Corporate Governance Mechanisms and the Practice of Sustainability Activities in Nigeria

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Authors’ contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

ABSTRACT

The paper examined the determinants of sustainability practice (SP) in Nigerian. Two main dimensions of the factors influencing sustainability practice were investigated. First, company characteristics, proxied by firm size (FSIZE), dividend per share (DIPS), Tobin’s Q (TOBQ), type of industry (IDTY), and profit after tax margin (NPTM). Secondly, the board characteristics, proxied by disclosure of board roles and function (DBRF), chairman roles in the board (DCRB), board members appointment date (BADT), shareholders engagement policy (DISS), and board meetings with attendance records (DMBM). The content analysis approach was introduced to extracted relevant data from 270 annual reports of the sample companies between 2011 and 2020. The Global Initiative Reports GRI (G4) index was used to examine these annual reports. The panel regression result exerts that all of the elements of board characteristics are important determinants of SRP in Nigeria. This suggests that factors related to the identity of companies might influence the disclosure for SRP, particularly when the disclosure is voluntary. Whereas, the proxies of the company characteristics except for DIPS, TOBQ, and IDTY are not important factors, which might be linked with the voluntary nature of sustainability practice in Nigeria. The results further reveal a low level of disclosure. The low rating and disclosure indicated that listed Nigerian firms are still behind when it comes to disclosing and reporting sustainability activities in line with the GRI-G4 guidelines. Therefore, the study is empirically and theoretically relevant, as it might be in need of investigating the commitments and contributions of Nigerian companies and institutions towards a sustainable world by 2030.

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1. INTRODUCTION

The present condition of the world's environment and the effect of the industrial revolution on the ecology have led to consistent and persistent scrutiny of the operations, commitments, and performances of organizations. These and other similar issues necessitated the concept of sustainability reporting practice (SRP) or at times called sustainable development. Sustainable development is an advancement in the productions, technologies, societies and environments. One of the fundamental goals of sustainable development is the protection and development of the environment and its surroundings by the present generations and paving ways for the future generations to accomplish their goals and objectives in line with the current trend of the industrial revolution [1].

This definition emphasizes particularly the current state of less developed and developing countries in Africa and Asia in particular, the globe in general.

The expectations from the businesses to disclose their organizational impact into the public domain through Sustainability Reporting (SR) cannot be overemphasised. It has been internationally recognized that SR leads to improvement in business performance via communicating internal information with stakeholder groups like customers, suppliers, employees, financial institutions, regulators and communities for proper decision making [2,3]. It has been established that SR enhances transparency, accountability, and above all propel firms' performance. A firm's performance can be characterized as a firm's ability to create acceptable outcomes and actions.

However, a critical element of the SR debate is the question of how it relates to firm value and a firm's financial performance [1,4]. The traditional starting point in this debate is the notion that managers should only engage in activities that increase or maximize shareholder value [5]. Obviously, SR with positive Net Present Value (NPV) suit this goal and objective. Certainly, environmentalist argues that implementing clean technology and embarking on green production is cost-efficient. That is investments with positive NPV. Sustainable production saves costs, avoid fines and penalties, and allow firms to set higher prices in the marketplace.

Regardless of the expected returns on investment, shareholder's pressure may also push and encourage companies to embark on sustainable development practices (SRP). In some cases, shareholders put a non-monetary value on sustainable development just to comply with regulatory expectation and the UN requirements on vision 2030, which aims to provide a framework that guide organizations and institutions to work towards a sustainable world [6-8]. The resultant effect is that it may not necessarily maximize shareholders wealth, but it will certainly maximize shareholder welfare [8].

Furthermore, stakeholders other than investors such as societies, non-governmental organizations, environmentalists, government agencies, UN national assembly can shift the focus of organizations from the traditional system of operations and reporting practices to more robust and comprehensive methods of organizational activities and reporting practices; in line and conformity with the requirements of the latest GRI G4 [3]. In addition, managers may use SRP to pursue personal goals for their private benefit, in such cases, SRP may give rise to an agency problem [9].

Given the broad range of motives for SRP and the increasing concern for global environmental protection and development, SRP has become more and more important, to both developed and developing economies, sparking the interest of the literature [10]. Noticeably, an increasing number of empirical studies gauged factors influencing SRP [11-18] but, it is perhaps not surprising that they revealed mixed results. Meaning, there is no consensus on the specific determinants of SR. Therefore, it is against this backdrop and motivations that the researchers seek to provide empirical evidence and insight on the possible determinants of SRP in Nigeria.

The remainder of the paper is organized as follows: Section 2 provides and discusses relevant and related concepts and literature on sustainability reporting, firm’s characteristics, and firm’s financial performance. Reviews of prior literature and hypotheses development were also considered. Section three deals with the methodology. Section 4 summarizes the empirical findings. Lastly, section 5
concludes and recommends based on the key findings.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The disclosure of sustainability activities is generally associated with firms’ efforts towards effective corporate governance and ensuring the sustainability of firms through sound business practices that promote transparency. The disclosure of SRP demonstrates the responsiveness of a firm towards vision 2030. SRP consists of many environmental, social, economic, governance, and ethical issues. The reporting processes of SRP entails measurement and structured disclosure of firms' non-financial performance as per some guidelines followed globally, regionally, and/or country-specific. Thus, the quality, reliability, and determinant of SRP is clearly a research area.

Academic studies established that the size, age, and sector of an enterprise may explain its efforts towards SRP. This study considered such features as firm size, industry type, net profit margin, Tobin’s Q, dividend per share, as proxies of company characteristics and the influence of board characteristics such as disclosure of shareholders engagement process/policy, disclosure of board members appointment dates, disclosure of board meetings with attendance records.

Consequently, several company attributes were associated with the quality and quantity of SRP. Scholars revealed that firm size as one of the attributes of company characteristics indicated a positive and significant correlation on the quantity and quality of SRP [1,2,10]. The correlation may be linked with the greater public scrutiny of large firms, which arguably pushed them to engage in SRP [19,2,20]. Secondly, by the absolute advantage, big firms possess in disseminating information. Communication is relatively less costly for larger firms, even though implementation of clean technologies requires huge investment [21]. The industry type is another factor frequently associated with SRP. Anazonwu, et al. [17] reveal that the quality and quantity of SR activities vary across different industries. This finding suggests that SRP is more appealing when information asymmetry is high or when firms need to communicate with a larger set of shareholders.

Based on the main lines of research identified in the literature review, the study hypotheses that:

\[ H_{01}: \text{Companies characteristics influence Sustainability Reporting Practices (SRP) in Nigeria.} \]

Another stream of literature examines the association between SRP and board characteristics, such as shareholder engagement process/policy, board meetings with attendance records among others. A study by Dalla-Via, et al. [22] postulated that corporate government attributes are positively linked with the practice and disclosures of sustainability activities. In the same line of study, Mallin, et al. [23] affirmed that stakeholder’s orientation significantly influenced a firm’s commitments towards sustainable development orientation.

The significant positive correlation between company’s and board characteristics with SRP is not unique to corporate non-financial reporting. The same attributes may also influence firms’ financial disclosures (Leuz & Wysocki 2008). This revelation indicated that there is significant overlap in the drivers of non-financial reporting and traditional financial reporting practices. Babangida, [6] Abdulksam and Babangida, [1] Abdulrahman, et al. [2] Abdullahi and Auwal, [3] stated that firms’ size, industry type, board meetings and shareholders engagement are correlated with firms’ economic activities. Obviously, firms operating insensitive (polluting) industries tend to have higher levels of environmental protection and development [14].

Abdulksam, et al. [1] and Abdulrahman, et al. [2] for instance, revealed that oil and gas companies show higher compliance with the requirements of sustainable development. Similarly, Byrd & Cooperman [24] find that alcohol, tobacco, firearm firms, and other higher pollutant companies show greater commitments to SRP than firms in noncontroversial industries. Therefore, in line with the arguments and misconceptions identified in the literature review, the paper formulated the following research hypothesis:

\[ H_{02}: \text{Board characteristics influence Sustainability Reporting Practice (SRP) in Nigeria.} \]

Conceptually, there are arguments for both a positive, negative, and non-relation between the company and board characteristics and a firm’s
SRP [25]. Disclosure theories suggest that firms with better performers may have incentives to report their performance to stakeholders. Socio-political theories suggest that poor sustainability performers have an incentive to provide positive disclosures to address the threats to their legitimacy from the underlying poor sustainability performance. Furthermore, there is growing attention devoted to the effect of SRP on capital market behaviour [26,27]. There is also attention oriented toward the influence of SRP on consumers' behaviour. Additionally, there is attention directed to the contribution of improved quantity and quality of socio-environmental disclosure in reducing information asymmetries between investors, managers, and other stakeholders. Lastly, another attention was directed towards the implication of mandatory SR practices [3].

Consequently, significant scholarly articles on factors that propel the practice and disclosure of sustainability in Nigeria has been published [28,29,20] however, the emerging evidence about the determinants is ambiguous [25]. As such, there is a need for more empirical evidence on the subject matter.

3. THEORETICAL FRAMEWORK

Sustainable development motives are quite associated with legitimacy, standards, regulations and stakeholders. Stakeholder theory, for example, deals with the dynamic relationship that companies have with the entire environment, and the ability to strike a balance between contradictory stakeholders’ goals and objectives. The theory further emphasized that managers have blended responsibility, they are responsible to the owners and equally responsible to the diverse stakeholders. Freeman [5] complemented the notion by emphasizing the behaviour and activities of the directors which can affect the decision of internal and external stakeholders who have a stake in the business. Stakeholder theory provides insights into the motivating factors that thrive the practice and disclosure of sustainability. On the other end, the theory addresses the group of stakeholders deserving management’s attention. Unlike stakeholder theory, the legitimacy theory is generalized perceptions or assumptions that firms’ actions are desirable, proper, or appropriate within socially constructed norms, values, beliefs, and definitions. Institutional theory systematically integrates social and environmental laws and regulations with structures, including schemes, rules, and norms. Different components of the theory explain how these elements are created, diffused, adopted, and adapted [30-32]. In relation to sustainability reporting, legitimacy theory is seen as a means through which organisations in the pursuit of organizational goals and objectives, make an effort that influences society by meeting their preference demands. The theory presumes that a firm does not have an automatic right to the world's resources but is subject to approval by society. Campbell, et al. [33] concludes that legitimacy theory is one of the very few theoretical perspectives for explaining patterns of sustainability disclosure that can be empirically tested, the other theories mostly act as descriptive frameworks. Therefore, the theory can support and serve as a base for this study.

4. RESEARCH METHODOLOGY

The study is two-fold, first, it compared and contrasts the quality, quantity, and disclosure of sustainability reporting amongst companies. Secondly, it gauged the influence of company and Board characteristics on SRP in Nigeria. The paper focused on the selected sample consisting of twenty-seven (27) listed companies in the Nigerian Stock Exchange for Ten years spanning from 2011 – 2020, with a total of 270 observations. The data were collected from annual accounts and reports of the sample companies. The sample includes sixteen (16) consumer goods companies with a total of 160 observations, five (5) conglomerate companies with a total of 50 observations, four (4) natural resource companies with a total of 40 observations, and two (2) construction companies with a total of 20 observation. The paper focuses on these industries because of their relatively high expenditures on sustainability activities and exposure which may have a material impact on firm value and investor returns.

A longitudinal research design was adopted. This is because a longitudinal research design involves repeated observations of the same units over some time. The use of longitudinal research design in this research is based on the fact that the data is subject to time and cross-sectional attributes. Secondly, it minimizes the bias that might result from the aggregation of individual units into broad aggregates. Thirdly, it helps to take care of heterogeneity in the estimation process, because it allows for individual-specific variable assessment.
The study adapted panel regression models to test the formulated hypotheses. The basic models are presented as follows:

\[ SRP_{it} = \beta_0 + \beta_1 FSIZE_{it} + \beta_2 IDTY_{it} + \beta_3 NPTM_{it} + \beta_4 TOBQ_{it} + \beta_5 DIPS_{it} + \varepsilon \ldots \ldots \ldots (1) \]

\[ SRP_{it} = \beta_0 + \beta_1 DBRF_{it} + \beta_2 DCRB_{it} + \beta_3 DMBM_{it} + \beta_4 BADT_{it} + \beta_5 DISS_{it} + \varepsilon \ldots \ldots \ldots (2) \]

\[ SRP_{it} = \beta_0 + \beta_1 FSIZE_{it} + \beta_2 IDTY_{it} + \beta_3 NPTM_{it} + \beta_4 TOBQ_{it} + \beta_5 DIPS_{it} + \beta_6 DBRF_{it} + \beta_7 DCRB_{it} + \beta_8 DMBM_{it} + \beta_9 BADT_{it} + \beta_{10} DISS_{it} + \varepsilon \ldots \ldots \ldots \ldots (3) \]

Where \( SRP_{it} \) is a dependent variable (sustainability reporting practice) measured by three groups of indicators [34]. The social group of indicators (SOS), Governance group of indicators (GOV), and Environmental group of indicators (ENV). \( \beta_0 \) is the constant and \( \beta_{1-10} \) is the slope of the independent variables. The independent variables are the company characteristics and Board characteristics. The company characteristics are proxied by Firms-size [1] Type of Industry [35], profit after tax margin [6] Tobin’s Q [36] and Dividend per share [37]. Board characteristics are measured by the disclosure of board roles and functions (DBRF), disclosure of chairman’s roles in the board (DCRB), disclosure of board meetings with attendance records (DMBM), disclosure of board members appointment date (BADT), and disclosure of shareholders engagement policy (DISS). \( \varepsilon \) is the random error. \( t \) stands for the firms and \( t \) stands for the period.

4.2 Descriptive Analysis

Table 2. presents the descriptive analysis of the variables under investigation. The mean, standard deviation, minimum and maximum values have been provided.

As shown in Table 2, the result of the descriptive analysis shows that the average SRP score for Nigerian listed firms stood at 0.431888 with a minimum of 0.097561 and a maximum of 0.853686. This statistic indicated that only 43.2% out of the total sample firms properly disclose sustainability information in line with the GRI-G4 index. This low rating and disclosure indicated that listed Nigerian firms are still behind when it comes to disclosing and reporting sustainability activities. This finding is in line with the previous empirical studies in the context of Nigeria [1]. With respect to the independent variables, DIPS has the highest mean value of 1.80 with a minimum score of 0 and a maximum of 68.2. This indicated that Nigerian firms disclose dividend per share more than any other proxy of independent variables, the finding is in line with the scholarly literature and stakeholder and agency theories that prioritized shareholders. Then, followed by FSIZE with a mean value of 1.56 and a minimum score of 0.06 and a maximum score of 13.21.

The disclosure of DCRB has the lowest disclosure among the firms. This indicated that most of the sample firms concentrated on the disclosure of the firm’s characteristics and roles within their reports that ultimately lead to better performance. This finding is in line with the previous empirical studies [6, 17,38]. The negative mean score value of -32.16 for NPTM shows that it is not a significant factor in explaining the quality and quantity of SRP in the company’s annual accounts. Therefore, the descriptive analysis on the determinants of disclosure of sustainability information seems to support legitimacy theory [15].

4.3 Correlation Analysis of Company’s Characteristics

Table 3. shows the correlation results of firm’s size, Tobin’s-Q, dividend per share, profit after tax margin, and industry type.

As shown in Table 3., the result shows that the correlation between SRP and DIPS stood at 0.2004, which indicated a positive but weakly correlation. Suggesting that more engagement
on SRP is related to higher DIPS to some extent. Similarly, SRP is partially correlated with the TOBQ and IDTY at 0.1051 and 0.2038 respectively. Whereas, there is no correlation between SRP and NPTM and FSIZE. These findings suggested that an increase in NPTM and FSIZE does not correlate with the higher engagement of SRP by the sample Nigerian firms. This is true because proxies of a company’s characteristics in relation to non-financial performance can equally proxy a company’s financial performance.

4.4 Regression Analysis of company’s Characteristics

Table 4. presents the extent to which company characteristics, one of the independent variables influence SRP of the Nigerian listed firms.

Wald chi2 for model one is 65.67, indicating significance at 1% level, showing that our model is adequate and correctly specified. The coefficient of determination $R^2$ is 0.1%, showing that 10% of the factors that affect the study variables are explained jointly in the model. This result signified that company characteristics alone cannot explain a firm's commitments to SRP.

DIPS with a coefficient value of 0.0046 shows a significant positive influence on SRP at 1% level; Showing that a change in a company characteristic through dividend per share will cause (0.46%) increase in SRP. Tobin's Q coefficient (0.00024) has a significant positive influence on SRP at 5% level. The result implies that a 1% change in TOBQ, will bring about 0.024% increase in SRP. Specifically, IDTY exerts a significant positive influence on SRP at 1% level. Showing that a unit change in industry type brings about 17.2% influence on SRP of the sample firms. Whereas, NPTM and FSIZE have no significant influence on a firm’s SRP.

A significant test statistic below 5% from serial correlation indicates the presence of serial correlation. But our findings from Table 1 revealed otherwise, so we accept the null hypothesis of no first-order autocorrelation problem. Both White's and VIF tests revealed the absence of multicollinearity and heteroskedasticity problems in the model. Ramsey RESET revealed no misspecification error in the model. So is right to say our model is appropriate for prediction.

4.5 Correlation Analysis of Board Characteristics

The correlation analysis of the proxies of the Board characteristics such as disclosure of board roles and functions, disclosure of chairman’s roles in the board, disclosure of board meetings with attendance records, disclosure of board members appointment dates, and disclosure of shareholders engagement policy is depicted in Table 5.

Table 5. depicts the correlation matrix for the predictors and outcome variables to test for multicollinearity. The correlation values are not high, suggesting that multicollinearity is not a major issue. The result shows that the correlation between SRP and DBRF is 0.6273, which indicated a positive correlation. This implies that more engagement on SRP is strongly related to higher DBRF. Similarly, SRP is strongly correlated with DMBM and BADT at 0.6948 and 0.7256. Whereas, the correlation between SRP and the DCRB and the DISS is 0.2128 and 0.4179. indicating that there is a relatively weak correlation.

| Variables | Obs | W    | Z    | Prob>z |
|-----------|-----|------|------|--------|
| SRP       | 270 | 0.97726 | 3.468 | 0.00026 |
| DBRF      | 269 | 0.98556 | -2.981 | 0.00357 |
| DCRB      | 269 | 0.94857 | 5.365 | 0.00000 |
| DMBM      | 269 | 0.98918 | 1.725 | 0.04230 |
| BADT      | 269 | 0.99967 | -6.418 | 1.00000 |
| DISS      | 269 | 0.98122 | 3.012 | 0.00130 |
| DIPS      | 270 | 0.26022 | 11.600 | 0.00000 |
| TOBQ      | 270 | 0.08595 | 12.094 | 0.00000 |
| NPTM      | 270 | 0.15115 | 11.921 | 0.00000 |
| FSIZE     | 270 | 0.75855 | 8.985 | 0.00000 |
| IDTY      | 270 | 0.94138 | 5.679 | 0.00000 |

Source: Researchers’ Computation, (2021).
Table 2. Descriptive statistics

| Var. | Obs. | Mean | Std. Dev. | Min | Max. |
|------|------|------|-----------|-----|------|
| DBRF | 269  | 0.610| 0.489     | 0   | 1    |
| DCRB | 269  | 0.115| 0.320     | 0   | 1    |
| DMBM | 269  | 0.751| 0.433     | 0   | 1    |
| BADT | 269  | 0.550| 0.498     | 0   | 1    |
| DISS | 269  | 0.223| 0.417     | 0   | 1    |
| DIPS | 270  | 1.780| 7.282     | 0   | 68.197|
| TOBQ | 270  | 10.000| 81.450   | 0.310| 1004.987|
| NPTM | 270  | -32.161| 627.658 | -5376.709| 6946.536|
| FSIZE| 270  | 1.565| 1.760     | 0.064| 13.211|
| IDTY | 270  | 0.370| 0.211     | 0.100| 0.900|
| SRP  | 270  | 0.432| 0.163     | 0.098| 0.859|

Source: Researchers Computation, (2021).

Table 3. Correlation results of company’s characteristic

|       | SRP  | DIPS | TOBQ | NPTM | FSIZE | IDTY |
|-------|------|------|------|------|-------|------|
| SRP   | 1.0000|      |      |      |       |      |
| DIPS  | 0.2040| 1.0000|      |      |       |      |
| TOBQ  | 0.1051| -0.0144| 1.0000|      |       |      |
| NPTM  | 0.0640| 0.0176| 0.0063| 1.0000|      |      |
| FSIZE | 0.0467| 0.2902| 0.0412| -0.0155| 1.0000|      |
| IDTY  | 0.2038| -0.0414| -0.0700| 0.0412| -0.1559| 1.0000|

Source: Researcher’s Computation, (2021).

Table 4. Regression result for company’s characteristics

| Dependent Variable: SRP | Independent Variables | Coef. | Std. Err | p>|t|/ |
|-------------------------|-----------------------|-------|----------|------|
|                         | DIPS                  | 0.0046| 0.0014   | 0.001***|
|                         | TOBQ                  | 0.0003| 0.0001   | 0.037**|
|                         | NPTM                  | 0.0001| 0.0001   | 0.385 |
|                         | FSIZE                 | 0.0016| 0.0057   | 0.28  |
|                         | IDTY                  | 0.1716| 0.0459   | 0.000***|
|                         | R²                    | 10%   |          |       |
|                         | Wald chi²             | 65.67***|        |       |
|                         | (LM) Breusch-pagan Test| 49.23 (0.000)|   |       |
| Diagnostic Tests        | Autocorrelation (Wooldridge Test) | (0.2871)|       |       |
|                         | Multicollinearity Test (VIF Mean) | (1.05) |       |       |
|                         | Heteroskedasticity (White’s Test) | (0.1415) |   |       |
|                         | Ramsey RESET          | (0.2517) |       |       |

Source: Author’s computation (2021), using STATA version 14 Software. ***, ** and * denotes level of significance at 1%, 5% and 10% respectively. Values in the parentheses are P-values.

Table 5. Correlation result of board characteristics

|       | SRP  | DBRF | DCRB | DMBM | BADT | DISS |
|-------|------|------|------|------|------|------|
| SRP   | 1.0000|      |      |      |      |      |
| DBRF  | 0.6273| 1.0000|      |      |      |      |
| DCRB  | 0.2128| 0.0501| 1.0000|      |      |      |
| DMBM  | 0.6948| 0.4202| 0.0194| 1.0000|      |      |
| BADT  | 0.7256| 0.6245| 0.0455| 0.6197| 1.0000|      |
| DISS  | 0.4179| 0.3738| 0.0863| 0.2879| 0.4486| 1.0000|

Source: Researcher’s Computation, (2021).
4.6 Regression Analysis of Board Characteristics

Table 6. presents the extent to which the Board characteristics influences sustainability reporting practice (SRP).

The F-statistics for the model is 28.44, indicating significance at 1%, suggesting that our model is adequate. The coefficient of determination $R^2$ is 0.60, showing that 60% of the factors that affect the variables are explained jointly by the dependent variable (SRP) and the independent variables combined in the model. Hence, 28% is explained by variables outside the model or is captured by the error term. The results are based on the pooled sample of 270 observations.

Specifically, the DCRB as Board characteristic shows a significant positive influence on SRP at 1% level. A unit change in disclosure of chairman roles in the board will lead to an 8.9% increase in SRP all things being equal. DBRF also shows a significant positive influence on SRP at 1% level. Indicating that a 1% increase in DBRF will bring about 8.3% increase in SRP. The coefficient value of DMBM is positive as predicted and significant at 1% level. It shows that a single-digit increase in DMBM will bring about 14.6% increase in SRP of the sample companies. Similarly, BADT reveals a significant positive influence on SRP of the sample companies at 1% level. Showing that disclosure of board members appointment dates bring about 10% influence on SRP. As shown in Table 6 DISS shows a significant positive coefficient value of 10%. Suggesting that a change in DISS will bring about 2.6% increase in SRP by the sample Nigerian firms.

Furthermore, the result of serial correlation is also presented in Table 6. A significant test statistic below 5% from serial correlation indicates the presence of serial correlation. But our findings in Table 1.1 revealed otherwise, so we accept the null hypothesis of no first-order autocorrelation problem. Both White's and VIF tests revealed the absence of multicollinearity and heteroskedasticity problems in the model. Ramsey RESET revealed no misspecification error in the model. So is right to say the model is appropriate for prediction.

5. DISCUSSION OF FINDINGS

The regression results indicated that dividend per share, Tobin's-Q, and industry type exert a significant influence on the SRP of listed companies in the Nigerian Stock Exchange. Thus, hypothesis one hold that company characteristics influence Sustainability Reporting Practices (SRP) in Nigeria. This finding reveals that compliance with the requirements of sustainable development goals enhances SRP and boost market measures, validating legitimacy theory. The theory is generalized perceptions or assumptions that firms’ actions

Table 6. Regression result for board characteristics

| Dependent Variable: SRP                      | Coef.   | Std. Err. | p>|t| |
|---------------------------------------------|---------|-----------|----|
| DBRF                                        | 0.082884| 0.0145648 | 0.000*** |
| DCRB                                        | 0.088795| 0.0172633 | 0.000*** |
| DMBM                                        | 0.145526| 0.0162004 | 0.000*** |
| BADT                                        | 0.096130| 0.0169266 | 0.078** |
| DISS                                        | 0.026441| 0.0149291 | 0.000*** |
| $R^2$                                       | 60%     |           |    |
| F-Statistics                                | 28.44***|

 Diagnostic Tests

- Autocorrelation (Wooldridge Test) (0.2419)
- Multicollinearity Test (VIF Mean) (1.59)
- Heteroskedasticity (White's Test) (0.1118)
- Ramsey RESET (0.1135)

Source: Author's computation (2021), using STATA version 14 Software. *, **, and *** denotes level of significance at 1%, 5% and 10% respectively. Values in the parentheses are P-values.
are desirable, proper, or appropriate within socially constructed norms, values, beliefs, and definitions. Certainly, organizations systematically integrate sustainability guidelines with structures, including schemes, rules, and norms. This is consistent and in line with the findings of Abdulrahaman, et al. [1] Braam, et al.[26].

Furthermore, the findings are in line with the findings of Abdulsalam and Babangida [1] which revealed that big size firms received higher pressure from media, policymakers, and other stakeholders. But contradicted Uwuigbe (2011), who argues that there is no relationship between the size of the firm and social and environmental reporting.

Secondly, it was funded that the “second hypothesis” Board characteristics do influence SRP in Nigeria. Specifically, disclosure of board roles and functions, chairman roles in the board, board meetings, the appointment of board members, and disclosure of shareholders engagement policy exerts a significant positive influence on SRP of listed firms in Nigeria. This indicated that firms with good corporate governance shows high commitments to SRP and achieve the best in terms of growth. This is consistent with the arguments proposed by Lu and Abeysekara [39] Muttakin and Khan [40]. Legitimacy theory in support of the conclusions postulated that controversial companies (high pollutant companies) voluntarily show greater SRP to change the negative societal perception towards them. These also confirmed the findings of Amacha and Dastane [41] and Diantimala, [42] but contradicted Ioannou and Serafeim [43].

Lastly, the descriptive result revealed a low level of SRP by the sample firms. This indicated that listed Nigerian firms are still behind when it comes to SRP in line and conformity with the requirements of vision 2030, NESREA Act, NOSDRA Act and GRI-G4 guidelines. This conforms with the previous empirical studies in the context of Nigeria [1,44-46] The finding is also plausible because there are no commonly acceptable indices for measuring, treatment, disclosure, and reporting sustainability activities in Nigeria.

6. CONCLUSIONS

Based on the empirical evidence, the study, therefore, concluded that the greater the SRP the higher the growth of firm’s wealth, environmental protection and social development. This is consistent with the extant literature and theories on sustainability reporting practice.

7. RECOMMENDATIONS

Based on the findings of this study, the following recommendations were made. Measuring, treatment, disclosure, and reporting of sustainability activities need to be standardized and legalized in Nigeria. Implying that, there is a need to complement voluntary SRP with mandatory requirements for sustainable development in combination with strong enforcement mechanisms to urge companies to become more accountable and transparent in terms of SRP. This will not only encourage and mandate Nigerian firms to work towards a sustainable world by 2030, but will also enhance the firm’s competitiveness and subsequently lead to high corporate financial performance.

POLICY IMPLICATION

The policy implication of these findings is that sustainability reporting practice to be mandatory with legislative backing in Nigeria. Thus, it is not only important for the Nigerian firms to give due importance to SRP, but also important for the policymakers to develop policies relating to sustainability reporting. It will also be of significance to academicians as well as practitioners in developing a broad understanding of the determinant of corporate sustainability reporting.

SUGGESTION FOR FURTHER STUDIES

Future researchers should extend the scope and study period to observe whether significant influence might occur over time.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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