 and 2012, Li et al. (2015) conducted a study to investigate the association between board features and the sustainable growth of family-listed firms in China. The result, using descriptive statistics and regression analyses, showed that sustainable growth was not only positively, but significantly correlated with the number of external directors, board meetings, and the chairman's stake. Nevertheless, the reverse was the case with the board size. In Mukherjee and Sen (2019) carried out other research investigating the influence of corporate governance on the sustainable growth of the sampled 139 non-financial firms listed in India, covering five financial years (2011 to 2015). The findings of the study, based on longitudinal data analysis, reveal that board size and board independence have a substantial impact on explaining business sustainable growth, while there is no meaningful association between firms' sustainable growth and leverage.

The study of Zare et al. (2014) also looked into the link between board features and the sustainability of business firms in Iran. The sample size is 54 non-financial companies, with a period of 2006 to 2012. The data were analyzed using multiple linear regression analysis and correlation coefficient approaches. The findings revealed that there was no link between the size of the board, board meetings, and long-term growth. Sulaiman et al. (2017) conducted a study in 2015 to examine the canonical correlation between board characteristics and firm performance, using a sample of 100 Nigerian firms listed on the stock exchange. Board size and director ownership were found to be inversely connected with the firm's success. Firm success is highly connected with board independence and gender diversity.

The study of Musa et al. (2020) looked at how board gender diversity influenced the performance of Nigerian banks between 2011 to 2015. The sample size of the study was 16 listed banks, while the data were analyzed by applying multiple regression. The result showed that board gender diversity influenced firm performance positively. Another study, by Ain et al. (2021), was conducted to assess the influence of board diversity in a term of gender on the business sustainable growth rate of quoted non-financial firms in China. The coverage period of the study is 15 financial years (2003 to 2017). The result of the study, using a multiple regression method, showed that woman's directorship has a positive influence on firm sustainable growth.

Table 1. Summary of Empirical Review

S/N	Author & Year	Country of Study	Purpose of Study	Methodology	Findings
1	Zare et al. (2014)	Iran	An association between board characteristics and sustainable development	Multiple regression	No association between board features and sustainable growth
2	Akpan (2015)	Nigeria.	Influence of board meeting on firm performance.	Multiple regression	The firm performance showed negative relationships with board meetings and board size, while the reverse was the case with board gender diversity
3	Li et al. (2015)	China	assess the association of board qualities with sustainable growth	Multiple regression	Board features except size were positive and significant with sustainable growth
4	Sulaiman et al. (2017)	Nigeria	Examination of relationship portrayed by board qualities on performance	Multiple regression	Board independence and gender difference impacted growth significantly and positively
5	Rahim (2017)	Malaysia	Association between sustainable growth and firm performance	Descriptive and multiple regression analysis	There was the existence of a significant relationship between leverage, firm size, and sustainable growth
6	Mukherjee and Sen (2019)	India	Influence of corporate governance on sustainable growth	A multiple regression analysis	Board qualities had a positive influence on sustainable growth.
7	Musa et al. (2020)	Nigeria	Influence of board gender diversity on firm performance	Multiple regression	Board gender diversity influenced firm performance positively.
8	Nor et al. (2020)	Malaysia	Impact of Covid-19 on sustainability growth	Multiple regression	Covid-19 affected corporate sustainability growth inversely.
9	Adebayo et al. (2021)	Nigeria	Board-features-ownership-structure influence on business long-term sustainability	Multiple regression	Board features influenced sustainable growth positively, while ownership concentration did not.
10	Ain et al. (2021)	China	An assessment of the influence of board gender diversity on sustainable growth.	Multiple regression	Women directors impacted a firm's growth positively.

Source: Authors' Computation (2022)

Conceptual Framework

To achieve the stated objective of the study, a diagrammatic representation of the study's model is presented hereunder.

Independent Variables **Dependent Variable**
Corporate Governance: Board Characteristics

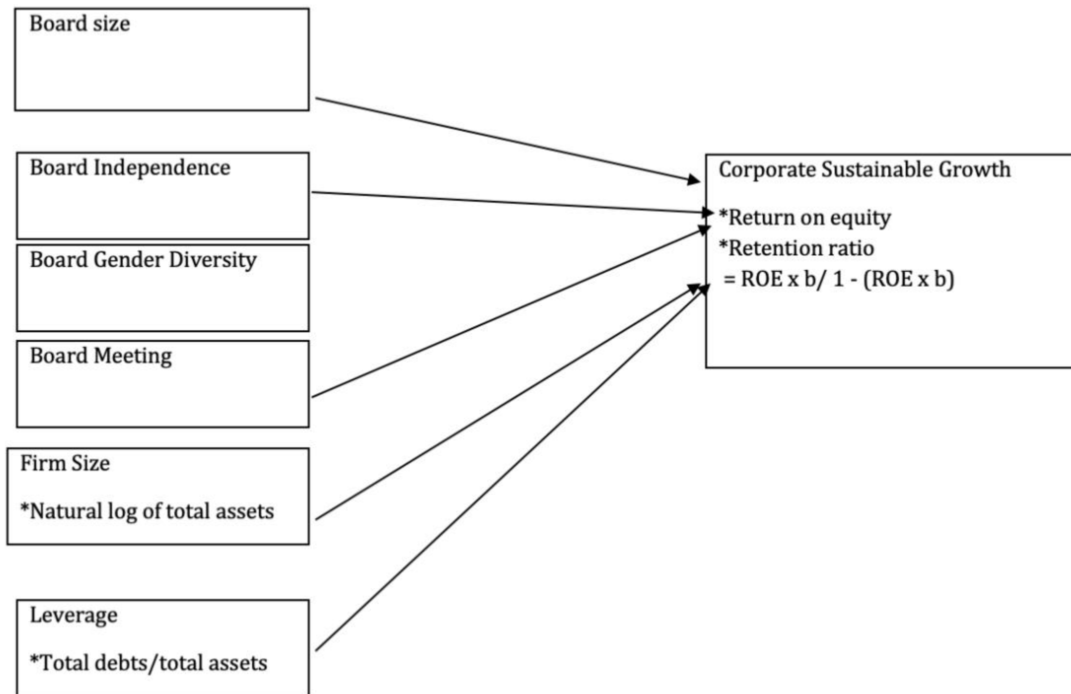

Figure 1. Conceptual Framework
Source: Author's Conceptualization, 2022

Theoretical Framework

The theory of agency is a unique basis for business organization governance (Badawy, 2020; Kyere & Ausloos, 2020). Professional managers' failure to satisfy the investors' interest led to the emergence of agency contests. The remedy for this issue is to solidify the qualities of the board (Fama & Jensen, 1983; Mukherjee & Sen, 2019; Badawy, 2020). This study, in this sense, was founded on agency theory.

METHODOLOGY

We used a secondary method to collect the data employed in achieving the objective of our study. The data were collected from the annual reports of the sampled non-financial firms from 2011 to 2020. The population of the study was the listed non-financial firms on the Nigerian Exchange Group (NGX). While the sample size of 60 firms was selected using the content analysis sampling technique. Both descriptive and inferential statistics were applied to analyze the data through regression analysis.

Model Specification

Previous studies were examined for the sake of obtaining the model of our study. The model of our study was adapted from the study of Mukherjee and Sen (2019).

$$CSG = f\,(BSIZE, BIND, BMTN, BGD, LEVR, FSIZE) \quad \ldots\ldots(1)$$

$$SGit = \beta_0 + \beta_1 BSIZEit + \beta_2 BINDit + \beta_3 BMTNit + \beta_4 PWOMit + \beta_5 LEVRit + \beta_6 FSIZEi + Uit \quad \ldots\ldots(2)$$

A priori expectation = $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6 > 0$

Table 2. Variable Measurements

Variables	Measurement	Expected Sign
Dependent		
Corporate Sustainable Growth (CSG)	ROE x b/ 1 - (ROE x b) Where, ROE (Return on Equity) = Net Profit/ Total Equity b (Retention Ratio) = PAT - Current Year Dividend/PAT (Asaolu et al., 2022)	+
Independent Variables		
Board Size	Number of directors on a board's natural logarithm	+
Board Independence	The proportion of independent directors on the board	+
Board meeting	Total number of board meetings held in a year	+
Board gender diversity	The proportion of woman directors on a board	+

Source: Authors' Compilation

Table 3 presented the result of descriptive statistics. According to the table, the maximum value of board gender diversity (BGD) is 3, while its minimum value is 0. The implication is that female directors were present on the board of some listed non-financial firms while some companies did not appoint any female directors. Board independence (BIND) maximum and minimum values were 16 and 2 respectively. At least, two independent directors were among the sampled firms' boards of directors. The maximum and the minimum values of the board meeting (BMTN) were 13 and 3 respectively. What can be deduced from these figures is that the listed non-financial firms in Nigeria held at least 3 board meetings in a year. Moreover, it can be seen from the table that the board size of the sampled firms ranged from 7 members to 18 members because the minimum value of board size (BSIZE) was 7 while its maximum value was 18. On the part of leverage (LEVR), among the listed sampled non-financial firms, some were highly geared while some were not. This can be seen from the results of LEVR maximum and minimum values. Furthermore, the variables were not evenly distributed because their Jacque Bera statistics were greater than the 5.99 threshold and their probability values were significant at 5%.

Table 3. Descriptive Statistics

	Mean	Median	Max	Min	Jarque-Bera	Prob.
CSG	-0.0257	0.0561	10.11	-51	21587	0.00000
BGD	1.167	1	3	0	164.169	0.00000
BIND	4.870	5	16	2	6.318	0.04245
BMTN	3.828	4	13	3	27.986	0.00000
B SIZE	8.503	8	18	7	46.988	0.00000
FSIZE	6.987	7.025	9.71	5.82	5973.875	0.00000
LEVR	0.808	0.55	19.56	0.109	1.938	0.00000

Source: Authors' Computation (2022)

FINDINGS AND DISCUSSION

Influence of Board Characteristics on Sustainable Growth

A unit root test was conducted to ascertain the degree of stationarity of the variables. The result of the two tests (Im et al., 2023) showed that all the variables exhibited stationarity at level, which implied that the variables were free from the unit root (see Appendix 1). Therefore, there was no need for a cointegration test.

Table 4. Pairwise Correlation Analysis

Pairwise Correlation Analysis: Ordinary

Correlation Probability	**CSG**	**B SIZE**	**BIND**	**BMTN**	**BGD**	**LEVR**	**FSIZE**
CSG	1.0000						

B SIZE	0.0497	1.0000					
	0.2468	-----					
BIND	0.0122	0.4577	1.0000				
	0.7747	0.0000	-----				
BMTN	-0.0245	0.3023	0.3498	1.0000			
	0.5684	0.0000	0.0000	-----			
BGD	0.0272	0.3381	0.3159	0.2727	1.0000		
	0.5260	0.0000	0.0000	0.0000	-----		
LEVR	-0.0056	-0.0621	-0.2235	0.0296	-0.0201	1.0000	
	0.8954	0.1474	0.0000	0.4898	0.6383	-----	
FSIZE	0.0531	0.4883	0.2776	0.1748	0.3060	-0.1747	1.0000
	0.2161	0.0000	0.0000	0.0000	0.0000	0.0000	-----

Source: Authors' computation (2022)

Table 4 presented the pairwise correlation of the variables adopted in this objective to examine the degree of association among the explanatory variables. The result of the pairwise correlation indicated that board size (BSIZE) was statistically correlated with board independence (BIND) at a 5% level of significance (r=0.4577, p=0.0000). This correlation coefficient showed that any increment in board size promoted an increment in board independence. Also, it was discovered that board size exhibited a statistically significant correlation with the board meeting with a coefficient of 0.3023 and p-value of 0.000. In the same vein, board size exhibited a statistically significant correlation with board gender diversity and firm size with a correlation value less than 0.5. When a board of directors is large, it gives room for the inclusion of women directors on the board. The positive correlation between the board size and the firm size as depicted in Table 4 signaled that as the sampled firms expanded in size, the size of the boards also increased.

Moreso, the result of the correlation in Table 4 reported that board independence exhibited a statistically significant correlation with other independent variables but with a correlation coefficient of less than 0.5. This indicated the fact that firm board independence cannot be achieved without a reasonable number of board size, board meetings, and board gender diversity. Board meetings report a positive correlation with the board gender, leverage, and firm size of the sampled firms. The firm board gender failed to report a significant correlation with the firm size, while leverage exhibited a significant negative correlation with the firm size. There was a negative correlation between corporate sustainable growth (CSG) and leverage (LEV). Finally, the coefficient of the correlation shown in Table 4 indicated that the independent variables used in achieving this objective did not suffer from multicollinearity, because all the coefficients of the pairwise correlation of the regressors were not greater than 0.6.

Table 5. Influence of Board Characteristics on Sustainable Growth

	Random Effect			
	VIF	Coefficient	t-value	Probability
B SIZE	3.123275	0.0659	2.9764*	0.0030
BIND	2.844238	0.0405	2.6156*	0.0091
BMTN	1.197889	0.0508	2.8590*	0.0044

	Random Effect			
	VIF	Coefficient	t-value	Probability
BGD	1.220057	0.0397	0.3722	0.7098
LEVR	1.161145	-0.0058	-2.0923*	0.0368
FSIZE	1.483580	0.0554	2.5504*	0.0110
C	NA	-0.6273	-0.9998	0.3178
Arellano-Bond Serial Correlation Test (p-value)		0.145		
Adj. R-Squared		0.6447		
Breusch-Pagan LM Test (p-value)		0.0067		
f-value		30.5735		
Hausman Test (p-value)		0.9838		

*Note: * significant at a 5% level of significance*

Source: Authors' Computation (2022)

Table 5 reported the outcome of the regression analysis. As a pre-estimation test, the Breusch-Pagan LM test was conducted to choose the appropriate model between the Pooled OLS and the Random Effect Model (REM). Since the test p-value was less than 5%, Random Effect Model was selected appropriately. We moved a step forward to conduct the Hausman test to select the appropriate model between Random Effect Model and Fixed Effect Model. The result of the Hausman test (see Appendix 2) showed that the random effect model was appropriate ($p > 0.05$). The result revealed that the independent variables were statistically significant in affecting the sustainable growth of the sampled firms. As presented in the table, the Adjusted R-Square was 64.4% depicting that the regressors jointly explained 64.4% of the total variation in sustainable growth. The f-statistics of the model with a value of 30.5735 indicated that the model was statistically significant and all the variables were jointly different from zero. Firstly, board size was positively associated with sustainable growth with a coefficient of 0.0659 and a t-value of 2.9764 at a 5% level of significance. This implied that large board sizes enhanced the non-financial firms' sustainable growth. This was in support of the previous works (Fauzi & Locke, 2012; Arora & Sharma, 2016; Oludele et al., 2016; Herdjiono & Sari, 2017; Scholtz & Kieviet, 2018; Mukherjee & Sen, 2019; Adebayo et al., 2021). The result of the finding was against the studies of Li et al. (2015) and Huang et al. (2019) because they posited that large boards impaired firms' sustainable growth. They argued that larger board sizes halted fast decision-making.

Similarly, board independence contributed positively to the sustainable growth of the firms with a coefficient of 0.0405 and a t-value of 2.6156. This showed that enhanced board independence led to a rise in the firms' sustainable growth (Li et al., 2015; Wu & Li, 2015; Herdjiono & Sari, 2017; Mukherjee & Sen, 2019; Nyuur et al., 2020). Independent boards have the freedom to make genuine decisions, without any fear of intimidation from the management, whenever there is a critical issue facing the company. More so, it was discovered that board meetings also aided the firm sustainable growth with a coefficient of 0.0508 and a t-value of 2.8590. The high frequency of board meetings of the governing board is a great factor that promotes the sustainable growth of the firms. This is not in conformity with the work of Ain et al. (2021). Regarding board gender diversity (BGD), women's directorship improved the degree of sustainable growth, though not significant ($t = 0.37$; p-value > 0.05). Women can use their position to attract more customers and persuade the board to take steps that will improve their firms' performance (Usman et al., 2020; Ain et al. 2021). The study showed that the positive influence of women's directorship on sustainable growth was insignificant, because some non-financial firms had no woman director on their board, and they still performed well (Assenga et al., 2018; Mukherjee & Sen, 2019).

The result of the control variable of leverage and firm size exhibited a statistically significant relationship with sustainable growth. Leverage affected the sustainable growth negatively with a coefficient of -2.9763 and t-value of 2.0923, this implied that using a high degree of debt in building the firm capital, can reduce the firm sustainable growth (Adebayo et al., 2021; Ain et al., 2021). Not only that, but during any financial crisis, companies found it difficult to attract more external funds because of the loss of investors' confidence. While firm size exhibited a positive effect on sustainable growth with a coefficient of 0.0554 and a t-value of 2.5504. Big firms were able to use their reputation to sustain their existing customers, and at the same time used it to attract more market shares.

The variables were free from multicollinearity because the Vector Inflation Factors (VIF) values in Table 5 were not up to 10. The was also the absence of serial correlation among the variables (p-value > 0.05). The result of the Heteroskedasticity LR test as presented in Table 4.4 revealed that the model residual was free from the problem of heteroskedasticity because the p-value of the test statistics is greater than 0.05.

CONCLUSIONS

Our finding was conducted to establish the influence of board qualities on the sustainable growth of non-financial firms listed in Nigeria. It was revealed by the study that all the elements of board features except board gender dichotomy had positive and significant influences on the sustainable growth of the non-financial listed firms in Nigeria. The Board of Directors, throughout the world, is a decision engine room of every business organization. The economy of a country may be melted down, and a country may be witnessing recession. However, a company's performance can still be buoyant by the qualities of the decision-making board. The findings of the study were in line with the apriori expectation that board characteristics (size, independence, meeting, and gender difference) had a positive influence on the sample non-financial firms in Nigeria. Board has to be of moderate size to accommodate different calibers of people with diverse skills, it has to be independent to give room for freedom of decision-making, it must hold frequent meetings, and it must allow for woman's participation among its members. All these are germane to firms' survival in the long run.

Furthermore, two control variables were used in our study, namely 'leverage' and 'firm size'. According to the study, leverage did not only negatively associate with sustainable growth, but was also significant at the 5% threshold. This has dual implications. One, during a financial crisis period, companies find it difficult to have access to external sources of funds. Internal sources of funds are resorted to for the advancement of the companies. Two, if a company can get the debt to finance its operation, a bad decision-making process by an ineffective board will useless the debt. Firm size was significantly and positively associated with companies' long-term growth. Companies can use the advantage of their size to attract more customers.

LIMITATIONS & FURTHER RESEARCH

One of the limitations of our study is that we were able to cover only the listed non-financial firms in Nigeria. Again, not all the listed non-financial firms were examined; we picked just a sample size of 60 companies.

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Appendix 1
Panel Unit Root Test

Variable	Statistics	p-value	Statistics	p-value
ROE	-8.8966	0.0000	-5.6550	0.00000
LEVR	-10.0060	0.0000	-2.69172	0.0036
FSIZE	-113.200	0.0000	-27.7119	0.0000
BSIZE	-4.74665	0.0000	-3.62221	0.0000
BMTN	-6.03871	0.0000	-4.76806	0.0000
BIND	-11.29553	0.0000	-8.25384	0.0000
BGD	19.00517	0.0000	-3.16113	0.0000
CSG	-12.2770	0.0000	-6.12002	0.0000

Source: Authors' Computation (2022).