Available online at
http://myjms.mohe.gov.my/index.php/JEEIR

JEEIR

e-ISSN: 2289-2559

Journal of Emerging Economies & Islamic Research 10(1) 2022, 90 – 106.

Journal of Emerging Economies and Islamic Research

The impact of corporate board size and board composition on corporate social responsibility disclosure in Nigerian non-financial sector: the moderation effect of firm's financial performance

Shamsuddeen Yusuf Bugaje[a*], Bala Sulaiman Dalhat[b], Mary Adaku Egbuna[c]

[a]*Department of Accounting, Faculty of Management Sciences, Federal University Dutsin-Ma, Katsina State, Nigeria*
[b]*Department of Accounting and Finance, Abubakar Tafawa Balewa University, Bauchi, Nigeria*
[c] *Department of Finance, Aminu Kano Teaching Hospital, Kano, Nigeria*

ARTICLE INFO

Article history:
Received 1 January 2022
Accepted 25 March 2022
Published 23 May 2022

Keywords:
CSR disclosure
Board composition
Board Size

DOI:
10.24191/jeeir.v10i1.15490

ABSTRACT

The number of corporate social responsibility frameworks and principles has considerably increased both in academics and environments. The applications of corporate social responsibility disclosure (CSR) in Nigeria remain in developing form. Therefore, the main focus of this study is to investigate the relationship between corporate board size and board composition and corporate social responsibility disclosure with moderating effects of firm financial performance in the Nigerian listed non-financial companies. A dichotomous was utilized to develop an index based on the corporate social responsibility dimension, analysed and examined using content analysis. The sample data used in this study comprises of 62 companies in listed non–financial companies in Nigeria and for the period of five years (2015-2019). The data were examined by panel regression models. The result of the statistical analysis provides some evidence of a positive relationship between corporate board size, board composition, and corporate social responsibility disclosure. The finding from the study shows that Nigerian non-financial companies are more likely to disclose more information using corporate board size and board composition. The result of the joint interaction term of profitability as a moderator of financial performance reveals a strong moderating effect of profitability on the relationship between board size, board composition and corporate social responsibility disclosure with positive and statistically significant.

* Corresponding author. *E-mail address*: *yshamsuddeen@fudutsinma.edu.ng*

©UiTM Press, Universiti Teknologi MARA

1. Introduction

The literature of the past three decades or so portrayed a growing interest in corporate social responsibility (CSR), whereby firms are being held liable for any events affecting society and the environment. From this global perception, firms are observed as part of a larger economic system in which their actions might affect mechanisms of the system and thus the system itself (Naseem et al., 2017). Over the last few periods, there has been a growing global public awareness of the role of corporations in society. Many companies which have been charged with contributing to the economic growth and development process have been criticized for creating social problems issues such as resources depletion, waste, pollution, product quality and safety, the rights and status of workers and the power of large corporations have become the focus of increasing attention and concerns (Lu et al., 2021). In this framework, corporations have been increasingly urged to become accountable to a wider group of stakeholders rather than shareholder and creditor groups. Public awareness and interest in environmental and social issues and increased attention in mass media have resulted in more social disclosures from corporations (Akanfe, Michael & Bose, 2017). CSR is a desirable goal well cherished by every stakeholder, including shareholders, creditors, employees, host communities, government at all levels and others. Perhaps, it is also true that some shareholders will prefer to receive higher dividends and capital gains than to part with returns on their investments. It is in the self-enlightened interest of the greater majority of stakeholders that corporations give back to the society that has allowed them to flourish. It is also in the interest of generations to come that we leave the world better than we met it (Yahaya & Apochi, 2021). Corporations usually inform of their CSR activities in the annual reports or separate social reports (CSR Reports or Sustainability Report). However, there is no standardization or uniformity in terms of the items reported or the way of reporting (Yahaya & Apochi, 2021).

Profitability as a moderator of firm performance is the ability of a company to earn profit or gain that would sustain the company's long-term and short-term growth (Idowu, 2014). One of the factors enabling management to disclose CSR activity in a high level of flexibility is profitability (Idowu, 2014). Our studies focus on the impacts of CSR disclosure practices by Nigeria listed firms. Empirical studies have shown that CSR disclosure activism varies across companies, industries, and time (Gray et al., 1997).

Our paper focused on the Nigerian business setting for several reasons. First, the Nigerian company was to provide the mandatory disclosure requirement (i.e financial statement) to the public. Due to the growing and global awareness of the role of the companies in society, some Nigerian listed companies report CSR information in their annual reports; however, the levels of this information are lower than expected (Uadiale & Fagbemi, 2012). Therefore. the objective of this study is to examine the impacts of corporate social responsibility disclosure with the relationship between board size and board composition and the moderating effect of firm's financial performance in Nigeria. The specific objectives are: to determine if there is a relationship between board size and corporate social responsibility disclosure; to ascertain the relationship between board composition and corporate social responsibility disclosure and to find out if there is a relationship between profitability as moderating effects of firm financial performance and corporate social responsibility disclosure.

2. Literature Review

CSR is becoming well known in every corporate sector, particularly Multinational corporations which have implemented this towards their employees, environment, customers, and government (Naseem et al., 2017). In the last few decades CSR was not very popular and had been considered as wasting corporation's money, energy and effort, but today, CSR has become an important tool in promoting goods and positive impressions about corporations (Brown & Deegan, 1999). The triple bottom line is considering that companies do not only have one objective, profitability, but that they also have objectives of adding

https://doi.org/10.24191/jeeir.v10i1.15490
©UiTM Press, Universiti Teknologi MARA

environmental and social value to society (Williams, 2003). Corporate Social Responsibility is defined as a method of achieving commercial success in ways that honour ethical values and respect people, communities, and the natural environment (Deegan, 2002). Bello (2012) opines that CSR consist of an action by a firm, which the firm chooses to take that substantially, affects an identifiable social stakeholder welfare. It is a business practice that goes beyond the minimum legal requirements and contributes to the welfare of its key stakeholders. CSR, therefore, is viewed as a comprehensive set of policies, practices, and programs that are integrated into business operations, supply chains, and decision-making processes throughout the company and usually include issues related to business ethics, community investment, environmental concern, governance, human rights, the market place, as well as the workplace (Halil, 2016).

2.1 Corporate Social Responsibility Disclosure

Generally, disclosure of corporate social information is voluntary. Corporate social disclosure is an aspect of social responsibility accounting that is concerned with communicating information on social/environmental involvements of companies to society. It should be noted that measurement and assessment of corporate social involvements is the concern of performance evaluation. It has been established that society uses disclosed corporate social information to make various decisions such as patronizing companies, investing in companies among others. (Bouaziz, 2014).

2.2 Corporate Board Size

The Board of Directors is one of the most important elements of the corporate board characteristics mechanism in overseeing the conduct of the company's business. Previous studies indicated that board size affected firms in multiple ways: increased problems, decreased the ability of the board to control management, increased the cost of maintaining many members, and poor decision making (Halil, 2016). Existing literature on board size can be classified into two categories. One is in favour of large boards whereas the other advocate smaller boards. The advocates of larger boards believed that large boards are inefficient as they have poor control of management and increase the agency cost. However, this notion is opposed as larger boards may be less influenced by management. Small boards are deemed efficient but they may be influenced by managers. Moreover, it is observed that large boards are diverse with regard to the education, expertise and gender of the directors (Carroll & Shabana, 2010).

2.3 Board Composition

Board composition is concerned with issues related to membership of the board of directors (firm and industry experience, functional backgrounds, etc.). In general, directors can be classified into three categories. Insider directors or management directors are salaried employees, such as the CEO, president, CFO, or COO. Related or affiliated outside directors are those who have a pre-existing relationship with the firm, such as family relatives and retired executives. Independent outside directors are directors who have no personal connections or business dealing with the firm (Deegan, 2002).In addition, a board that consists of directors with a diverse set of functional expertise (marketing, engineering, finance, etc.) industry experiences, educational qualifications, ethnic and gender mix might be better equipped to deal with a wide range of issues facing the firm and provide executives with advice and consultation from multiple perspectives (Muhammad, 2015).

2.4 Financial Performance

Profitability as a moderator of firm financial performance can be seen as the ability of a company to use its resources to generate revenues more than its expenses. In other words, this is a company's capability of

https://doi.org/10.24191/jeeir.v10i1.15490 ©UiTM Press, Universiti Teknologi MARA

generating profits from its operations (Idowu, 2014). Profitability is the ability of a company to earn profit or gain that would sustain the company's long-term and short-term growth (Idowu, 2014). One of the factors enabling management to disclose CSR activity in a high level of flexibility is profitability (Idowu, 2014). Profitability can further be defined as the ability of a business to produce a return on an investment based on its resources in comparison with an alternative investment. Although a company can realize a profit, this does not necessarily mean that the company is profitable (Halil, 2016).

2.5 Empirical Review

There have been various studies (Oluwatoyin, Agbi & Mustapha 2021; Lu et al.,2021; Al-Homaidi et al.,2021; Halil, 2016; Naseem et al., 2017; Mohd, 2017; Dandago & Muhammad, 2011; Idowu, 2014) in the area of corporate social responsibility disclosure and its relationship with corporate board characteristics. The study compares the general patterns of CSR between Nigeria and developed countries, and finds that the CSR was lower in Nigerian companies; the patterns of reporting were similar. Both countries had a dominance of employee-related information, subsequently came the environmental and community, followed by consumer information which is why some Nigerian firms disclose CSR information, while others do not. In other words, the study is interested to examine the factors affecting Nigerian firms' decision to report CSR information in their annual reports.

Yekinni (2008) shows that the level of CSR disclosure is relatively low; however, these studies did not examine the factors that affect a firm's decision to disclose or not disclose CSR information in their annual reports. The present paper, therefore, complements and extends prior research on CSR in Nigeria by explaining potential reasons for different CSR disclosure levels in Nigeria. Naseem et al.,(2017) studied the relationship between corporate social responsibility disclosure and corporate board characteristics in Malaysian public listed companies using a sample of 150 companies listed on the main board of Bursa Malaysia for the year 2006. The result of the study showed that government ownership and audit committee had a positive and significant correlation with the level of CSR disclosure and that the most significant variable that influences the level of CSR disclosure was government ownership. Ali and Atan (2013) examined the relationship between corporate board characteristics and corporate social responsibility disclosure. In their research, 120 companies were sampled for the year 2009 and a Multiple Regression Analysis and descriptive statistics were used to test the relationship. The result showed that the board size, board independence, and ownership concentration had a significant relationship with the extent of CSR disclosure. However, the control variables were not significantly related to the extent of CSR disclosures. This argument is supported by the theory of social contract influence, which indicates that the power of expertise influences compliance. In extant literature, it has been well documented that certain variables might jointly impact the level of disclosure. Some studies have proved that there exists a positive association between the profitability of the firm and corporate social responsibility expenditure (Oluwatoyin, Agbi & Mustapha, 2021; Al-Homaidi et al.,2021; Akinleye, Olarewaju & Fajuyagbe, 2019 and Bello, 2012) carried out a study in Malaysia to examine the impact of firm size, BC and BS on corporate social responsibility and found a positive impact on corporate social and environmental disclosure.

2.6 Corporate Board Size and its relationship with Corporate Social Responsibility Disclosure

Board Size is one of the most important elements of the Board of Directors in overseeing the conduct of the company's business and how properly managed by their agents. Previous studies indicated that board size effects increased communication and coordination problems, decreased ability of the board to control management, and the spread among a larger group of the cost of poor decision making (Oluwatoyin, Agbi & Mustapha,2021). In the same vein, Jensen and Meckling (1976), found that large boards result in less effective coordination, communication and decision making and are more likely to be controlled by the CEO. It is predicted that ineffective coordination in communication, and decision making leads to low

https://doi.org/10.24191/jeeir.v10i1.15490 ©UiTM Press, Universiti Teknologi MARA

quality of financial disclosure since the board of directors will be unable to carry out their assigned roles efficiently. Halil (2016) stated that an increase in board size may lead to an increase in the number of directors who have a financial or accounting background, which could have a positive influence on corporate environmental disclosure. In line with these arguments, the results of the several empirical studies (Oluwatoyin, Agbi & Mustapha,2021; Al-Homaidi et al.,2021; Akinleye, Olarewaju & Fajuyagbe,2019; Naseem et al., 2017; Duke & Kankpang, 2013; Haji, 2013; Idowu, 2014; Belal, 2000; Muhammad, 2015) documented a positive relationship between the board size and the level of disclosure. Contrary to these suggestions, Jensen and Meckling (1976) argue that larger boards are less likely to be effective and easier to be controlled and manipulated by the CEO than smaller boards (Jensen & Meckling, 1976). In a similar vein, it is suggested that as the number of the directors on the board increases, the monitoring capacity of the board also increases, but this benefit may be outweighed by the incremental cost of poorer communication and a slower decision making process (Lu et al.,2021).

2.7 Board composition and its relationship with Corporate Social Responsibility Disclosure

Board Composition refers to the proportion of non-executive directors sitting on board with the executive directors. For the board to be able to supervise the actions of the management and direct the company, it must be independent (Idowu, 2014).To be effective, a board needs the right group of people with an appropriate mix of skills, knowledge, and experience (e.g. professional backgrounds, industry experience, philanthropic support) that fits with the organization's objectives and strategic goals. This should be considered not only when new appointments are being contemplated or made but in the context of regular board evaluations (Ali & Attan, 2013). Despite the large number of empirical studies conducted in the area of corporate board size and board composition and the relationship on CSRD with moderating effect of firm financial performance in Nigeria, there is still no consensus been reached on its role on CSR activities.

2.8 Theoretical considerations

The social contract theory has been advanced as a theoretical basis upon which to explain the current practice of Corporate Social Responsibility (CSR) by corporations. Similarly starting from the 17th century the social contract concept has been used to justify human rights. The concept was the foundation of the constitution/ legal basis of many western states starting with England, U.S and France, which is contrary to that of the agency theory as it supports the idea of human right. Business ethicists and philosophers have tried to construct and analyse the social responsibility of corporations from a social contract perspective without linking it to human rights or the political social contract (Deegan, 2002). Social contract theory says that people live together in society in accordance with an agreement that establishes moral and political rules of behaviour. Some people believe that if we live according to a social contract, we can live morally by our own choice and not because a divine being requires it (Belal, 2000).

Agency theory is also a relevant notion to comprehend the possible association between CSR disclosure and Corporate Governance. Jensen and Meckling (1976), argue that in a business setting, there exists a contract between one or more persons (the principal) and another person (the agent) to perform certain matters on their behalf, thus, involving delegation of decision-making authority to the respective agent. The management is the essential group of people who has the opportunity to enter into a contractual relationship with other stakeholders; hence, they are the company's agents. In view of the above theories, Agency theory and Social contract theory are adopted as theories that best explain this study. The theories suggest that establishments must ensure they carry out their activities within the framework (bounds and norms) of the society in which they are operating.

https://doi.org/10.24191/jeeir.v10i1.15490 ©UiTM Press, Universiti Teknologi MARA

3. Methodology

Longitudinal and panel methods are used for the study of this nature. Information on corporate board size, board composition, and CSRD can best be obtained by examining the annual reports and accounts of the companies in line with Halil (2016). This study constructed a checklist for evaluating the content of corporate annual reports of the listed firms in the non-financial sector to determine the relationship of corporate board size, board composition on CSRD in the non-financial sector in Nigeria. The population of the study comprises all quoted firms in the Nigerian Stock Exchange, which consists of 235 quoted companies in the financial sector and non-financial sector listed in the Nigerian stock exchange.

3.1 Sampling technique

This study adopted the Morgan's formula of sample size which was used in the computation using 0.05 tolerance error, the result was found to be (62) sixty-two sample size as shown below, hence, 62 firms were selected from the 107 non-financial firms in listed Nigerian stock exchange and was used as the sample size for the study. This is in line with the similar approach used by Krejcie & Morgan (1970). The selection will be based on some criteria which is consistent with previous studies on corporate social responsibility Disclosure (Belal, 2000 and Said, Zainuddin & Haron, 2009). The formula for Determining Sample Size for a Finite Population is shown in Equation 1 as below:

$$n = \frac{X^2NP(1-P)}{e^2(N-1) + X^2P(1-P)} \tag{1}$$

Where:
X2= 3.841 is the table value of chi2 for 1 degree of freedom at the desired confidence level 3.841
n=107 total number of population
P=0.5 the population proportion for cluster (assumed to be 0.5 since this would the maximum sample size
e2=0.05 the degree of accuracy expressed as a proportion is 0.05
Therefore:

$$n = \frac{3.841(107)(0.5)(0.5)}{(0.05)2(122) + 3.841(0.5)(0.5)}$$

=236.2(0.5)
0.0025(122)+1.9205(0.5)
=118.1
0.305+0.96005
=118.1
1.86
=62.49 = 62 (approximately)

Table 1 shows the total number of sample firms from the population of the study. The subsector of food products had the largest number of 13 sample firms. Meanwhile, the smallest subsectors of 1 firm are Mining services and Exploration and production.

https://doi.org/10.24191/jeeir.v10i1.15490
©UiTM Press, Universiti Teknologi MARA

Table 1. Total number of sampled firms

Sector	Sub-sector	No. of firms	Population (%)
Agriculture	Crop production	3	2.0
Conglomerates	Diversified industries	6	4.0
Construction/Real Estate	Infrastructures/Heavy c	2	1.6
Consumer Goods	Beverages-Breweries Distiller	6	4.0
	Food product	13	8.0
Health Services	Pharmaceuticals	8	6.0
Industrial Goods	Building materials	8	12
Natural Resources	Chemicals	3	0.1
	Metals	2	1.6
	Mining Services	1	0.1
	Exploration and production	1	0.1
	Integrated oil and gas services	5	4.0
Advertising services	Hotels and lodging	4	3.0
TOTAL		62	66%

This study used a stratified random sampling technique that involves the division of a population into smaller sub-groups known as strata. The stratified random technique is applied for the sample of 62 listed firms operating in high profile industries as identified by (Halil, 2016). Researchers then select random groups with a systematic random sampling technique for data collection and data analysis. In single-stage sampling, the study collects data from every subsector within the selected.

3.2 The variables and measurement

There are five sets of variables. These are the dependent and explanatory variables. The corporate social responsibility disclosure index (CSRD) represents the dependent variable in this study. To assess the extent of CSR disclosure in annual reports, content analysis was employed in stimulating data from the annual report. This is due to the fact that the content analysis method is the commonly used method of measuring corporate social responsibility disclosure in annual reports Mohd (2017) and Uwuigbe and Egbide (2012). Content analysis is a systematic replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding. However, this study measured the CSR disclosure using the adopted checklist developed by Haniffa & Cooke (2002) with some modifications.

Table 2. Corporate social responsibility disclosure checklists

CSR disclosure	Items checklist
1	Charitable donations and subscription
2	Sponsorships
3	Community program (health and Edu)
4	environmental policies
5	Number of employees
6	Employees relations
7	Employees welfare
8	Employee Education
9	Employee Training and development

 ©UiTM Press, Universiti Teknologi MARA

10	Managerial Remuneration
11	Worker's health and safety
12	Types of product disclosed
13	Product development and research
14	Product quality and safety
15	Focus on customer service and satisfaction

Source: Adopted checklist developed by Haniffa and Cooke (2002) with some modifications

This study employed the Venanzi (2012) scoring scheme and the content analysis method of data collection in order to measure corporate social responsibility disclosure. For this study, a score of (1) was awarded if an item was reported; otherwise, a score of (0) was awarded. Finally, an environmental disclosure index (EDI) was developed with 15 attributes. Consequently, a firm could score a maximum of 15 points and a minimum of 0, that is the total scores divided by the total number of attributes. The formula for calculating the reporting scores by using the environmental disclosure index (attributes) is expressed in a functional form in Equation 2 below:

$$RS = \sum_{i=1}^{n} di \qquad (2)$$

Where:

RS = Reporting Score

di = 1 if the item is disclosed; 0 if the item is not disclosed

n = Total items in the checklist i.e. 15

i = 1, 2, 3…………….15

Corporate board characteristics are the independent variables and are proxies by the following variables.

- Corporate Board size (BS): Board size is an important corporate governance attribute, BS is measured as the number of directors on the board. Board size has a positive influence on the level of corporate voluntary disclosure (Mohd, 2017).
- Board composition (BC): Board composition is measured as Proportion of non-executive directors to the total directors on the board as used by (Mohd, 2017), BC consists of directors with a diverse set of functional expertise (marketing, engineering, finance, etc.), industry experiences, educational qualifications, ethnic and gender mix might be better equipped to deal with a wide range of issues facing the firm and provide executives with advice and consultation from multiple perspectives (Deegan, 2002).
- Profitability (PROF): This study used firm performance as a moderator measured by profitability. Profitability as a moderator is seen as the ability of a company to use its resources to generate revenues in excess of its expenses. In other words, this is a company's capability of generating profits from its operations (Idowu, 2014). In this study, profitability was measured as the ratio of net profit after tax to total assets at the end of the fiscal year. The measurement was adopted from the study of (Idowu, 2014).
- Firm Size (FS): Firm Size as a control for the firm size is necessary because the bigger the non-financial company, the larger the expected agency problem it will be experience (Carroll & Shabana,

 ©UiTM Press, Universiti Teknologi MARA

2010). In addition, Halil (2016) argues that larger firms are likely to show more information in order to improve the confidence of stakeholders and reduce political costs.

- Firm Age (AGE): Firm Age is a control variable of the study. For the purpose of this work, years of operation after listing are used as a proxy for age. The measurement of firm age used in this study is consistent with Halil (2016) and Naseem et al. (2017), who proxies age as the year of listing on the Stock Exchange. The use of year of listing is a better proxy for age because it represents the year in which the company becomes popular and their account been subjected to a number of scrutinies and reporting to regulatory agencies.

Table 3. Summary of variables measurement and description

Code	Variable	Description	Measurement	Expected outcome	Sources
CBS	Corporate board size	The number of persons serving as directors on corporate board at balance sheet date.	Number of directors sitting on the board	Positive	(Lipton & Lorsh, 1992)
BC	Board composition	Consists of directors with a diverse set of functional expertise (marketing, finance, etc.) industry experiences, educational qualifications, ethnic and gender mix might be better equipped to deal with a wide range of issues facing the firm and provide executives with advice and consultation from multiple perspectives.	proportion of non-executive directors sitting on board with the executive directors.	Positive	(Yermack, 1996)
PROF	Profitability	A company's capability of generating assets at the end profits from its operations this is a company's capability of generating assets at the end	Ratio of net profit after tax to total profits from its operations of fiscal year	Positive/ Negative	(Idowu, 2014)
CSRD	CSRDI	It is defined as, achieving commercial success in ways that honor ethical values and respect people, communities, and the natural environment.	Scoring of CSR disclosure index using a checklist		(Uwuigbe and Egbu, 2012)

3.3 Model specification

The statistical technique which includes a linear regression is adapted with some modification from previous studies (Deegan, 2002; Bello, 2012 & Halil, 2016) to examine the relationship between the dependent and the independent variables in this study, and also to measure the relationship with the moderating variables. Model 1 was developed to test the relationship between the dependent and explanatory variables of the study. In addition, Model 2 was developed to test the sum of each independent

 ©UiTM Press, Universiti Teknologi MARA

variable by multiplying with the profitability to show the interactions as moderators against the dependent variables and control variables. The models are presented as below:

Model (1):

$$CSRD_{it}=\beta_0+\beta_1 CBS_{it}+\beta_2 BC_{it}+\beta_3 FSit+\beta_4 AGE_{it}+\varepsilon_{it}$$

Model (2):

$$CSRD_{it}=\beta_0 CBS_{it}+\beta_1 BC_{it}+\beta_2 PROF_{it}+\beta_3 (CBS*PROF)_{it}+\beta_4 (BC*PROF)_{it}+\beta_5 FS_{it}+\beta_6 AGE_{it}+\varepsilon_{it}$$

4. Data Analysis and Discussion

Below is the presentation and discussion of the results of the data generated from the financial statements of the sampled firms.

Table 4. Descriptive statistics of the variables

Variables	Mean	Std. Dev.	Min	Max
Corporate Social Responsibility Disclosure	0.874	0.075	0.467	1.000
Corporate Board Size	9.029	2.644	4.000	19.000
Board Composition	0.369	0.101	0.182	0.875
Firm Size	6.421	0.856	3.239	7.968
Age	23.603	12.12	1.000	49.000
Firm Performance (Return On Asset)	403849	618487	25455	6850560

Table 4 presents the descriptive statistics for the variables used in the study. The mean corporate social responsibility disclosure for the sampled non-financial companies in Nigeria shows an average information disclosure of about 0.87. This means that on average companies disclosed their information of about 0.87%. This shows the element of a high level of information disclosure in the non-financial sector, with a minimum disclosure level of 0.47 % and a maximum disclosure level of 1.0%. The standard deviation of 0.075 indicates that there is no significant variation in disclosure of information between the sampled non-financial sectors during the period of the study. The mean corporate board size is about 9 members, a minimum of 4 members, and a maximum of 19 members. The standard deviation is 2.64 which shows that there is significant variation in the size of the board of the sampled non-financial companies. Board composition records a minimum of 0.18% and a maximum of 0.88%, on average. Firm size has a mean of 6.42 with minimum and maximum values of 3.23 and 7.96, respectively. The standard deviation of 0.85 suggests a considerable level of dispersion in firm size during the period under review. The mean return on assets (PROF) is about 403849 indicating the average profit earned by the sampled companies.

https://doi.org/10.24191/jeeir.v10i1.15490 ©UiTM Press, Universiti Teknologi MARA

Table 5. Multicollinearity test main effect

Variables	VIF	Tolerance
BC	1.58	0.632203
CBS	1.14	0.877504
CBS*PR	1..45	0.060790
BC*PR	1.66	0.053581

Table 6. Results of correlation matrix

Variables	CSRD	CBS	BC	PROF	FS	AGE	VIF
CSRD	1.0000						
CBS	0.1242*	1.0000					1.28
BC	0.0440	0.1458*	1.0000				1.63
PROF	-0.0771	0.0110	-0.1105*	1.0000			1.19
FS	-0.0909*	0.3553*	0.1637*	-0.1358*	1.0000		1.65
AGE	-0.0964*	-0.0038	-0.0606	0.0272	-0.2486*	1.0000	1.15

Note: The symbol (*) indicates a significant relationship

Table 6 shows the correlation coefficients on the relationship between corporate social responsibility disclosure (CSRD) and corporate board size (CBS), board composition (BC), return on assets (PROF), firm size (FS), and age of firm (AGE). It should be noted that the value of the correlation coefficient ranges from 1.0 to -1.0. The coefficient of 1.0 on the matrix indicates a variable that has a perfect and strong positive linear relationship with itself, while -1.0 indicates the presence of a perfect strong and negative association. However, correlation coefficient value that lies between 1.0 and -1.0 depicts a moderate relationship and a weak relationship. In other words, $r>0$ depicts a positive relationship, $r<0$ shows a negative relationship, where $r=0$ indicates no relationship at all. The result of multicollinearity of moderating effect of Profitability amongst the variables in the interacting effect. In reducing the effect of the multicollinearity to a level that constitutes a threat to the multiple regression analysis, the recommendations of Aiken and West (1991) were followed as also adopted in the moderating studies of Wibowo, (2012). In this case, all the variables were centred to get them close to zero value. After all the variables of this study were centred, the effect of multicollinearity reduced on the moderating effects of firm financial performance as well as in the moderating effect of profitability. In this case, all the variables were centred to get them close to zero value. After all the variables of this study were centred, the effect of multicollinearity reduced on the moderating effects of firm financial performance. Table 5 shows no severe multicollinearity issue.

4.1 Regression result

A regression model was developed to test the linear relationship between dependent and independent variables. To test the quality of the linear fit of the model, the researcher calculated the coefficient of multiple regressions as shown in Table 7 below.

https://doi.org/10.24191/jeeir.v10i1.15490
©UiTM Press, Universiti Teknologi MARA

Table 7. Regression results for main effect and interacting effect of Profitability.

Variables	Model 1	Model 2
Constant	1.3805***	1.4108***
	(8.17)	(8.27)
FS	0.0124	0.0207
	(1.53)	(0.0084)
AGE	0.0012	0.0018**
	(1.47)	(2.07)
PROF	0.2281***	0.0228*
	(3.18)	(3.1800)
CBS	0.0448***	0.0280***
	(3.38)	(3.29)
BC	0.8133***	0.6414***
	(2.65)	(1.86)
CBS*PROF		0.0073***
		(1.12)
BC*PROF		0.1193***
		(0.71)
Observation	620	620
Adjusted R2	0.0511	0.0678
P -value	0.0000	0.0007
F -value	9.06	3.12

Notes: ***, ** and * indicate 1% and 5% and 10% significant levels respectively; The t-value is presented in parenthesis while the other figures represent the coefficient.

In Table 7, Model 1 presents the regression result for the based model. The regression results reveal that the cumulative Adjusted R^2 is 0.0511. Hence, it shows that only 5.11% of the total variation in total disclosure of Nigerian for listed non-financial firms. The value of F- statistics of 9.06 and the model is significant at 1% level. On the contribution of each variable, three variables made a significant contribution, namely; board composition, board size, and profitability. Meanwhile, Model 2 reports the result of regression analysis on the variables with interaction effects of profitability with corporate board size and board composition variables. The overall coefficient of determination Adjusted R^2 is 0.0678 with F-statistics of 3.12 and significant at 1% level.

The findings indicate that the agency theory predicts that firms with a higher number of board members encourage the management to disclose more information on CSR activities to attract more investors. Board composition with positive coefficient value of 0.8133 implies the composition of board members has strong positive impact in their diverse division of labour indicating an increase in the level of disclosure of social activities. Meanwhile, board composition is positive and significantly affects the disclosure of corporate social responsibilities. The social contract theory predicts that a firm having the presence of people with different professional backgrounds and experience as board members performs better in helping the management to disclose more information on CSR activities to attract more investors.

https://doi.org/10.24191/jeeir.v10i1.15490 ©UiTM Press, Universiti Teknologi MARA

4.2 Hypotheses

Hypothesis one (1): The main effects

H1: Corporate board size, board composition, have significant impact on Corporate Social Responsibility Disclosure.

The findings for Model 1 in Table 7 provide statistical evidence that indicate corporate board size (CBS) is positively related with corporate social responsibility disclosure (CSRD) at 1% significance level. The evidence also reveals that the connection between board composition (BC) and corporate social responsibility disclosure (CSRD) is positive and significant at 5%.

Hypothesis two (2): Moderating effect of profitability

H2: Profitability has significant effects on moderating the relationship between Corporate board size and corporate social responsibility disclosure

The findings for Model 2 indicate that Profitability had significant moderating effect on the relationship between CBS*PROF on CSRD with evidence in the beta value of 0.0073. This result suggests that the profitability strengthens the relationship between CBS and CSRD. Similarly, the result reveals that the profitability also strengthens the relationship between BC*PROF on CSRD with a beta value of 0.1193.

5. Conclusion

In summary, the focus of the study is the moderation of independent variables on the relationship between board characteristics and CSRD with profitability as moderator of firm financial performance of the listed non-financial institutions in Nigeria. In line with the objective, the study concludes that corporate board size constrains the CSRD of the listed non-financial institutions in Nigeria and is seen to have a positive association with the level of corporate social responsibility disclosure. The study finds that board size and board composition have a positive relationship with CSR disclosure in the Nigerian listed non-financial firms. These findings provide evidence to the society, investors, and regulators that larger boards are associated with the CSR disclosure in Nigerian listed non-financial performance. First, the appointment of independent directors on the board should be based on their reputation, accounting knowledge, standing in the society, etc. rather than emphasizing the proportion to the total number of directors on the board. In order to have proper monitoring by independent directors, the Securities and Exchange Commission of Nigeria (SEC) should also require additional disclosure of financial or personal ties between directors (or the organizations they work for) and the company or its CEO. By so doing, they will be more completely independent. Second, the Financial Reporting Council of Nigeria and SEC should make it mandatory for companies to give a detailed disclosure on CSRD. In addition, necessary steps should be taken for mandatory compliance with the code of CG in disclosing CSR activities of non-financial companies and the shareholders should also note that the number of directors that are knowledgeable in CSRD in the board has a great impact on the CSR disclosure. Third, to ensure that CSR theory and concepts can be established and provide a source of managerial guidance, attention should be given to the explication of the underlying assumptions that bound the theory, to the distinction between different definitions of its constructs and variables, and to the implications of the assumed interrelationships among them. Focusing on the boundaries of CSR, the comparative analysis might also be used to help interpret and discuss growing trends in the business and society field such as stakeholder management, corporate citizenship, triple-bottom-line accounting, and sustainability. On a final note, the study develops a CSRD checklist to measure the extent of CSR disclosure using the un-weighted disclosure index technique which implies equal

https://doi.org/10.24191/jeeir.v10i1.15490 ©UiTM Press, Universiti Teknologi MARA

importance of the selected information items. Thus, it does not intend to measure the quality of voluntary disclosure made by listed companies.

Acknowledgements

The authors would like to acknowledge the support of Department of Accounting, Federal University Dutsinma, katsina, Nigeria; and Faculty of Management science Technology Abubakar Tafawa Balewa University, Bauchi, Nigeria. For providing the supervisory facilities and financial support on this research.

Conflict of interest statement

1 The authors agree that this research was conducted in the absence of any self-benefits, commercial or
2 financial conflicts and declare the absence of conflicting interests with the funders.
3

References

Aiken, L. S. & West, S. G. (1991). *Multiple regressions: Testing and interpreting interactions*. Newbury Park, CA. SAGE.

Akanfe, S. K., Michael, S. O., & Bose, A. D. (2017). Determinant of corporate social responsibility disclosure in Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 7(7), 565-580. http://dx.doi.org/10.6007/IJARBSS/v7-i7/3122

Ali, M. A. M., & Attan, R. (2013). The relationship between corporate governance and corporate social responsibility disclosure: A case of Malaysian sustainability companies and global sustainability companies. *South East Asia Journal of Contemporary Business, Economics and Law*, 1(3), 39-48.

Al-Homaidi, E. A., Al-Matari, M. A., Tabash, M. I., Khaled, A. S., & Senan, N. A. M. (2021). the influence of corporate governance characteristics on profitability of Indian firms: An empirical investigation of firms listed on bombay stock exchange. *Investment Management and Financial Innovations*, 18(1), 114-125. http://dx.doi.org/10.21511/imfi.18(1).2021.10

Akinleye, G. T., Olarewaju, O. M., & Fajuyagbe, B. S. (2019). Corporate governance and financial performance: An empirical analysis of selected multinational firms in Nigeria. *Problems and perspectives in management*, 17(1), 11-18. http://dx.doi.org/10.21511/ppm.17(1).2019.02

Belal, A. R. (2000). Environmental reporting in developing countries: empirical evidence from Bangladesh. *Eco-management and Auditing Journal*, 7(3), 114-121. https://doi.org/10.1002/1099-0925(200009)7:3%3C114::AID-EMA131%3E3.0.CO;2-E

Bello, M. M. (2012). Corporate social responsibility disclosure and financial performance of quoted firms in downstream sector of the Nigerian petroleum industry. *Journal of Researches on Contemporary Accounting Issues.* 978-987.

Bouaziz, M. Z. (2014). Corporate governance and voluntary financial disclosure by Canadian listed firms. *Management review: An International Journal*, 9(1), 44-69.

 ©UiTM Press, Universiti Teknologi MARA

Brown, N., & Deegan, C. (1999). The public disclosure of environmental performance information: a dual test of Media Agenda Setting Theory and Legitimacy Theory. *Accounting and Business Research*, 29(1), 21-41. https://doi.org/10.1080/00014788.1998.9729564

Carroll, A. B., & Shabana, K. M. (2010). The business case for corporate social responsibility: A review of concept, research and practice. *International Journal of Management Review*, 12(1), 59-73. https://doi.org/10.1111/j.1468-2370.2009.00275.x

Dandago, K. I., & Muhammad, M. L. (2011). Corporate social responsibility (CSR) in Kano: A banking industry perspective. In K. I. Dandago, A. J. Tijjani (Eds.), *Journal Publication of the Department of Accounting, Bayero University Kano*, Adamu Joji Publishers, Kano, Nigeria.

Deegan, C. (2002). Introduction: The legitimizing effect of social and environmental disclosures as theoretical foundation. *Accounting, Auditing and Accountability Journal*, 13(3), 281-310. https://doi-org.ezaccess.library.uitm.edu.my/10.1108/09513570210435852

Duke II, J., & Kankpang, K. (2013). Implications of corporate social responsibility for the performance of Nigerian firms. *Advanced in Management & Applied Economics*, 3(5), 73-87.

Gray, R., Dey, C., Owen, D., Evans, R., & Zadek, S. (1997). Struggling with the praxis of social accounting: stakeholders, accountability, audits and procedures. *Accounting, Auditing and Accountability Journal*, 10(3), 325-364. https://doi-org.ezaccess.library.uitm.edu.my/10.1108/09513579710178106

Haji, A. A. (2013). Corporate social responsibility disclosure overtime: Evidence from Malaysia. *Managerial Auditing Journal,* 28(7), 647-676. https://doi-org.ezaccess.library.uitm.edu.my/10.1108/MAJ-07-2012-0729

Halil, E. (2016). Relationship between board characteristics and environmental disclosure: Evidence from Turkish listed companies. *South East European Journal of Economics and Business*, l1(2), 21-45. https://doi.org.10.1515/jeb-2016-0007

Haniffa, R. M., & Cooke, T. E. (2002). Culture, corporate governance and disclosure in Malaysian corporations. *A Journal of Accounting, Finance and Business Studies (ABACUS), 38*(3), 317-349.

Idowu, A. (2014). Corporate social responsibility in Nigerian banking industry: When will the lip-service games end?. *Journal of Economics and Sustainable Development*, 5(22), 21-26.

Jensen, M. C., & Meckling, W. H. (1976). Theory of Firm: Managerial Behaviour, Agency Costs and Ownership Structure. *Journal of financial Economics*, 3(4), 305-360.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological measurement*, 30. 607-610.405X(76)90026-X.

Lipton, M., & Lorsch, J. W. (1992). A modest proposal for improved corporate governance. *The Business Lawyer*, 48(1), 59-77. http://www.jstor.org/stable/40687360

Lu, J., Javeed, S. A., Latief, R., & Ong, T. S. (2021). The moderating role of corporate social responsibility in the association of internal corporate governance and profitability: Evidence from Pakistan. *International Journal of Environmental Research and Public Health*, 18(11), 1-22. https://doi.org/10.3390/ijerph18115830

Mohd, R. B. (2017). The effect of board characteristics on corporate social responsibility (CSR) disclosure. *Journal of Finance*, 2-25.

 ©UiTM Press, Universiti Teknologi MARA

Muhammad, S. (2015). Board characteristics and corporate social responsibility disclosure of listed food product firms in Nigeria. *Journal of Finance,* 1-87.

Naseem, M. A., Rehman, R. U., Ikram, A., & Malik, F. (2017). Impact of board characteristics on corporate social responsibility disclosure. *Journal of Applied Business Research*, 33(4), 801-810. https://doi.org/10.19030/jabr.v33i4.10001

Oluwatoyin, A. A., Agbi, S. A., & Mustapha, L.. O. (2021). board characteristics and sustainability reporting of listed non-financial firms in Nigeria. *Journal of Finance and Accounting*, 9(5), 182-189. http://www.sciencepublishinggroup.com/j/jfa doi: 10.11648/j.jfa.20210905.11

Said, R., Zainuddin, Y., & Haron, H. (2009). The relationship between corporate social responsibility disclosure and corporate governance characteristics in Malaysian public listed companies. *Social Responsibility Journal*, 5(2), 212-226. https://doi-org.ezaccess.library.uitm.edu.my/10.1108/17471110910964496

Uadiale, O. M., & Fagbemi, T. O. (2012). Corporate social responsibility and financial performance in developing economies: the Nigerian experience. journal of economics sustainable development, 3(4), 44-54.

Uwuigbe, U., & Egbide, B. C. (2012). Corporate social responsibility disclosure in Nigeria: A study of listed financial and non-financial firms. *Journal of Management Sustainability*, 2(1), 160-169. http://dx.doi.org/10.5539/jms.v2n1p160

Venanzi, D. (2012). *Financial performance measures and value creation: the state of the art*. Springer.

Wibowo,, A. J. (2012). Interaction between corporate social responsibility disclosure and profitability of Indonesian firms. *UMT 11th International Annual Symposium on Sustainability Science and Management*, 373-380.

Williams, R. J. (2003). Women on corporate boards of directors and their influence on corporate philanthropy. *Journal of Business Ethics*, 42(1), 1-10. https://doi.org/10.1023/A:1021626024014

Yahaya, O. A., & Apochi, J. (2021). Board of directors and corporate social responsibility reporting of quoted companies in Nigeria. *Journal of Accounting, Finance and Auditing Studies*, 7(2), 38-52. https://doi.org//10.32602/jafas.2021.011

Yekinni, C. O. (2008). Social and environmental reporting: how informative is the disclosure of community involvement cost-qualitative or quantitative. *Corporate Responsibility Research Conference*, Queens University. Belfast.

About the Authors

Shamsuddeen Yusuf Bugaje, (PhD in-view) in accounting, he is a lecturer II in the Department of Accounting at the Federal University Dutsinma, Katsina, Nigeria. His main research areas are corporate social responsibility disclosure and environmental accounting. He published on these subjects in publications such as the *Journal of Accounting Research*, He can be reached through his email yshamsuddeen@fudutsinma.edu.ng

Bala Sulaiman Dalhat, PhD is a Professor in the Department of Accounting and Finance at the Faculty of Management science Technology Abubakar Tafawa Balewa University, Bauchi, Nigeria. His main research activity is in the area of Finance and organizational management. He has published widely on these subjects in publications such as the *International Journal of HRM, Journal of Business Research, International*

 ©UiTM Press, Universiti Teknologi MARA

Journal of Information Management and Management Decision. He can be reached through his email at baladalhat03@gmail.com.

Mary Egbuna is a professional accountant in the Department of Accounting and Finance at the University Teaching Hospital, kano Nigeria. Her main research activity is in the area of Auditing in local based journals, she has contributed much in the area of Taxation in the institute of chartered Accountant of Nigeria. She can be reached through her email at megbuna30@gmail.com

Authors' contributions

Shamsudddeen Yusuf Bugaje carried out the research, wrote and revised the article. Mary Egbuna conceptualized the research idea and provided the Funding acquisition. Bala Sulaiman Dalhat designed the research, and supervised research progress and approved the article submission.

© 2022 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).