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The Economic Benefit of Board Features in Enhancing Corporate Sustainability Reporting Practices Disclosure of Nigerian Listed Non-Financial Firms

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Abstract

Companies that worry economically about being held accountable by stakeholders and society for their corporate sustainability reporting (CSR) efforts should have a board structure that protects the interests of all stakeholders and investors. Therefore, we believe knowledgeable boards economically impact CSR practices, especially if they are well-organized. Thus, we look into how board characteristics, specifically board size (BDZE), board independence (BDIND), gender diversity (BOGD), and board CSR committee (CSRC) affect CSR activities. We employed the global consensus rater CSRHUB to evaluate 300 observations from listed firms comprising 50 companies. We postulated that every attribute on the board had a favourable economic impact on CSR activities. Ordinary least square (OLS), Panel-corrected standard error (PCSE), and Driscoll/Karaay (SCC) regression models were used to examine the study's data. Our findings support all the assumptions except for BDIND. Therefore, we conclude that board features like BDZE, BOGD, and CSRC increase the disclosure of CSR activities. Our projections show that BDIND has a detrimental economic impact on CSR practices. Empirical evidence supporting the legitimacy of the board traits that positively contribute to strengthening CSR practices and stakeholders' opinions on the firms are provided by this study. Our findings imply that further research is necessary to understand women's participation on boards of directors fully.

Keywords: *Economic Benefit, Board Size, Board CSR Committee, Board Gender Diversity, CSR Practices.*

Introduction

The disclosure of corporate sustainability reporting (CSR) practices in administrative governance enables companies to maintain positive relationships with all stakeholders. It is upheld by society as a driving force behind CSR practice challenges (Martinez & Isabel, 2019). By doing this, businesses may show the people in their immediate neighbourhood that they care about meeting the needs and aspirations of all stakeholders, including investors (Pforr et al., 2021). It may be desirable to disclose social and environmental issues to improve a company's standing, reduce stakeholder challenges, and increase stock values (Jizi et al., 2014; Jizi & Nehme, 2018). Boards of directors make judgments about CSR planning activities, sustaining a company's relationships with all investors, allocating resources to concerned enterprises, and committing to CSR practices for stakeholders and humanity. These choices could have the effect of encouraging the corporations in our study to report on corporate

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sustainability. Accordingly, Pforr et al. (2021) indicate that as long as the company's interest entails making gestures to all stakeholders and society devoted to their goals, competent boards would be expected to support CSR practice.

Furthermore, the host community's pressure may force boards to collaborate with all parties involved and promote the disclosure of issues related to CSR practices. As a result, board characteristics may be important in enhancing companies' voluntary disclosure of CSR policies. Previous research, like Martinez and Isabel (2019) and De-Mandojana and Aragon-Correa (2015), claims that the form of boards determines how well they inspire CSR activities and maintain positive connections with all investors to meet stakeholders' demands. In particular, compared to public companies, corporate businesses are generally smaller and less subject to shareholder inspection (Alexeyeva, 2023). Bashiru et al. (2022) support the claim that an executive's announcements regarding the disclosure of CSR activities heavily rely on board attributes. Martinez and Isabel (2019) record that the selection of a board's composition is predicated on its ability to effectively fulfil the needs of all stakeholders while also serving as a safeguard for the interests of investors.

The structure of this paper is as follows. The literature review, theoretical deductions, and formulation of the study's research hypotheses came after the introduction. The methodology of this study is covered in the next part, along with the empirical findings for the variables in line with the study's sample. The fourth portion discusses and analyses the findings, while the fifth section contains the conclusions and ramifications of our investigation.

Literature Review

The Brundtland Report from 1987 laid the groundwork for worldwide contemporary sustainability reporting by multinational enterprises. Sustainability was described in this report as "development that satisfies the present without sacrificing the potential of future generations to satisfy their own needs" (Keeble, 1988). This work awakens a sleeping giant in academia, the expert community, and the scholar community in response to integrating the evolving elements of economic, social, environmental, and governance (ESEG) practices to address the needs of the world's poor. As asserted by Zaernyuk et al. (2020), improving the quality of the environment is not an inevitable endogenous result in the process of economic growth.

A turning point in the sustainability issue was the United Nations Conference on Sustainable Development, which took place in Rio de Janeiro, Brazil, in 1990. (Nahar et al., 2023). Written twenty years later, the documents related to the Sustainable Development Goals effectively explain how the Rio + 20 meeting brought sustainability issues back into the spotlight, how the Millennium Development Goals followed, and how the Sustainable Development Goals concluded with a focus on environmental and economic developmental goals without ignoring the crucial social goals. With time, the definition of corporate sustainability provided by the Global Reporting Initiative (GRI, 2013), which distinguishes between economic, social, environmental, and governance elements, becomes relevant. Chang (2016) characterizes corporate sustainability as a philosophy that emphasizes the welfare of society as a whole, encompassing issues such as community development, environmental preservation, worker protection and social justice, product safety, and company leadership. Atiya et al. (2021) assert that financial sustainability is essential for advanced and developing economies. Therefore, everyone should be interested in tactical improvements related to sustainability challenges (Adedeji et al., 2020). Consequently, firms' stakeholders have shared information about the latter's sustainability initiatives through corporate sustainability reporting (Moses et al., 2020).

Furthermore, Moses et al. (2020) contended that in such a situation, businesses essentially fabricate sustainability information in the form of popular narratives to support their operations, using CSR as a language technique to portray corporate practices. Because of this, stakeholders now have higher expectations when it comes to obtaining trustworthy and transparent corporate sustainability reports that show a company's true commitment to sustainability, its capacity to weather financial setbacks, and the efficiency of its corporate board (Al-Shaer & Zaman, 2016; Gatti et al., 2021). That being said, industrialized and developing countries have shown a desire to conduct empirical research on the variables influencing sustainability disclosure. Until now, certain studies have concentrated on the effects of different board features and business elements (Moses et al., 2020; Nwude & Nwude, 2021; Bashiru et al., 2022; Kartika et al., 2023).

It is currently unknown how the elements above affect improving CSR practice through governance attributes in Nigeria, and research in this field is only beginning (Bashiru et al., 2022). Therefore, it's critical to look into how governance characteristics impact the state of corporate sustainability reporting procedures today. Another method this research contributes to the body of literature is the analytical analysis of the relationship between corporate governance characteristics and corporate social responsibility (CSR) initiatives in developing nations like Nigeria.

Theoretical Inferences and Hypotheses Development

The nature and reasons behind business sustainability activities have been studied using a variety of theoretical frameworks in previous CSR research. Kumar et al. (2022) state that a multi-theory approach is required to monitor CSR operations due to the complexity of comprehending corporate sustainability disclosure. With the aid of stakeholder and legitimacy theories, the impact of governance elements on CSR practices is quantitatively investigated.

Stakeholder theory is helpful in this situation because it protects investors' interests, helps companies enhance their sustainability disclosure policies, and develops their relationships with other interested parties (Kumar et al., 2022). According to legitimacy theory, companies must live up to social expectations to stay respected by the public (Martínez et al., 2022). According to Mamun and Easmin's (2018) explanation of legitimacy theory, CSR practices serve as a vehicle for indicating a company's obligation to environmental and social concerns, influencing stakeholders' opinions of the company. This study examines how board attributes, such as size, independence, gender diversity, and the existence of a corporate social responsibility (CSR) committee, impact Nigerian companies' sustainability reporting procedures while considering stakeholder and legitimacy theories.

Board size and CSR Practices

Studies on board size and CSR practices have been conducted for a while, but the theoretical support and practical recommendations offered here do not compromise (Lin & Nguyen, 2022). Stakeholder theory (ST) holds that a more diverse board of directors encourages active business decision-making and organizational justice, giving stakeholders greater influence over CSR practices (Freeman & Evan, 1990; Friedman & Miles, 2002). More members on a board make it easier to supervise CSR initiatives and provide shareholders with greater transparency (Bashiru et al., 2022; Martnez et al., 2022). Because of this, one important factor in assessing the sophistication of a firm's actions is the number of individuals serving on its board of directors (Aksoy et al., 2020). Bashiru et al. (2022) opined that an active board of directors may be able to assist a company in enhancing sustainability disclosure procedures and promoting effective CSR implementation.

Additionally, studies by researchers like Hussain et al. (2018) and Nwude and Nwude (2021) demonstrate a negligible correlation between board size and CSR activities. Despite inconsistent results in the relationship between the two variables, Simon et al. (2020) found no evidence of a substantial association between board size and CSR practice. However, earlier research reveals a favourable relationship (Bashiru et al., 2022; Martinez & Isabel, 2019; Nguyen et al., 2023). Hence, this study hypothesizes below.

H1. *Board size is positively related to CSR practices.*

Board Independence and CSR practices

One cannot overstate how well-regarded independent directors are at fulfilling the job of effective board oversight and connecting the company's policies to stakeholders' interests (Lin & Nguyen, 2022). Therefore, improved board independence helps the concerned businesses develop an active monitoring and supervisory structure (Jizi & Nehme, 2018). According to stakeholder theory, more independent boards also assist other stakeholders. Doing so helps them and serves their interests in bringing all parties together and improving transparency in CSR standards (Hussain et al., 2018). That supports the statement made by Lone et al. (2016) that board independence improves a company's CSR efforts. Mixed empirical findings, however, have been found regarding the relationship between board independence and CSR practices. These findings include favourable (Akbas 2016; Pucheta-Martínez et al. 2019), inconsequential (Hörisch et al., 2020; Amran et al., 2015), and negative correlations (Ahmad et al., 2017; Lin & Nguyen, 2022; Mousa et al., 2018). So, it is equally important to investigate and provide additional information regarding this association. Therefore, this study hypothesizes that:

H2. *Board independence is positively related to CSR practices.*

Board Gender Diversity and CSR Practices

It has been demonstrated that having a diverse mix of genders enhances board monitoring, improves board governance, and fortifies stakeholder relationships concerning corporate social responsibility (Issa et al., 2022; Simionescu et al., 2021). According to a study by Martinez and Isabel (2019), BOGD has a positive influence on promoting ethical corporate social responsibility (CSR) activities and supports the idea that having more women on boards can increase board efficiency. According to Rashid (2018), the legitimacy theory is widely applied to explain how gender roles change and how much corporate social responsibility is being done. According to Bannà et al. (2021), having female directors positively affects social and environmental issues and encourages more corporate social responsibility (CSR) activities. A favourable correlation between BOGD and CSR behaviours was also discovered in earlier research, including that of Ben-Amar et al. (2017) and Naveed et al. (2021).

Conversely, Glass et al. (2016) discovered an adverse relationship between the percentage of female CEOs and transparency on environmental, social, and governance issues. Even though women favoured proactive choices that may enhance the businesses' sustainability policies, these choices aid in improving CSR activities (Moses et al., 2020). Equally, the findings of Suciu et al. (2021) do not prove or support the notion that having more women on boards could result in better CSR practices. In line with the preceding, this study's hypotheses are as follows:

H3: *There is a positive relationship between Board gender diversity and CSR practices.*

Board CSR Committee and CSR Practices

Committees such as board CSR committees have become a hot subject in the governance traits and CSR circuit because of their ability to improve rules on CSR activities. (Martinez & Isabel, 2019). Al-Shaer & Zaman (2016) held that businesses use board CSR committees to express worries about their reputation regarding host communities' economic, social, and environmental well-being. Consequently, setting up a board of CSR committees from the board's directors would lead to more meetings for higher-quality CSR activities (Martinez & Isabel, 2019). Based on the stakeholder theory approach, Tavares and Dias (2018) concluded that companies establish board CSR committees to assist boards in upholding stakeholders' wishes and interests regarding social responsibility concerns and ensuring investors' and all stakeholders' accountability issues. Similarly, board CSR committees positively correlate with increased business openness regarding sustainability, as Fuente et al. (2017) explained. Additionally, Konadu (2017) shows how a board CSR committee on the company's board increases the voluntary sharing of environmental data and CSR policies. However, the existence of a CSR committee and CSR practices are not strongly correlated, according to earlier research (Michelon and Parbonetti 2012). Thus, this study hypothesized as follows:

H4: *There is a positive relationship between the Board CSR committee and CSR practices.*

Control Variables

This study also includes a few control variables to prevent bias in the results. These variables were previously used in earlier research on CSR practices.

Company Size: This variable denotes the firm's size. Rodriguez-Fernandez (2016) states that larger corporations are more likely to implement CSR practices because they focus on better community inspection, social pressure, and participation in additional financial assets to offset the cost of CSR practices. They are **also** more visible. According to some academics, including Elijido-Ten and Tjan (2014), Ja'afar et al. (2021), Pham et al. (2021), Kumo (2023), and Uwuigbe et al. (2018), a larger company is more likely to reveal its CSR policies concerning social and environmental issues. Still, smaller businesses tend to take a more localized approach to societal and ecological matters. Thomas and Indriaty (2020) demonstrate that CSR has less impact on them. Also, there was no statistically significant relationship found by De Villiers et al. (2014) between the size of a business and its dedication to environmental sustainability.

AGE: Businesses' ages are correlated with how much weight they place on sustainability rating indices and how long they intend to use them for corporate social responsibility (Trencansky et al., 2014). Also, their findings established that firms implement new regulations more slowly than startups. Certain studies show a positive relationship between firm age and CSR practices (Godos-Díez et al., 2014; Basuony et al., 2014). It is asserted that improved CSR practices are associated with a stronger focus on productivity and job satisfaction. Younis and Sundarakani (2020) concurred with Trencansky et al. (2014) that there is no relationship between a company's age and its CSR score. They also discovered no relationship between a company's age and its CSR initiatives. However, Benjamin et al. (2017) found that firm age has a substantial and positive correlation with CSR practices in Nigeria.

Leverage: This variable addresses the risk related to the company's financial holdings and liability. Organizations with higher debt loads might have to enforce stricter corporate social responsibility protocols to meet the expectations of investors and creditors (Orazalin & Baydauletov, 2020). Thus, calculating leverage involves dividing the whole debt amount by the total assets. Understanding a company's debt levels and corporate social responsibility (CSR) initiatives is essential, according to research by Chang et al. (2019). However, companies with high levels of debt offer optional instructions for reducing expenses and, consequently, investments (Chang et al., 2019). Studies like those by Yang and Lai (2021) and Nwude and Nwude (2021) have shown a connection between financial leverage and CSR initiatives. On the other hand, Uwuigbe et al. (2018) discovered a strong and inverse relationship between businesses' environmental disclosure level and their usage of financial leverage.

Data and Methodology

The population of this study consists of 168 companies listed on the Nigerian Stock Exchange (NSE) as of the end of 2021. (NSE March 1, 2022). However, because of their significant global contribution to corporate social responsibility (CSR), this study only looks at the listed non-financial sector of the Nigerian companies that CSRHUB assessed to create its sample. CSRHUB is a consensus rater across all ESEG sectors. Purposive sampling was used to select the samples, and the final sample of 300 firm-year observations offers a balanced panel that was used to evaluate the models. The study was conducted from 2016 until 2021.

Previous studies have focused on a subset of listed companies in Nigeria, limiting their analysis to either the financial or non-financial sectors (Hamid & Ibrahim, 2020; Kumo et al., 2023; Mohammed et al., 2016; Nwobu et al., 2017; Uwuigbe et al., 2018). However, this study focuses on Nigerian publicly traded firms in all industry categories ranked and classified by the World CSR Consensus Rating. For this reason, we based our study on annual reports and financial statements from publicly traded corporations. We can gain a better understanding of the relationships between the variables in our study with the use of multivariate panel regression analysis and descriptive statistics.

Measurement of Variables

The unweighted disclosure index was employed in this study to measure CSR practices. Similar to previous research by Bashiru et al., Waheed et al. (2021) and Jamil et al. (2021) employed the unweighted disclosure index to quantify the CSR practice as a dichotomous variable (2022). We recorded a "0" for any company that did not disclose information on CSR practices in its annual report and a "1" for those that did (Gujarati & Porter, 2009). The final score for CSR disclosure is calculated by adding the subscores for 14 economic aspects, 12 social dimensions, 15 environmental dimensions, and 15 governance dimensions related to CSR practice. Indexes are calculated using the disclosure model's weightless, additive scoring system. There were 56 CSR indicators in the disclosure index. A corporation's total score is calculated by dividing its values by the highest possible score.

Four independent variables, board size (BDSZE), independence (BDIND), gender diversity (BOGD), and board CSR committee, were used to reflect various board characteristics. Similarly, to eliminate possible sources of bias, we included operational control variables, including company size, age, and leverage. Accordingly, scholars like Ain et al. (2021), Issa et al. (2022), and Nwude and Nwude (2021) have quantified BDSZE in the past by reckoning the number of board members. BDSZE was computed using the natural logarithm of the total number of board members, as in Pavić Kramarić et al. (2018). Studies like Jizi and Nehme (2018), Nwude and Nwude (2021), and Rashid (2018) have used the ratio of independent non-executive directors to the total number of directors as an additional indicator of board independence (BDIND). BOGD is measured as the percentage of female directors among all board members (Ain et al., 2021; Chams & García-Blandón, 2019; Nwude & Nwude, 2021; Orazalin & Baydauletov, 2020). Prior research, on the other hand, measured board CSR committees (CSRC) as a dummy variable, with the present assigned '1' and otherwise '0' to demonstrate the existence of the CSR committee for transparency regarding sustainability issues. This was done by Dias (2017), Fuente et al. (2017), Konadu (2017), and Velte & Stawinoga (2020).

In contrast, the natural logarithm of the company's total assets was used to compute the control operating variables that comprise company size (SZE) (Ain et al., 2021; Malik et al., 2020). The years a firm has been in operation, or company age (AGE), was used (Issa et al., 2022; Wu et al., 2020). The entire debt of the business divided by its assets is its leverage (Ain et al., 2021; Wu et al., 2020).

Model Description

This study attempts to evaluate the function of board characteristics as a predictor of CSR practice for listed Nigerian enterprises over six years. Thus, an equation-based panel regression model was introduced by the study:

$$CSRP_{it} = \beta 0_{it} + \beta 1BDZE_{it} + \beta 2BDIND_{it} + \beta 3BOGD_{it} + \beta 4CSRC_{it} + \beta 5SZE_{it} + \beta 6AGE_{it} + \beta 7LEV_{it} + \ldots \mu_{it}. \text{ i}$$

Where

β0- signifies the beta coefficient worth of the panel model regression.

β1- β7 show beta coefficients of the descriptive variables for the study.

μ - represents the regression model's error term, *i* - signifies the number of companies, and *t* - indicates the number of years. BDSZE = directors' number on the board, BDIND = proportion of independent directors, BOGD = percentage of feminine directors, CSRC = board CSR committees, SZE = corporations' size, AGE = number of years the company has been in operation, and LEV = the total debt/assets.

Table 1: Measurement of Operational Variables.

Dependent Variables;	Code	Measurement	sources
Corporate Sustainability Reporting Practices	CSRP	The Sustainability disclosure total is the sum of the sub-scores of CSR by firms.	Corporate Sustainability or Annual reports
		Independent Variables	
Board size	BDSZE	The total amount of board members.	Annual report
Board independence	BDIND	The proportion of non-executive board members to total board members.	Annual report
Board gender diversity	BOGD	Number of women on the board as a proportion of all board members	Annual report
Board CSR committee	CSRC	The dummy variable takes '1' if the firm set up a CSR committee or '0' otherwise.	Velte and Stawinoga (2020), Dias (2017)
Company size	SZE	Estimated using the asset value's natural logarithm.	Periodic Report
Company Age	AGE	Time in business	Yearly report
Company Leverage	LEV	Measured as total debt to total assets.	Yearly report
μ		error term	

Findings

This section presents the results of the multivariate regression, Pearson correlation, and descriptive statistics used in the study. Table 2 displays the summary of statistics.

Table 2: Summary of Descriptive Statistics.

Variable	Obs	Mean	Std. Dev.	Min	Max
CSRP	300	0.320	0.046	0.000	0.375
BDSZE	300	11.500	3.889	4.000	22.000
BDIND	300	4.534	3.244	0.000	20.000
BOGD	300	17.800	11.668	0.000	44.444
CSRC	300	0.137	0.345	0.000	1.000
SZELOG	300	18.459	3.352	15.831	23.181
AGE	300	7.479	0.916	1.860	76.095
LEV	300	0.823	0.772	0.000	5.601

A mean of 11 directors holds positions on the boards of the financial sector companies evaluated by CSRHUB, according to the descriptive summary of numbers for the variables currently included in Table 2. There could be as few as four and as many as twenty-two members on the board. Additionally, on average, 4.5 out of a possible 20 independent non-executive directors serve on the corporate boards of the Nigerian financial sector organizations that have been evaluated. CSR procedures need to expand to meet the larger board because several companies do not have any independent or non-executive directors. In a similar vein, women hold 17.8% of executive jobs. Certain corporations have no female directors, while others have up to 44% of female board members. Additionally, of the financial sector companies evaluated by CSRHUB, only 13.7 per cent had a Board CSR committee on average.

When the SZE is expressed as the natural logarithm of the total assets, the average value is 18.46 per cent. Concurrently, the average age of the model company is 7.5 per cent, with a wide range of 1.8 to 76 years of operation. An influence on the general level of CSR may result from the extrapolation that 82.3 per cent of trades in the banking industry used leverage to sustain their operations. Thus, corporate social responsibility (CSR) may change if a business depends more on debt finance to fund its operations. It's important to note that only between 32 and 37 per cent of financial services firms participate in CSR. Table 3 presents the Pearsons correlation of the study variables below:

Table 3: Correlation Analysis.

variables	1	2	3	4	5	6	7	8	VIF
CSRP	1.000								
BDSZE	0.528***	1.000							3.62
BDIND	0.165**	0.380***	1.000						2.19
BOGD	0.277***	0.162**	0.005	1.000					1.78
CSRC	0.084	0.294***	0.035	0.066	1.000				1.09
SZE	0.716***	0.646***	0.044	0.232***	0.398***	1.000			2.65
AGE	0.859***	0.361***	0.170**	0.187**	0.048	0.674***	1.000		1.31
LEV	0.305***	0.09	0.024	0.010	0.029	0.037	0.132*	1.000	1.82

Note: Prob>Chi^2 0.000 ***, ** and *indicate, 1%, 5% and 10% Significance Levels, Respectively.

The connection matrix between the explanatory and dependent variables is displayed in Table 3. The board characteristics included in the study BDSZE, BDIND, BOGD, and CSRC favourably correlate with CSR practice. These numbers support the idea that a greater percentage of independent directors, women serving on boards, and an adequate number of CSR committees impact CSR practices. Since larger firms have more resources to execute CSR policies and practices than smaller industries, SZE and CSR practices are positively correlated. As a result, the company's size affects how much Nigerian financial industry companies practice CSR. AGE and LEV similarly show a positive correlation with CSR practice.

A jointly significant positive link exists between the explanatory variables as well. Comparably, there is a positive correlation between the control variables SZE, AGE, and LEV and the other variables. Since the highest linkages between the variables are equal to or less than 0.86, we can conclude that there is no multicollinearity between the predictor variables, as shown by the correlation matrix (Naciti, 2019). Multicollinearity is thought to happen whenever the variance inflation factor (VIF) value is greater than the borderline of 10, according to Hair et al. (2014) and Olive (2013). Therefore, the VIF shows that all values are tolerable, which helps to investigate multicollinearity better.

Multivariate Regression Results

The absence of heteroscedasticity, as determined by the Breusch-Pagan/Cook-Weisberg test, suggests that the data can be reported without worrying about a skewed statistical interpretation. The Wooldridge test was also used to check for autocorrelation, and the results indicated that it was absent from the model. Therefore, more methodologies were employed to validate the Ordinary Lease Square (OLS) model's conclusion, indicating a substantial relationship between most variables and CSR practice. These models include the Driscoll and Kraay Standard Error (SCC) model, which was developed by Huber (1967) and updated by White (1980). The Panel Corrected Standard Errors (PCSEs) model was presented by Beck et al. (1995). To produce a more appropriate and reliable standard error estimation for the study model, as recommended by Hoechle (2007). The PCSE and SCC were used in this investigation.

Table 4: Multivariate Regression Analysis.

Variables	**Ols**		**Pcsc**		**Driscoll/Kraay**	
	(Coeff.)	t-stat	(Coeff.)	z-stat	(Coeff.)	t-stat
_CONS	-0.0002	-0.020	-0.0002	-0.030	-0.0002	-1.270
	0.983		0.980		0.212	
BDSZE	0.0023	4.450	0.0023	6.550	0.0023	13.060
	0.000***		0.000***		0.000***	
BDIND	-0.0004	-0.850	-0.0004	-1.340	-0.0004	-1.110
	0.399		0.18		0.275	
BOGD	0.0003	2.500	0.0003	6.770	0.0003	5.690
	0.013**		0.000***		0.000***	
CSRC	-0.0102	-7.730	-0.0102	-7.730	-0.0102	-12.640
	0.000***		0.000***		0.000***	
SZE	0.0022	2.810	0.0022	7.190	0.0022	12.250
	0.005***		0.000***		0.000***	
AGE	0.0324	14.990	0.0324	23.790	0.0324	117.850
	0.000***		0.000***		0.000***	
LEV	0.0113	6.600	0.0113	22.150	0.0113	58.160
	0.000***		0.000***		0.000***	
N	300		300		300	
R2	0.8436		0.8436		0.8436	
Prob>chi2	0.000		0.000		0.000	

Note: ***, **, and *indicate, 1%, 5%, and 10% Significance Levels, Respectively.

Table 4 displays the various types of analysis used in the study above, such as OLS, PCSE, and SCC regressions. However, as Fairchild and MacKinnon (2009) and de Heus (2012) suggested, the R-square value may be as low as 4.6 per cent. The explanatory variables in this study account for 84.36 per cent of the variation, as indicated by the R-squared result from these models, which provides evidence of the models' fitness.

Furthermore, the regression results of the three models, OLS, PCSE, and SCC, have a fair amount of similarity. As a result, we explain the Driscoll/Kraay, which shows that, at level 1 per cent (b = 0.0023, p = 0.000), the coefficient's link between BDSZE and CSR practices is favourably significant. Given that we now know that the number of directors on the board affects CSR practices, this result leads us to support hypothesis H1, which claims that increasing the number of directors on the board will improve CSR practices. These results also align with those of Bashiru et al. (2022), Martinez and Isabel (2019), and Nguyen et al. (2023), who found a favourable and substantial relationship between BDSZE and CSR behaviours. Furthermore, the outcome is consistent with the stakeholder theory, which acknowledges that a larger board can significantly influence CSR activities, guaranteeing administrative justice and proactive corporate decision-making. The outcome, however, is at odds with research such as Hussain et al. (2018) and Nwude and Nwude (2021), which demonstrate a negligible correlation between board size and CSR activities. Furthermore, Simon et al. (2020) showed that board size had no appreciable impact on CSR practices.

Table 4's results, on the other hand, show that the SCC model's coefficients of board independence (BDIND) and CSR practice are negatively and hardly connected (b = -0.0004, p = 0.275), which leads us to reject hypothesis H2. According to this finding, CSR practices among listed non-financial sector companies in Nigeria are unaffected by the proportion of non-executive independent directors on the board. These results align with other studies (Akbas, 2016; Pucheta-Martínez et al., 2019; Hörisch et al., 2020), indicating a weak and negative correlation between BDIND and CSR activities. Although studies like Lin and Nguyen (2022) and Mousa et al. (2018) documented a positive association between BDIND and CSR practices, this finding contradicts stakeholder theory, which posits that independent directors can actively monitor supervision activities and protect the investors' and stakeholders' interests.

Concerning Board gender diversity (BOGD) and CSR practices, Table 4 further illustrates the positive significance of the model (b = 0.0003, p = 0.000). This finding supports hypothesis H3 by confirming that gender diversity on boards similarly affects CSR policies and practices. Al-jai et al. (2023), Ben-Amar et al. (2017), and Naveed et al. (2021) are among the studies that showed a positive link between BOGD and CSR practices. This outcome further strengthens the case for the legitimacy theory, which holds that, given the widespread prevalence of male dominance and recent changes in the economy and society, having women on company boards is essential to sound corporate governance. According to Glass et al. (2016) and Suciu et al. (2021), there is no proof that better CSR policies and practices result from having more women on boards.

Conversely, at a 1 per cent level, the coefficient value of the relationship between CSRC and CSR behaviours is inversely significant (b = -0.0102, p = 0.000). The result above indicates that CSRCs harm the anticipated worth of CSR practices. That is to say, the more CSR committee members there are, the worse the CSR policies of the corporations being examined; this leads us to reject hypothesis H4. This outcome is in line with Michelon and Parbonetti's (2012) study, which found a tenuous link between CSR activities and the existence of a CSR committee. This finding contradicts the stakeholder theory approach, which holds that businesses establish board-level CSR committees to encourage interest in sustaining social responsibility concerns to assure investors and other stakeholders of CSR activities (Tavares & Dias, 2018). Additionally, the outcome contradicts the research conducted by Konadu (2017) and Fuente et al. (2017), who showed that the presence of a board CSR committee increases the voluntary disclosure of environmental information and CSR practices and that board CSR committees are positively related to advanced business transparency regarding sustainability.

There is still a statistically significant positive connection between SZE and CSR practices even though the impact of the control variables on CSR practices does not reduce the significance of the coefficient value ($b = 0.0022$, $p = 0.000$). This study illustrates the impact of a firm's asset size on its corporate social responsibility program. This result is in line with studies by Pham et al. (2021), Ja'afar et al. (2021), and Uwuigbe et al. (2018), which contend that a company's size is associated with more transparency about its CSR initiatives to social and environmental issues. The results shown in Table 4 also indicate a positive correlation, at a 1-cent level, between company age (AGE) and CSR practices ($b = 0.0324$, $p = 0.000$). Lin and Nguyen's (2022) documentation suggest that an organization's environmental practices will increase with age. The results also align with earlier research by Al-jaifi et al. (2023), Benjamin et al. (2017), and Basuony et al. (2014), which found a substantial positive correlation between the age of the organization and CSR practices. A positive and statistically significant relationship between LEV and CSR practices is also shown in Table 4 ($b = 0.0113$, $p = 0.000$). Furthermore, these results are in line with earlier research by Al-jaifi et al. (2023), Bashiru et al. (2022), and Uwuigbe et al. (2018).

Concluding Remarks and Discussion

This study examines the influence of board qualities on the corporate social responsibility (CSR) practices of companies that CSRHUB reviewed and rated in Nigeria between 2016 and 2021. This study's sample size consists of 300 observations. As a result, the study strives to establish a hypothesis regarding how board characteristics affect CSR activities. Furthermore, four (4) hypotheses involving various control variables like SZE, AGE, and LEV in the research were developed regarding the impacts of BDSZE, BDIND, BOGD, and CSRC factors on CSR practices. As a result, panel data from the annual accounts and reports of listed non-financial sector corporations were gathered and used. The legitimacy and stakeholder theories established the proposals' theoretical underpinning, which postulated the potential positive effects of the independent variables on CSR initiatives.

The multivariate result further demonstrates the validity of stakeholder and legitimacy theories since a company's BOGD and BDSZE are highly correlated with the calibre of its CSR initiatives. A favourable correlation exists between CSR activities and SZE, AGE, and LEV. The study's findings support the stakeholder and legitimacy theories. Consequently, the significance of CSR activities increases along with the board of directors' stature. CSR initiatives are viewed as a trade policy that can enhance ties with the neighbourhood, increase the company's visibility, and produce quantifiable results, as evidenced by the proportion of female board members. Due to their extensive operational history and wealth of acquired knowledge, large firms are not only a better source of capital, but they also have a greater opportunity to understand the importance of fiscal restraint in enhancing sustainability practices.

However, the statistical analysis also demonstrated that the CSRC had a negative and significant impact on CSR practices, with the result that the more board members there are on the CSR committee, the fewer CSR practices there are. This study, however, could not find any proof that BDIND enhances CSR procedures. The study's results conclude that board qualities like BDSZE and BDGD and control factors like SZE, AGE, and LEV greatly influence Nigeria's CSRHUB evaluations and assessments of listed non-financial businesses.

Practical Inferences and Social Implication

The study's findings ought to convince businesses that adding more women and diversity to their boards will help them adopt more CSR policies and expedite the process of sustainable development. Moreover, a company's capacity to implement sustainable practices is limited by its size, which may be attributed to its years of operation (AGE) and level of expertise. Finally, the study's conclusions have significant ramifications for regulators and legislators, who can use them to suggest a board feature that would ensure the implementation of an ethical CSR strategy that is good for the environment and society.

Suggestions for Future Study and Limitations

You should be aware that there are several significant limitations to this study. First, only Nigerian businesses undergoing CSRHUB evaluation and assessment are considered. Therefore, the study's results may not apply to other African emerging economies or companies that trade on the Nigerian Stock Exchange. Unfortunately, most Nigerian businesses are not included in sovereign sustainability databases such as Thomson Reuters and the Dow Jones Sustainability Indices, so the study can only provide data for 2016 through 2021. This study collected thorough data from the company's annual accounts report, websites, and numerous periodicals. However, this study examined only the impact of select board features that potentially improve CSR practices. Future studies should examine additional characteristics as possible predictors of CSR practices, like financial constraints, competitive considerations, and sustainability practices. Factors influencing CSR practices in developed and developing nations are similar and comparable. Despite many limitations, the study provides data to support the notion that a higher percentage of women on boards of directors positively impacts CSR policies. The results of the control variables support this claim by indicating that larger businesses and those that rely on debt to fund a portion of their operations both have better CSR practices and that the number of years that corporations have improved their CSR practices is also considered.

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