

Determinants of Corporate Sustainability Reporting Of Listed Non-Financial Services Firms In Nigeria

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ABSTRACT:- This paper investigated the determinants of sustainability reporting of non-financial services companies in Nigeria. Ex-post factor was used as the research design. A total population of seventy Five (75) non-financial services companies was used out of which Forty Six (46) companies were employed using filter as the sampling technique for the study. Data was obtained from the financial statements of the listed companies based on extraction as the method of data collection for the duration of ten (10) years ranging from 2014 to 2023. To analyze the data, multiple regression was utilized as the estimation technique for the study. The findings revealed that environmental sustainability committee and firm leverage have statistical significant impact on corporate sustainability reporting of non-financial companies in Nigeria. It is thus, necessary and desirable that the management of the non-financial services companies in Nigeria should embrace the establishment of an independent environmental sustainability committee. This can be achieved through the involvement of more independent directors in the committee with requisite technical and professional expertise. In addition, such members of the committee should be committed to having reasonable proportion of meeting attendance. If effectively put in place, such firms are likely to have quality and reliable sustainability reporting.

Keywords:- Sustainability Reporting, Board Independence, Board Diversity, Sustainability Committee, Non-Financial Firms.

I. INTRODUCTION

From the global context, sustainability reporting has become a very serious issue amongst different corporate stakeholders in both advanced and developing countries (Awen & Yahaya, 2024). These comprises of such stakeholders as existing shareholders, potential investors, management, regulatory agencies, standard setting bodies, the immediate societies, governmental and non-governmental organizations amongst others. The relevance of such sustainability reporting information to the various users cannot be underestimated. One of the prominent advantages of the sustainability reporting is its relevance in serving as a guidance for investment decisions (Mohammed et al., 2024).

The term sustainability reporting therefore, can be posited as the revelation of corporate quantitative and qualitative financial information for the decision making of various interested parties (Benjamin & Yahaya, 2024). It is the method of making available fact about the entity's economic operations such as financial position, income statement, and even non-financial information like information on the influence of business activities on the immediate community and the operating ecosystem (Olurunfemi et al., 2024). In Nigeria, corporate entities have been placing serious concern on sustainability reporting mainly to achieve different stakeholders' expectations such as profit maximization, jobs creation, customers' satisfaction, compliance with legal and regulatory frameworks amongst others (Lefley et al., 2024). To effectively achieve the aforementioned expectations, this study employed board independence, gender diversity, environmental sustainability committee, firm size, and firm leverage as the determinants of corporate sustainability reporting of listed non-financial services firms in Nigeria.

The non-financial services companies in Nigeria is a conglomeration of different economic sub-sectors like the consumer goods firms, industrial goods firms, petroleum marketing companies, healthcare or pharmaceutical firms, the natural resources firms, and the agro-allied companies amongst others. The aforementioned companies played a very crucial role to the growth and development of the Nigerian economy especially in terms of their impact on the gross domestic product. Specifically, the non-oil sector which comprises of these companies contributed about 93.79% of the nation's Gross Domestic Product in Q1 2023 [National Bureau of Statistics (NBS), 2025]. Hence, an investigation of the determinants of corporate sustainability reporting of Non-financial services companies in Nigeria is worthwhile to justify the contributions of the sector to the development of the Nigerian economy.

From the empirical point of view, different scholars such as Lefley et al. (2024), Mohammed et al. (2024), Saifi et al. (2024), Olurunfemi et al. (2024), Benjamin and Yahaya (2023), had attempted to employ different variables as predictors of sustainability reporting. While studies like Bala et al. (2023), Githaiga and Kosgei (2023), Orazalin et al. (2023), Okerekeoti and Emeneka (2022), had employed board attributes such as board independence, board size, board gender, board expertise, board nationality, and board meeting as independent variables, the empirical work of Lefley et al. (2024), Skadden (2022), Olorede et al. (2022), Boshnak (2022), Bananuka et al. (2022), Olayinka (2022), used firm specific attributes as the predictors of sustainability reporting. However, the aforementioned studies have been grossly inadequate especially in using the combination of the aforementioned predictors as independent variables in explaining the sustainability reporting of the listed firms. Against the foregoing backdrops in literature, this study attempted to fill the voids in the extant literature by employing both the board mechanisms and the firm-specific attributes in order to examine their combined effect on sustainability reporting. Therefore, this study considers it necessary to investigate the determinants of sustainability reporting of non-financial services companies in Nigeria.

Based on the aforementioned issues, it is highly imperative to ask the research questions as follows: What are the determinants of sustainability reporting of non-financial services companies in Nigeria? Specifically, the following research questions are formulated:

- (i) What is the effect of board independence on sustainability reporting of Non-financial services companies in Nigeria?
- (ii) Does board gender diversity affect sustainability reporting of Non-financial services companies in Nigeria?
- (iii) To what extent environmental sustainability committee affect sustainability reporting of Non-financial services companies in Nigeria?
- (iv) What is the effect of firm size on sustainability reporting of Non-financial services companies in Nigeria?
- (v) Does firm leverage affect sustainability reporting of Non-financial services companies in Nigeria?

Consistent with the foregoing, the main aim of this paper is to investigate the determinants of sustainability reporting of Non-financial services companies in Nigeria. The specific aims are to:

- (i) Analyze the effect of board independence on sustainability reporting of Non-financial services companies in Nigeria;
- (ii) Investigate the effect of board gender diversity on sustainability reporting of Non-financial services companies in Nigeria;
- (iii) Find out the effect of environmental sustainability committee on sustainability reporting of Non-financial services companies in Nigeria;
- (iv) Analyze the effect of firm size on sustainability reporting of Non-financial services companies in Nigeria;
- (v) Ascertain the effect of firm leverage on sustainability reporting of Non-financial services companies in Nigeria.

In line with the research objectives, the following hypotheses were formulated:

H₀₁: Board independence does not affect sustainability reporting of Non-financial services companies in Nigeria;

H₀₂: Board gender diversity does not affect sustainability reporting of Non-financial services companies in Nigeria;

H₀₃: Environmental sustainability committee does not affect sustainability reporting of Non-financial services companies in Nigeria;

H₀₄: Firm size does not affect sustainability reporting of Non-financial services companies in Nigeria;

H₀₅: Firm leverage does not affect sustainability reporting of Non-financial services companies in Nigeria.

In terms of its relevance, the management and boards of non-financial services companies in Nigeria can immensely benefit from the outcomes of this research work. By providing a high quality sustainability reports, the management and the boards of the quoted companies can evaluate the impact of their corporate strategic decisions especially with regards to sustainability reporting in order to analyze any progress achieved so far, and the challenges encountered (if any). Hence, assist in providing avenue for preparing a high quality, relevant, and reliable sustainability information for a different users like potential investors, existing shareholders, regulators, standard-setters, and governmental agencies amongst others.

II. LITERATURE REVIEW

Sustainability Reporting

Sustainability disclosure is the process of disseminating data regarding a corporation's sustainability performance (Mohammed et al., 2024; Burhan et al., 2012). It is a voluntary report that complements traditional financial reports and includes information on sustainability, corporate social responsibility (CSR), ethical and environmental matters (Olurunfemi et al., 2024). Sustainability disclosure is the system in which corporate interested parties are provided with sustainability updates in respect of the entity's sustainability disclosure (Giner & Luque-Vilchez, 2022; Elaigwu et al., 2020). Sustainability reporting is concerned about gathering and

reporting various non-financial information and firm performance in regards to the sustainable development goal, it encompasses capturing risk assessment, portfolio design, securities selection, and investment analysis with social, environmental, and governance parameters (Olurunfemi et al., 2024).

Board Independence

Board Independence is the idea that the executive team of a business should predominantly consist of non-executive directors. As members of a board who are not materially connected to the company, independent directors are able to make independent decisions and speak for the interests of shareholders. The capacity of boards to minimize agency conflicts, maintain sound corporate governance, and offer objective counsel and viewpoints makes them essential (Skadden, 2022). Independent directors are crucial because they actively participate in succession planning, offer objective advice and judgment on issues like financial matters, approach, execution, mitigation of risks, and crucial appointments, and defend the expectations of each stakeholder (Ramasubramanian, 2024).

Board Gender Diversity

Board gender diversity emphasizes the inclusion of females in corporate governance, which is increasingly recognized as a strategy to improve board effectiveness and organizational efficiency. Various countries, including those in the European Union, have implemented gender quotas, mandating a lowest membership of female on boards to achieve a "critical mass" that fosters collective action and independent voices among female directors (Lefley et al., 2024). Research indicates that gender-diverse boards can lead to improved financial outcomes, as evidenced by studies showing that female directors positively influence shareholder wealth in Nigeria (Salawudeen & Isa, 2021).

Environmental Sustainability Committee

Benjamin and Yahaya (2023) perceived environmental sustainability as the activities carried out by corporate entities to gain financial performance devoid of hindering their capability for long range growth bearing in mind the interior and exterior resources. Furthermore, Okerekeoti and Emeneka (2022) asserted that the environmental sustainability committee deals with the minimization of the effect of corporate entity's activity on the ecosystem (land, air and water) and the natural setting (living and non-living). As contended by Almaliki (2020), the environmental sustainability committee deals with the reporting of how the environment influences the economic performance disclosure in respect of expenses and gains. It is an instrument to assess and disclose information concerning ecological performance of corporate entities with ecosystem impacts to the stakeholders and community in a way that enhances monitoring and appraisal of their ecosystem activities (Awen & Yahaya, 2024; Orazalin et al., 2023; Fuadah et al., 2021).

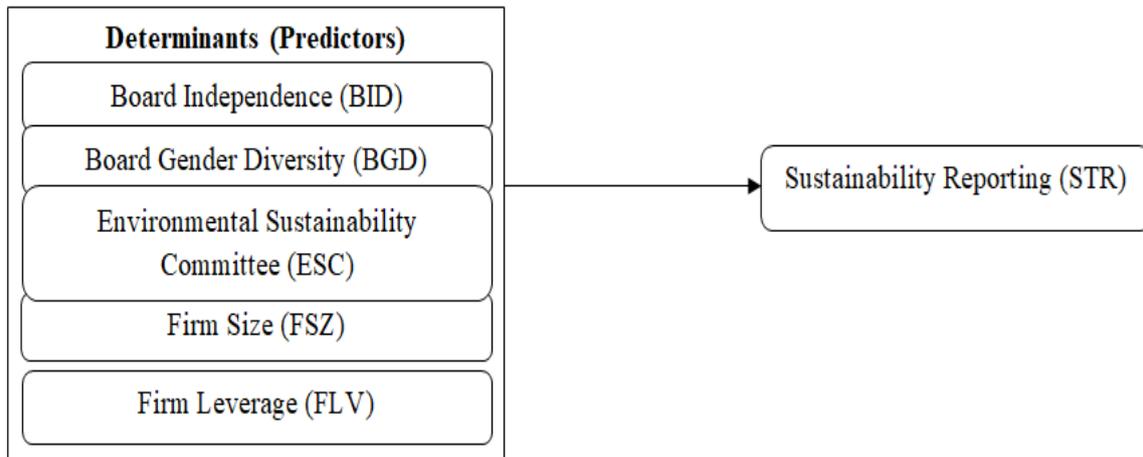
Company Size

The concept of firm size is multifaceted, influencing various aspects of business dynamics and performance. Larger firms are predisposed to a more significant effect on future firm births, as their deaths can stimulate new business creation, primarily due to their resource availability and market demand effects (Olurunfemi et al., 2024). Overall, firm size serves as a critical determinant in understanding firm performance and strategic decision-making across various contexts (Saifi et al., 2024).

Company Leverage

Corporate gearing is the use of debt financing to improve a company's capital structure, which has a big impact on its risk profile and financial performance. These dynamics change depending on the legal and economic situation in different countries (Awen & Yahaya, 2024). Corporate borrowings, encompassing loans and debt securities, are strategically employed to address capital needs and promote growth, although they also introduce risks that necessitate careful management (Saifi et al., 2024). Empirical studies indicate that firms with high leverage may deter specialized investments from suppliers and customers, as stakeholders often prefer to engage with less leveraged firms to mitigate risks associated with debt overhang (Orazalin et al., 2023). Overall, understanding corporate leverage is crucial for effective financial decision-making, particularly in the face of evolving market conditions and corporate governance structures (Olayinka, 2022).

Figure 1: Conceptual Framework of the Study



III. REVIEW OF EMPIRICAL STUDIES

Board Independence and Sustainability Reporting

Mohammed et al. (2024) examined how board commitment affected the sustainability reporting and board characteristics of Nigerian companies that were listed between 2013 and 2022. Sustainability reporting is considerably and favorably impacted by board independence, according to multiple regression analysis. Despite the effort of the researcher to examine how board commitment affects sustainability reporting using some variables such as board independence but he failed to include board nationality which my study identifies as a gap to fill.

Razak et al. (2023) investigated how corporate board characteristics affected Nigerian listed companies' sustainability disclosure. The study utilized information from the financial statements of the firms based on ex post facto. The analysis employed a sample of 51 companies and spanned the years 2011–2020. It was found that board independence has a minor but favorable effect on businesses' sustainability reporting. However, the findings of this study might have been taken over by event considering the period gap of 3 years. Hence this study has bridged the gap by extending the study period from 2015 to 2024.

Githaiga and Kosgei (2023) looked into how board characteristics influenced sustainability disclosure in East African traded firms. The study analyzed a sample of 79 quoted companies from East African stock markets and data from 2011 to 2020. The findings demonstrated a significant and strong connection between board independence and sustainability reporting. However, there may be substantial differences between the Nigerian corporate governance legislation and other environmental rules, such as the corporate governance that is in place in East Africa.

Board Gender Diversity and Sustainability Reporting

Mohammed et al. (2024) examined how board commitment affected the sustainability reporting and board characteristics of Nigerian companies that were listed between 2013 and 2022. Board gender has a favorable but negligible effect on listed companies' sustainability reporting, according to multiple regression analysis. Despite the effort of the researcher to examine how board commitment affects sustainability reporting using some variables such as board independence but he failed to include board nationality which my study identifies as a gap to fill.

Razak et al. (2023) examined the effect of corporate board composition on sustainability disclosure in Nigerian quoted firms. The study employed data from the financial statements of the quoted companies. The population was made up of 116 non-financial companies as of December 31, 2020. The analysis used a sample of 51 companies and spanned the years 2011–2020. The random effect regression results demonstrate that gender diversity on boards has a large and positive effect on sustainability reporting. Even though, the researcher's effort to analyze how corporate board attributes influence Nigeria listed firm from 2011 to 2020.

Furthermore, Olayinka (2022) studied how corporate governance influenced listed firms' sustainability disclosure. The study's population consisted of 169 companies that were listed on the Nigerian Stock Exchange (NSE). The research work was conducted for the duration of 2010-2019, based on a sample of 42 quoted companies. The findings showed that woman director has a major influence on sustainability disclosure in Nigeria.

Environmental Sustainability Committee and Sustainability Reporting

In this perspective, Benjamin and Yahaya (2024) explored the contribution of sustainability committee on triple bottom line accounting disclosure of 134 quoted firms in Nigeria for the duration of 15 years ranging from 2008 to 2022. Content analytics and ex-post facto were combined and used as the research designs for the study. Findings from the regression analysis indicated that risk committee membership in the environmental risk committee has no significant influence on triple bottom line accounting disclosure of quoted companies in Nigeria. Even though, the use of multivariate regression as the estimation technique appears to be archaic, too conventional and not in line with contemporary estimation techniques for a typical panel data.

More recently, Awen and Yahaya (2024) assessed the nexus between environmental sustainability committee attributes and sustainability accounting of 154 listed companies in the Nigerian Exchange for the duration of Ten (10) years (2014 to 2023). It was documented that risk committee establishment, autonomy, size, expertise, and meeting attendance have significant effect on sustainability reporting of companies in Nigeria. Nevertheless, the findings of the study seems to be suspicious as the data was interpreted using the multiple regression which may be associated with panel data issues like the problems of Heteroskedasticity, endogeneity among others. Hence, the result may no longer be reliable to draw inferences.

Firm Size and Sustainability Reporting

Faridul-Islam and Hossain (2022) conducted a study on eco-affecting reporting practices of publicly traded engineering companies in Bangladesh. Secondary sources of data were employed using annual financial reports and accounts of the listed companies. a self-constructed reporting index was used comprising of thirty-eight (38) disclosure indices. Findings from the study revealed that corporate visibility proxied by their total assets have a positive significant effect on the level of eco-affecting information disclosures of listed engineering companies in Bangladesh.

An empirical examination on determinants of corporate social and environmental voluntary disclosures in Saudi Arabian listed firms was conducted by Boshnak (2022). Secondary data was obtained from the annual financial reports of the non-financial firms listed in Saudi Arabia. The findings indicate that corporate visibility is a positive and significant determinant of corporate social and environmental voluntary disclosures of listed non-financial firms in Saudi-Arabia.

In the work of Bananuka et al. (2022), they examined the impact of gender diversity on sustainability performance disclosures using GRI standards compliance in Uganda. For the data analysis, Partial Least Square (PLS) Sequential Equation Modeling (SEM) was employed as the technique for testing the hypotheses of the study. Findings from the study revealed that corporate visibility have positive significant impact on sustainability performance disclosures of listed manufacturing firms in Uganda. Although, corporate governance structures in Uganda cannot be truly applicable in other economic settings like Nigeria.

Firm Leverage and Sustainability Reporting

In the work of Ikpor et al. (2022), they examined the drivers of sustainability accounting and reporting in emerging economies from the context of Nigeria. It was an ex-post facto design that employs data from the secondary sources mainly (the annual reports and accounts, sustainability reports and Websites). Samples size of top fifty (50) companies were obtained from the Nigerian Exchange Group (NGX) with filter as the sampling technique of the study. The study was carried out for the period of six (6) years spanning from 2015 to 2020. Findings from the regression result revealed that firm leverage has positive significant relationship with sustainability accounting and reporting by the listed companies in Nigeria.

In the research work of Olorede et al. (2022), they investigated institutional investors and sustainability reporting of quoted companies in Nigeria. Sample of fifty (50) listed companies were drawn from both financial and non-financial firms in the Nigerian Exchange Group (NGX) using filter as the sampling technique for the study. Secondary data was obtained from the financial reports and accounts of the listed companies. Panel Corrected Standard Error (PCSE) was employed as the post-estimation technique for data analysis in the study. The findings revealed that firm leverage has positive and significant correlation with sustainability reporting of quoted companies in Nigeria.

The study of Bello and Ogungbenle (2022) focused on the determinants of environmental disclosure in the financial report of listed companies in Nigeria. Historical data was employed from the annual financial statement of the listed manufacturing companies in Nigeria. Panel data regression was employed as the technique for data analysis in the study. The result shows that company leverage has positive significant effect on environmental disclosures of listed companies in Nigeria. Although, greater focus was placed on environmental accounting while the economic and social disclosure performance were not given any desired consideration.

Underpinning Theory

This theory was first pioneered by Freeman in 1984 to address morals and values in business management. The theory of stakeholders is seen as a viable explanation for corporate environmental accounting. It comprises identifying and acknowledging the relationship between an organization's actions and how those actions affect the stakeholders they serve. One of the main schools of thought in the study of social, environmental, and sustainable management is stakeholder theory. Scholars define stakeholders as individuals or groups that depend on a company to help them accomplish their goals and on which the company depends for survival, as well as individuals or groups who can impact or be impacted by decisions on the creation and exchange of value. Stakeholder theory facilitates an understanding of how stakeholders impact companies' decisions and how entities adapt to these changes.

Methodology

The ex-post factor design was used as the research design for this study. This is rooted from the research paradigm and approach employed in the study being positivism and quantitative respectively. The decision to use the earlier design was due to the availability of historical data extracted from the financial statements of the companies. This paper employed 75 Non-financial services companies of December 31, 2024. A sample of Forty-Six (46) companies were utilized based on filter sampling technique. In this research work, data was obtained from documentary sources based on annual financial reports of the companies. The study was conducted for the duration of Ten (10) years spanning between 2015 and 2024. For the essence of this work, multiple regression was utilized to analyze the research hypotheses. This method is chosen for its effectiveness in exploring the connections between two or more predictor variables and one or more outcome variables within a specific study period. The variables used in this study were measured with relevant sources from the extant literatures as contained in table 1 as follows:

Table 1: Variables Measurements and Sources

Variables	Type	Acronym	Measurements	Sources	Priori Sign
Sustainability Reporting	Dependent	STR	GRI G4 Version Guidelines SNR=Total Disclosure (TD)/ maximum possible scores (M)	Saifi et al. (2024)	
Board Independence	Independent	BID	The ratio of the board's independent directors to its total members.	Razak et al. (2023)	+
Board Gender Diversity	Independent	BGD	The proportion of female board members to total members.	Awen and Yahaya (2024)	+
Environmental Sustainability Committee	Independent	ESC	Using the average values of environmental sustainability committee independence, expertise, and meeting attendance.	Benjamin and Yahaya (2024)	+
Firm Size	Independent	FSZ	Using the natural logarithm of firms' total assets	Lefley et al. (2024)	+
Firm Leverage	Independent	FLV	Using the proportion of total debt to total assets	Oloredo et al. (2022)	+

Source: Author's Compilation Based on Field Work, (2025)

To test the research hypotheses, the econometric model was adapted from Awen and Yahaya (2024) with slight modifications and thus, specified as follows:

$$STR_{it} = \beta_0 + \beta_1 BID_{it} + \beta_2 BGD_{it} + \beta_3 ESC_{it} + \beta_4 FSZ_{it} + \beta_5 FLV_{it} + \epsilon_{it} \dots \dots \dots i$$

Where: STR= Sustainability Reporting; BID= Board Independence; BGD = Board Gender Diversity; ESC = Environmental Sustainability Committee; FSZ = Firm Size; FLV = Firm Leverage; β_0 = Intercept; β_1 - β_5 = Slope of the independent variables; it= company and year; ϵ = Error term.

IV. RESULTS AND DISCUSSION

This section deals with the analysis and interpretation of results. It mainly begins with the descriptive statistics which highlights the nature, quality, and the overall magnitude of the data used in the study. It is depicted in table 2 as follows:

Table 2: Descriptive Information

Constructs	Mean	Std. Dev.	Minimum	Maximum	Observations
STR	0.4562	0.1829	0.20	0.90	460
BID	0.3094	0.1314	0.08	0.7084	460
BGD	0.2622	0.1409	0	0.8332	460
ESC	0.2235	0.0968	0.10	0.7817	460
FSZ	16.4412	1.5768	13.7554	19.4501	460
FLV	0.4244	0.1467	0.1669	0.7875	460

Source: STATA Output Results, (2025)

The information captured in table 2 shows the variables employed in the study viz; STR = Sustainability Reporting, BID = Board Independence, BGD = Board Gender Diversity, ESC = Environmental Sustainability Committee, FSZ = Firm Size, and FLV = Firm Leverage. Indeed, it represents a total of 460 firm-year observations during the study period.

From the purview of sustainability reporting, it shows the mean and standard deviation values of 0.4562 and 0.1829 respectively. This is followed with the minimum and maximum values of 0.20 and 0.90 respectively. On average, the listed non-financial services firms have disclosed 46 percent of information on sustainability reporting during the period. The lowest level of sustainability reporting during the period was 20 percent while the highest sustainability reporting was 90 percent. It implies that the sustainability reporting of the listed non-financial services firms varies across industry or firm specific attributes.

With reference to board independence, it shows the mean and standard deviation values of 0.3094 and 0.1314 respectively. This is followed with the minimum and maximum values of 0.08 and 0.7084 respectively. On average, the listed non-financial services firms have 30 percent of their members as independent directors during the study period. The lowest proportion of independent directors during the period was 8 percent while the highest proportion was 70 percent approximately. It implies that the proportion of independent directors of the listed non-financial services firms varies strongly across the industry or firm specific attributes.

In another perspective, the board gender diversity reveals the mean and standard deviation values of 0.2622 and 0.1409 respectively. This is followed with the minimum and maximum values of 0 and 0.8332 respectively. Based on the average result, the listed firms have 26 percent of their members as female directors during the study period. The lowest proportion of female directors during the period was 0 percent while the highest proportion was 83 percent approximately. It implies that some listed non-financial services firms have no female representative in their board of directors while the highest proportion of female directors during the period was 83 percent approximately.

Correlation Matrix

The correlation matrix is illustrated in table 3 as follows:

Table 3: Matrix of Correlation

Variables	STR(1)	BID(2)	BGD(3)	ESC(4)	FSZ(5)	FLV(6)
(1)	1.0000					
(2)	-0.0894* 0.0554	1.0000				
(3)	0.0291 0.5336	-0.1619* 0.0005	1.0000			
(4)	-0.1773* 0.0001	0.1326* 0.0044	0.0264 0.5726	1.0000		
(5)	-0.0516 0.2697	0.1279* 0.0060	-0.1049* 0.0244	0.0512 0.2727	1.0000	
(6)	-0.1887* 0.0000	0.2007* 0.0000	-0.2098* 0.0000	0.0671 0.1506	0.1177* 0.0116	1.0000

Source: STATA Output Results, (2025)

Reference to the information contained in table 3, it shows the matrix of correlation analysis in respect of the variables of the study. Starting with the board independence (BID), it has a weak negative relationship with the sustainability reporting of the listed non-financial services firms in Nigeria. Further relationship reveals that board gender diversity has positive correlation with sustainability reporting of the listed non-financial services firms in Nigeria. In another perspective, the environmental sustainability committee shows a strong negative relationship with sustainability reporting of the listed non-financial services firms in Nigeria. For firm size, it has shows a negative correlation with sustainability reporting of the listed non-financial services firms in

Nigeria. Finally, firm leverage reveals a strong negative correlation with sustainability reporting of the listed non-financial services firms in Nigeria.

Based on the correlation coefficients in respect of all the variables of the study, it can be deduced at this juncture that there is absence of strong correlation amongst the parameters used in the study. This is because none of the variables have a coefficient value greater than or equal to 0.50. Specifically, all the variables have coefficients values that falls within the range of 0.00 to 0.29 which implies absence of high correlation amongst the variables of the study as advocated by Benneish (1997).

Regression Results

This section describes the extent of connectivity amongst the parameters. This is captured in the form of mathematical function viz; $STR = F(BID, BGD, ESC, FSZ, \text{ and } FLV)$ which is depicted in table 4 as follows:

Table 4: Summary of Regression Results

Variables	Coefficients	T-Values	P-Values
Constants	0.6702	7.39	0.000
BID	-0.0457	-0.85	0.393
BGD	-0.0131	-0.18	0.858
ESC	-0.3028	-3.52	0.000
FSZ	-0.0023	-0.50	0.619
FLV	-0.2133	-3.81	0.000
R ²			0.2113
AR ²			0.2026
F-Stat.			24.32
F-Sig.			0.0000
Mean VIF			1.06

Source: STATA Output Results, (2025)

The table 4 shows the adjusted R² of 0.2026. This signifies that the predictors have explained approximately 20 percent of the total changes in sustainability reporting of the non-financial services companies in Nigeria. By implication, the predictors are good and strong determinants of sustainability reporting among the non-financial services listed firms was determined by other variables not captured in the model of the study. In another vein, the model fitness test represented by 24.32 signifies that the model is good, adequate and well fitted for the study. This is validated by the probability value of 0.0000 signifying that it is significant at 1 level.

Board Independence and Sustainability Reporting

The regression results in table 4 shows the coefficients of -0.0457. this is followed with the t and p values of -0.85 and 0.393 respectively. This signifies that board independence has negative insignificant effect on sustainability reporting of listed non-financial services firms in Nigeria. This implies that a proportional decrease in the number of independent directors in the board of the listed firms could lead to a drastic reduction in the level of sustainability reporting amongst the listed non-financial services firms in Nigeria. It also implies that board independence is not a good determinant of sustainability reporting among the listed non-financial services firms in Nigeria. The result therefore, is contrary to the priori expectation of the study. In respect of hypothesis one, H₀₁ is failed to be rejected. Although, the aforementioned finding was not supported by Mohammed et al. (2024), Razak et al. (2023), Githaiga and Kosgei (2023).

Board Gender Diversity and Sustainability Reporting

Similarly, the regression result reveals the coefficients of -0.0131. This is followed with the t and p values of -0.18 and 0.858 respectively. This signifies that board gender diversity has negative insignificant effect on sustainability reporting of listed non-financial services firms in Nigeria. This implies that a proportional decrease in the number of female directors in the board of the listed firms could lead to a serious decline in the level of sustainability reporting amongst the listed non-financial services firms in Nigeria. It also implies that board gender diversity is not a good determinant of sustainability reporting among the listed non-financial services firms in Nigeria. Similarly, the result is contrary to the priori expectation of the study. Based on the hypothesis two of the study, H₀₂ is failed to be rejected. Nevertheless, the finding was not in agreement with the study of Mohammed et al. (2024), Razak et al. (2023), and Olayinka (2024).

Environmental Sustainability Committee and Sustainability Reporting

The result in respect of ESC shows the coefficient value of -0.3028 with corresponding t and p values of -3.52 and 0.000 respectively. This signifies that environmental sustainability committee has negative significant effect on sustainability reporting of listed non-financial services firms in Nigeria at 1 percent level of significance. By implication, the environmental sustainability committee is a strong determinant of sustainability reporting amongst the listed non-financial services firms in Nigeria. Even though, the result is found to be inconsistent with the priori expectation of the study, it provides the basis for rejecting hypothesis three of the study. For hypothesis three, H_{03} is strongly rejected. Interestingly, the finding is in tandem with the work of Awen and Yahaya (2024) but contradicted the work of Benjamin and Yahaya (2024).

Firm Size and Sustainability Reporting

With regards to firm size, the table 4 indicates values of -0.0023, -0.50, and 0.619 which represent the coefficient, t and p values respectively. This signifies that firm size has negative and insignificant effect on sustainability reporting listed non-financial services firms in Nigeria. The result therefore, implies that a unit decrease in firm size has an adverse effect on sustainability reporting of listed non-financial services firms in Nigeria. This result is contrary to the priori expectation of the study. For hypothesis four, H_{04} is failed to be rejected. However, the finding is contrary to the empirical studies conducted by Faridul-Islam and Hoassain (2022), Boshnak (2022), and the work of Bananuka et al. (2022) which have documented positive significant relationship between firm size and sustainability reporting of listed firms.

Firm Leverage and Sustainability Reporting

The regression result shows the coefficient value of -0.2133 with corresponding t and p values of -3.81 and 0.000 respectively. This signifies that firm leverage has negative significant effect on sustainability reporting of listed non-financial services firms in Nigeria at 1 percent level of significance. The implication of this is that a proportional decrease in firm leverage brings about a reduction in the level of sustainability reporting amongst the listed non-financial services firms in Nigeria. However, the result is found to be inconsistent with the priori expectation of the study. Interestingly, it provides the reasons for rejecting hypothesis five of the study. For hypothesis five, H_{05} is strongly rejected. Based on the previous studies, the finding is consistent with the work of Ikpor et al. (2022), Olorede et al. (2022), and Ogungbenle (2022).

V. CONCLUSION AND RECOMMENDATIONS

Reference to the aforementioned findings, the following conclusions is made:

- (i) It was found that board independence has negative insignificant effect on sustainability reporting of non-financial services companies in Nigeria. It is concluded that a proportional decrease in the number of independent directors lead to a reduction in the level of sustainability reporting of he listed firms;
- (ii) Board gender diversity was found to have negative and insignificant effect on sustainability reporting of listed non-financial services firms in Nigeria. Thus, a declining proportion of female directors in the board is associated with the poor level of sustainability reporting amongst the listed non-financial services firms in Nigeria;
- (iii) The result in respect of environmental sustainability committee shows a positive significant effect on sustainability reporting of listed non-financial services firms in Nigeria. Therefore, environmental sustainability committee is a good determinant of sustainability reporting of listed non-financial services firms in Nigeria;
- (iv) Firm size was found to have negative insignificant effect on sustainability reporting of listed firms in Nigeria. It is concluded that firms with declining assets are less inclined to sustainability reporting;
- (v) Firm leverage has negative significant effect on sustainability reporting of listed non-financial services firms in Nigeria. Hence, firms with declining proportion of leverage are most likely to embrace sustainability reporting.

Based on the conclusion drawn on findings, the recommendations are made as follows:

- (i) The nomination committee of the board of directors of the non-financial companies in Nigeria should revisit the proportion of independent directors with a view to increase their number in the board. This is necessary and desirable in view of their critical roles in corporate strategic decisions in which sustainability reporting is very essential;
- (ii) In the same vein, the nomination committee of the boards of listed firms should embrace the gender equality policy in their corporate strategic decisions. They can do this by ensuring that female directors are adequately represented in the board of directors. This is done in order to ensure that board gender diversity contribute immensely to corporate strategic decisions including sustainability reporting of the companies;
- (iii) The management of the non-financial services companies in Nigeria should embrace the establishment of an independent environmental sustainability committee. This can be achieved through the involvement of more independent directors in the committee with requisite technical and professional expertise. In addition, such

members of the committee should be committed to having reasonable proportion of meeting attendance. If effectively put in place, such companies are likely to have quality and reliable sustainability reporting;

(iv) The board of directors of the non-financial companies in Nigeria should inaugurate an independent Assets Quality Management Committee (AQMC). This is designed at ensuring that the assets of the companies are not only properly monitored but evaluated on a regular basis to capture any changes in the assets size of the companies. Hence, such information is very relevant to be captured in the sustainability reporting of the non-financial companies in Nigeria;

(v) The management of the listed non-financial services firms in Nigeria should be consistent in the management of their firm leverage. This can be achieved by ensuring a frequent reasonable balance between the firms' total debt and total assets in order to avoid falling into the trap of over-indebtedness. Again, a constant progress reports about the firms' leverage level should be properly captured and disclosed as a vital segment of the sustainability reporting amongst the non-financial services companies in Nigeria.

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