



## SUSTAINABILITY DISCLOSURES AND THE PERFORMANCE OF LISTED MANUFACTURING COMPANIES IN NIGERIA

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**ABSTRACT:** *The study investigated the effect of sustainability disclosure on the performance of publicly listed manufacturing companies in Nigeria using ex-post facto research design. A sample of twenty (20) publicly listed manufacturing companies was obtained and secondary data were computed from the annual reports and accounts of the companies from 2013-2022. Data obtained were analyzed by means of descriptive, post-estimation and inferential statistics. Findings of the multivariate regression result revealed that financial performance (return on assets and return on equity) are not significantly affected by the level of sustainability disclosure. Based on the findings, it was recommended that management of publicly listed manufacturing companies should gear efforts toward enhancing disclosure on sustainability (in particular, index of sustainability reporting); this may further strengthen their financial performance level. In addition, management of publicly listed manufacturing companies should determine measures of sustainability disclosure affecting performance the most and focus more on them; this study contributes to knowledge by filling the gap in the literature on the relationship between sustainability disclosure and financial performance of listed manufacturing companies in Nigeria.*

**KEYWORDS:** Sustainability disclosure, Return on asset, Return on equity, Manufacturing firms.



## INTRODUCTION

The concept of sustainability disclosure is a traditional concern of business organization's diversification, product differentiation as well as global assessment of firm's performance about its environment (Nnamani, Onyekwelu & Ugwu, 2017). However, the evolution of strategic thinking underscores the need to include activities that seek to integrate social and environmental issues into business decision-making processes. More so, firms which integrate their environment and people are viewed as socially responsible (Emenyi & Okpokpo, 2023). Therefore, many business organizations take much responsibility for social and environmental issues as they do for economic issues. When people come together to establish a firm, they do so to allocate their resources for a common goal and to earn profit. To achieve this goal, they also interact with the environment.

On the basis of their motives, stakeholders and groups keep interest in the operations of the organization. In recent times, varied business professionals and accounting scholars are keen on understanding how sustainability disclosure affects financial performance of publicly listed firms (Onoh, Biradawa & Ndubuisi, 2023; Almaqtari, Elsheikh, Abdelkhair & Mazrou, 2023). On the other hand, financial performance is a subjective measure of how well a firm can use assets from its primary mode of business to generate resources. Sustainability reports are voluntarily disclosures by corporations that want to offer additional value and information to stakeholders concerning the effect their activities and operations have on the society and environment (Gary, 2015).

The performance of firms can be measured in terms of profitability (i.e. return on assets, return on equity, earnings per share, etc.). Prior studies argued that size and profitability of firms could also have an effect on the level of disclosure of information by firms. For example, Al-Gamrh and Al- Daharnari (2016) argued that larger firms are likely to disclose additional information in order to reduce agency costs, improve reputation, win public supports, and attract investors. Arising from past studies (Nwobu, 2017; Soyka, 2012; Eccles & Krzus, 2010), it is apparent that there is the need for firms to disclose sustainability report; however, in Nigeria, the disclosure of sustainability report is still at its infancy stage and voluntary for listed firms

Furthermore, to achieve corporate sustainability, business organizations are deemed to show commitments in actualizing four key areas linked with corporate sustainability namely economic, environmental, social, and governance and also ensures that value is created for shareholders, and other stakeholders while managing risks that arise from economic, social and environmental issues. In Nigeria, listed firms are increasingly confronted to extend of accounting information to encompass sustainability disclosure as part of their competitive advantage and corporate strategy. Practically, sustainability disclosure entails the disclosures of information relating to social and environmental. Most manufacturing firms' listed on Nigerian Exchange Group activities often results in environmental problems. Regardless of these, they are forced to take care of the problems and contribute reasonably to enhancing their environment. Manufacturing firms are also usually challenged to increase shareholders stake which is achieved via profiteering.

In view of the above, there are conflicting arguments indicating that firms that entrench and avail the public of their sustainability reports have positive performance indicators than those who do not integrate sustainability disclosure. On the other hand, there are widely



acknowledged views that the accountability side of manufacturing firms is incomplete without inclusion of disclosure of sustainability reports in annual accounts. More worrisome is the fact that how well is listed manufacturing firms disclosing sustainability engagements in line with available sustainability indicators like Global Reporting Initiative (GRI) guidelines? The identified issues formed the gaps of the study, which the researcher seeks to fill by investigating how sustainability disclosures affect the level of performance (return on assets, return on equity & return on capital employed) of listed manufacturing companies in Nigeria

### **Research Hypotheses**

In line with the above discuss, the following research hypotheses were developed:

Ho1: There is no significant relationship between sustainability disclosures and return on assets of listed manufacturing companies

Ho2: There is no significant relationship between sustainability disclosures and return on equity of listed manufacturing companies

## **REVIEW OF RELATED LITERATURE**

### **Conceptual Review**

#### **Sustainability Disclosures**

The Global Reporting Initiative (GRI, 2019) defined sustainability reports as those issued by firms about their economic, environmental and social impacts caused by their daily operation activities. Almaqtari et al (2023) described sustainability reporting (SR) as a set of a company's activities that demonstrate the inclusion of social and environmental concerns in business operations and interactions with stakeholders. This report is thus aimed at achieving sustainable development goals (Gunarsih & Ismawati, 2018).

Sustainability disclosure emerged as a new trend in corporate reporting by integrating the financial and non-financial performance of a company. There are strong arguments by scholars and industrialists that companies received more than proportionate benefit from embedding sustainability policies in the organizational settings. The measurement of sustainability performance falls in the general area of social accounting. Under this area, various activities may be delineated: economic activities, social activities and environmental activities (Natalia, 2017). That is to say, the concepts of sustainability disclosures are products of corporate social responsibility (CSR), corporate governance and human resource planning, amongst others.

Sustainability disclosure is the process of selecting the firm level of social performance variables, measures, and measurements procedures, systematically developing information useful for evaluating the firm's social performance and communicating of such information to a concerned social group both within and outside the company (Almaqtari, Elsheikh, Abdelkhair & Mazrou, 2023). Sustainability disclosure emerged as a new trend in corporate reporting, integrating the financial and non-financial performance of a company into a single report. At the moment, there is a significant number of companies that voluntarily integrate



social and environmental issues into their strategic plans. Sustainability disclosure can either be mandatory in countries such as Germany, France, Finland, South Africa among other few countries, with legislative backing (Ioannou & Serafeim, 2014).

Furthermore, it can also be voluntary, driven by soft external and internal pressures or market differentiation strategies (Joshi & Li, 2016). The results of the empirical studies of the relationship between SR and firm value are mixed and results remain inconclusive. Some identify a positive link between SR and the firm's market value (e.g. Wahba, 2008; Asuquo, Dada & Onyeogaziri, 2018; and Reverte, 2011). Some evidence also suggests that firms with strong environmental management enjoy better financial performance (ROA, ROE and cash flow) (Margolis and Walsh, 2007; Clarkson et al., 2008).

On the issue of increasing firm value by reducing the cost of equity capital, several studies had suggest that SR disclosure by firms with superior sustainability performance leads to the lower cost of equity capital (Richardson & Welker, 2001; Ioannou & Serafeim, 2014); however, there are also findings to the contrary. The main conclusion from prior research is that no clear conclusion can be drawn regarding the value-relevance of sustainability disclosure as the results are inconclusive.

### **Financial Performance**

In corporate finance, financial performance is an important issue considering the levels of financial scandals and various degrees of firms' failures. In the accounting literature, financial performance refers to profits, return on assets and economic value obtained from the financial activities of a firm (Emenyi & Okpokpo, 2023). Profits are source of retained earnings, providing much of the funding for investments in plant and equipment that raises productive capacity. Profits are also frequently used in measuring the rate of return on investment and the relationship between earnings and equity valuation. Profits may also be used to evaluate the effects of changes in policy on corporations or profits or in economic conditions (Onoh, et al, 2023)

Financial performance or profitability is the primary aim of business venture without, which the business will not survive in the long run. Therefore, the measurement of current or past profitability and projecting future profitability is very important. Profitability is the most important measure of the success of the business and a business that is not profitable cannot survive. Consequently, profitability of firm plays an important role in the structure and development of firm because it measures the performance, success of the firm and enhances the reputation of the firm (Gunarsih & Ismawati, 2018).

Financial performance a summary measure of corporate success or failure and thus serves as an essential indicator of economic performance. Consequently, a business that is highly profitable has the ability to reward its owners with a large return on their investment. Profitability of a firm is the ability to generate revenue in excess of cost in relation to the company's capital base (Natalia, 2017). Almaqtari et al (2023) defined profitability to mean; the ability to make profit for all business activities of an organization. They further described it as management efficiency in the use of organizational resources in adding value to the business.

Profitability is determined by the extent of the net accounting profit (return on asset, return on capital employed, and return on equity). Return on assets is used in finance as a measure of

the returns that a company is realising from its capital employed. It is commonly used as a measure for comparing the performance between businesses and for assessing whether a business generates enough returns to pay for its cost of capital.

Consistent with prior research (Almaqtari, et al, 2023; Emenyi & Okpokpo, 2023; and Onoh, 2023), ROA has been measured as (Profit before tax/total assets) multiplied by 100. Return on equity on the other hand measures a firms' profitability by revealing how much profit firm generates with money shareholders have invested (Gunarsih & Ismawati, 2018). It is measured as profit after tax divide by book value of shares. It is a product of the activities and return on investment in a given period (Ioannou & Serafeim, 2014). Financial performance helps to reveal the result of investment activities of the organizations thus informs and send out signals to the public in relation to their worth/value to help investors make valuable economic decisions.

In analyzing financial performance, emphasis should be made in formulating an adequate description of the concept of a firm's performance which will uncover the different dimensions upon which firm's performance should be evaluated. In conclusion, financial performance is used as a measure to dictate an organization's growth and development. It shows the level of improvement made by an organization or firm within a period of time (Nnamani, et al, 2017). There is no specific measure to employ in order to arrive at performance; however, the measure of corporate performance could be arrived at by the use of a number of indices or variables which include productivity, profitability, growth or even customer satisfaction are most likely used.

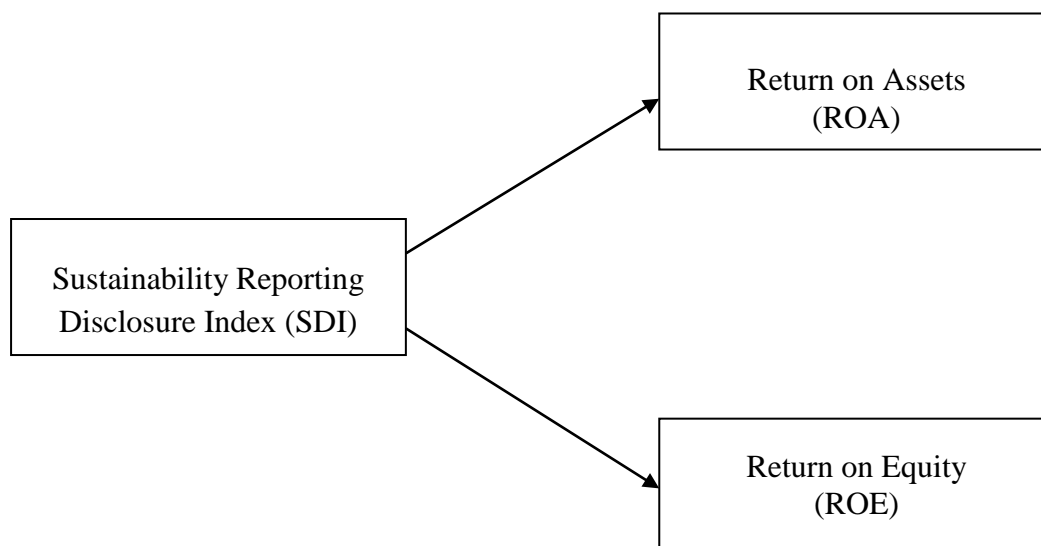


Figure 1: Conceptual Model

Source: Researcher's Conceptualization (2024)



## Theoretical Framework

Despite the various theoretical methods that can have been used to explain sustainability disclosure, the legitimacy, stakeholder, and agency theories are the most frequently advanced theoretical perspectives in the social and environmental accounting literature (Joshi & Gao, 2016; and Emenyi & Okpokpo, 2023). These theories represent the belief that corporations who share their social and environmental activities with stakeholder groups acquire a competitive edge over enterprises that are less socially and ecologically active. Voluntary disclosure theory has its roots from agency theory which was expounded by Brammer and Pavelin (2008).

Voluntary disclosures are attempts to remove informational asymmetries between the firm, external agents and primary agents in the investment community. Voluntary disclosure theory is based on the agency theory perspective which explains the level of disclosure of information. The voluntary disclosure theory predicts that organizations which have a good environmental performance do not hide the environmental impacts of their operations and are willing to inform stakeholders about their environmental activities. Voluntary disclosure predicts that the information risk for current and potential investors will be lowered (Brammer & Pavelin, 2008).

Voluntary disclosure can lead to a competitive advantage because it highlights the environmental programme and the impact of activities on the national environment. Stakeholders receive bad news from the company along with good news. Investments in environmental management or programs are costly and for the short term, they will not result in higher returns; if disclosure is absent or low, stakeholders will assume that the current environmental strategy adopted by the firms is inferior (Clarkson, Li, Richardson & Vasvari, 2008).

## Empirical Studies

This section reviewed empirical studies on sustainability disclosure and related subjects as they influence the level of corporate financial performance in Nigeria, the world over. For instance, Shehu (2015) examined the impact of CSR on the financial performance of conglomerates companies publicly listed in Nigeria between 2006 and 2011. The study comprised eight (8) quoted conglomerates and CSR was measured by community, expenditure and environmental expenditures while financial performance by return on asset. Multiple regression result revealed that employees' and community expenditures had significant positive effect on ROA while environmental expenditure exerted negative effect on ROA.

Kwaghfan (2015) investigated the effect of sustainability disclosure on corporate financial performance of sixty-four (64) listed companies in Nigeria from 2009-2013. Sustainability disclosure was measured via economic, environmental and social while performance by net profit margin, return on assets, return on equity and earnings per share. Findings indicated that sustainability disclosure contributes to increased corporate performance of the selected companies. Utama and Mirhard (2016) examined the effect of sustainability disclosure as moderating variable on the link between intellectual capital (IC) and financial performance of 21 listed firms in Indonesia Stock Exchange from 2010-2013. Sustainability disclosure was measured using the Pulic's value-added intellectual coefficient while performance via return



on assets, return on equity and revenue growth rate. Findings indicated that VAIC had positive impacts on ROA and ROE except revenue growth rate.

Nnamani, Onyekwelu and Ugwu (2017) evaluated the impact of sustainability disclosure on financial performance of listed Nigerian manufacturing firms. Using the ordinary least square estimation technique, the study revealed that sustainability disclosure had negative insignificant impact on financial performance of listed firms in Nigeria. Omodero and Ogbonnaya (2017) studied the correlation between corporate social responsibility and the profitability of Nigerian commercial banks so as to know the extent to which CSR affects profit after tax, net asset and total revenue of ten (10) commercial banks from 2006-2015. The multiple regression results showed that expenditure on CSR had no positive influence on the financial performance of commercial banks in Nigeria.

Okpala and Iredele (2018) examined whether market value of quoted firms can be affected by corporate social environmental disclosure (CSED) using Nigerian data. Findings indicated that CSED significantly influence the level of market value of quoted firms in Nigeria. Asuquo, Dada and Onyeogaziri (2018) investigated the impact of sustainability disclosure on corporate performance of quoted brewery companies in Nigeria using 21 pre-selected content categories along four (4) dimensions: evidences, time, specificities and themes while corporate performance was measured using return on asset. The OLS result showed no significant link between sustainability disclosure and corporate financial performance of brewery companies in Nigeria.

Similarly, Emeka-Nwokeji and Osioma (2019) study on sustainability disclosure and firms' market value in Nigeria was carried out using publicly quoted manufacturing firms and the regression result showed that market value of quoted firms could be improved via sustainability disclosures in Nigeria. Irabora (2019) assessed the impact of CSR on organizational performance via questionnaire administered to three hundred and twelve (312) employees of Guinness Nigeria Plc., Benin City. Data obtained were analyzed using correlation and regression and findings revealed a positive and significant link between CSR and organizational performance.

Odunsi, Adeaga and Odeniyi (2019) investigated the impact of CSR on organizational performance using a total of fifteen (15) firms in the banking, service and manufacturing sector in Nigeria. Questionnaire was the major instrument of data collection and data obtained were analysed by means of both descriptive and inferential statistics. Results revealed that CSR contributes significantly to the profit generation, market share and image of the studied firms. Powei (2020) explored the nexus between CSR activities and the performance of international oil firms in the Niger Delta region of Nigeria. Data were obtained via a quantitative survey research instrument from a sample of two hundred and seventy (270) respondents residing in the host communities in the Niger Delta region. The multiple regression results showed that CSR positively and significantly affects international oil companies' performance.

Olaniyan, Efuntade and Efuntade (2021) examined the impact of CSR on the performance of manufacturing firms in Nigeria via structural equation modelling on data generated from questionnaire administered on 150 respondents. The result indicates that CSR is significantly and positively linked with financial performance of manufacturing firms in Nigeria. More so, the study found a direct link between CSR and financial performance by showing that



employee performance serves as a mediator in the link between CSR liabilities together with manufacturing firms' financial performance. Rodrigues, Alves, Oliveira, Vale, Vale and Silva (2021) assessed the dissemination of social information in Portugal using descriptive statistical techniques. The result of the study suggests that social disclosure information contributes to sustainability challenges of firms, which are imposed by carbon emissions, climate change, among others.

Singh and Misra (2021) evaluated the nexus between CSR and the performance of European multinational firms via questionnaire administered to 340 respondents. A two-stage approach was employed to analyze the data obtained in the field survey. The hierarchical regression result showed that CSR when fully implemented towards external stakeholders affect the performance of firms. More so, this effect has been found to diverge due to firms' reputation. Emenyi and Okpokpo (2023) examined whether sustainability reporting influence the level of corporate financial performance of listed companies in Nigeria. The multiple regression results revealed that sustainability reporting affects positively, the level of corporate financial performance in Nigeria

Onoh, Biradawa and Ndubuisi, (2023) investigated whether sustainability disclosure affects corporate financial performance of listed Nigerian companies. The multiple regression results showed that sustainability disclosure positively and significantly affects the level of financial performance of listed Nigerian companies. Almaqtari, Elsheikh, Abdelkhair and Mazrou (2023) studied whether sustainability disclosure affects corporate performance of listed companies in Malaysia. The multiple regression results showed found when listed companies in Malaysia reports sustainability indicators in their financial statements, it significantly affects the level of corporate performance.

## RESEARCH METHODS

In this study, *ex-post facto* research design was employed; this design was chosen because the data employed in the study had existed, hence, there is no room for control over certain variables as the event already exists. The population of the study comprised of the seventy-one (71) manufacturing companies listed on the Nigerian Exchange Group as at 31<sup>st</sup> December, 2022. (NGX., 2022). See attached (appendix I) for the list of publicly listed manufacturing companies on the NGX.

Given the size of the population of the study, twenty (20) manufacturing companies were sampled. The inclusion and exclusion criteria were used in selected the sample size of the study. For instance, companies who do not disclose sustainability reports were excluded from the study while those that had disclosed sustainability issues in their annual reports were included in the study. The study employed secondary data comprising sustainability disclosure and financial performance measures.

The sustainability disclosure measures include Sustainability Reporting Index (SDI) and Disclosure on Environmental Laws and Regulations (DELR) while the financial performance measures include return on asset (ROA) and return on equity (ROE). Data on sustainability disclosure and financial performance of publicly listed manufacturing firms were obtained from 2013-2022. Data obtained in this study have been validated by the regulatory framework of accounting and economic activities in Nigeria.





This present study builds on existing models of Onoh, et al (2023); and Almaqtari, et al (2023). In view of this, multiple regression equation was used to assess the hypothesized relationships between the dependent and independent variables of the study. The econometric form of the equation is given as:

$$CORPF = f(SDI, DELR) \quad eq.1$$

$$CORPF_{it} = \beta_0 + \beta_1 SDI_{it} + \beta_2 DELR_{it} + \mu_{it} \quad eq.2$$

Where: *SDI* represents sustainability disclosure index; *DELR* is disclosure on environmental laws and regulations; *CORPF*, composite metric for financial performance (ROA = Return on asset; and ROE = Return on equity);  $\mu_{it}$  = Error term firm *i* in period *t*

The analyses encompassed Descriptive (Mean, Standard Deviation, Kurtosis, Skewness, Minimum and Maximum Values and Pearson correlation); Diagnostic (Variance Inflation Factor, Multivariate Test of Means, Multivariate Test of Correlation, Test for Multivariate Normality & Test for Covariance Matrix); Inferential (Multivariate Regression) statistical techniques. The multivariate regression result was used in testing the research hypotheses. The decision rule is that reject  $H_0$  if the p-value of the test is less than  $\alpha$ -value (level of significance) at 5%, otherwise accept  $H_1$ . A-priori expectation is sustainability disclosure will significantly affect financial performance of the manufacturing firms.

## RESULTS AND DISCUSSIONS

Table 1: Summary of Descriptive Statistics

stats	roa	roe	sdi	delr
mean	9.350607	19.64418	.03	.0154639
p50	8.23825	14.8463	0	0
sd	14.1486	50.75934	.1576364	.123708
min	-26.3705	-254.0731	-1	0
max	47.0309	468.4316	.625	1
kurtosis	2.898187	38.33383	17.20967	62.68237
skewness	.0673747	3.501949	.6263818	7.853813
N	200	200	200	194

Source: Computed by the Researcher via STATA 13.0

Table 1 showed the summary of descriptive statistics for the dependent and independent variables for the sampled manufacturing companies in Nigeria from 2012-2022. Starting with the dependent variables (ROE and ROA), it was found that ROE recorded the highest mean value (19.64) with the highest dispersion (sd = 50.75) while ROA recorded a mean value of 8.23 and standard deviation of 14.14. The standard deviation showed relative changes in the financial performance indicators which ranged from 14.14-50.75.

The sustainability disclosure indicators of SDI and DELR had mean values of 0.03 and 0.015 with standard deviation values of 0.157 and 0.123 respectively; an indication that SDI and



DELR of the manufacturing companies are not dispersed from each and that most probable, most of the companies disclosed sustainability indicators.

The minimum value is zero (0) for DELR while the maximum value is 1; an indication that while sustainability disclosure is practiced among the companies, there are others that do not. The skewness value for ROE, ROA, SDI and DELR are positive; this result implies that the dependent and independent variables of the study moved in similar direction. More so, kurtosis values for ROA, and SDI were less than 3; an indication of mesokurtic distribution (normal distribution) while the other variables (ROE and DELR) had kurtosis value more than 3; an indication of leptokurtic distribution.

Table 2: Pearson Correlation

	roa	roe	sdi	delr
roa	1.0000			
roe	-0.0392	1.0000		
sdi	-0.0202	0.0127	1.0000	
delr	0.0123	-0.0024	0.1158	1.0000

Source: Computed by the Researcher via STATA 13.0

The Pearson correlation result for the dependent and independent variables was presented in Table 2; the result showed that ROE and SDI were negatively correlated while ROA was positively correlated with DELR. This suggests that there is negative link between ROE and SDI while a positive link exists between ROA and DELR. Also, the correlation matrix showed no pairs of independent variables (SDI and DELR) were perfectly correlated because none of the coefficients surpassed 0.8. Hence, there is no multi-collinearity in the models of sustainability disclosure and financial performance.

Table 3: Variance Inflation Factor

Variable	VIF	1/VIF
delr	1.01	0.986582
sdi	1.01	0.986582
Mean VIF	1.01	

Source: Computed by the Researcher via STATA 13.0

Table 3 reports the multi-collinearity tests for the sampled manufacturing companies in Nigeria; mean VIF is 1.01 and is less than the conventional VIF level (10), suggesting the absence of multi-collinearity in the model of the study

Table 4: Multivariate Test of Means

Hotelling T2 =	117.23
Hotelling F(3,191) =	38.67
Prob > F =	0.0000

Source: Computed by the Researcher via STATA 13.0



The multivariate test of means was presented in Table 4; the Hotelling  $F(3, 191)$  is 38.67 with Prob.  $F = 0.0000$ ; the probability value is less than 5%, indicating that all the means of the independent and dependent variables are similar.

**Table 5: Multivariate Test of Correlation**

```
Lawley chi2(5) =      2.84
Prob > chi2 =      0.7246
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Source: Computed by the Researcher via STATA 13.0

The multivariate test of correlation was presented in Table 5 the Lawley  $\chi^2(20)$  is 2.84 with Prob.  $F = 0.7246$  which is greater than 5%. This indicates that the correlation matrix is compound asymmetric; this implies that all the correlations are unequal

**Table 6: Test for Multivariate Normality**

```
Doornik-Hansen      chi2(8) =14018.963  Prob>chi2 = 0.0000
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Source: Computed by the Researcher via STATA 13.0

The test for multivariate normality was presented in Table 6; the Doornik-Hansen statistics  $\chi^2(8)$  is 14018.963 with Prob  $\chi^2$  of 0.0000. This showed that the variables (independent and dependent) are normally distributed at 5% level; thus, the data satisfies normality condition.

**Table 7: Test for Covariance Matrix**

```
Adjusted LR chi2(21) =    230.81
Prob > chi2 =    0.0000
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Source: Computed by the Researcher via STATA 13.0

The test for covariance matrix was presented in Table 7; the Adjusted LR  $\chi^2(21)$  is 230.81 with Prob.  $F$  of 0.0000 which is less than 5%. This suggests that the covariance matrix is diagonal (data moves from side to side).

**Table 8: Multivariate Regression**

Equation	Obs	Parms	RMSE	"R-sq"	F	P
roa	194	3	14.39879	0.0006	.0598368	0.9419
roe	194	3	51.7824	0.0002	.0169611	0.9832

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
roa					
sdi	-2.22173	7.366617	-0.30	0.763	-16.7521 12.30864
delr	1.714388	8.43496	0.20	0.839	-14.92325 18.35203
_cons	9.366367	1.071597	8.74	0.000	7.252681 11.48005
roe					
sdi	4.799106	26.49258	0.18	0.856	-47.4565 57.05471
delr	-1.639075	30.33466	-0.05	0.957	-61.47304 58.19489
_cons	19.64729	3.853788	5.10	0.000	12.04584 27.24874

Source: Computed by the Researcher via STATA 13.0



The multivariate regression result was presented in Table 8. R-squared is 0.0006 for ROA and 0.0002 for ROE; this suggests that the SDI and DELR explained about 0.06% and 0.02% changes in ROA and ROE respectively. The f-values indicated that ROA and ROE are insignificantly affected by SDI and DELR. Also, t-values for ROA (SDI = -0.30; DELR = 0.20) and ROE (SDI = 0.18; and DELR = -0.05) revealed that there is insignificant relationship between sustainability disclosure and financial performance of the publicly listed manufacturing companies in Nigeria. The null hypothesis was accepted and alternate hypothesis was rejected; this indicates that there is insignificant relationship between sustainability disclosures (SDI and DELR) and financial performance (ROA and ROE) of the listed manufacturing companies in Nigeria.

Practically, wealth owners place more emphasis on financial performance, particularly ROA and ROE. From wealth owners' viewpoint, ROA and ROE are better sources of wealth; the rationale is hinged on the fact that higher returns (equity and assets) are good enough in increasing the funds or money in shareholders' pocket (Almaqtari, et al, 2023). Thus, ROA and ROE take into cognizance, net profit after tax divided by total assets and equity. Prior studies (Nnamani, et al, 2017; Nwobu, 2017; Rodrigues, et al, 2021; Onoh, et al, 2023) have shown that sustainability disclosures has inverse (positive or negative) relationship with financial performance of companies in both developed and developing countries.

Notably, this study showed that there is no significant relationship between sustainability disclosures (SDI and DELR) and financial performance (ROA and ROE) of the listed manufacturing companies in Nigeria. The results disagree with the findings of prior studies (Nnamani, et al, 2017; Nwobu, 2017; Rodrigues, et al, 2021; Onoh, et al, 2023) that established that sustainability disclosure significantly influence the level of financial performance of companies. The variation in results could be linked to the diverse sector covered by other countries and the use of other sustainability disclosure variables which were not used in this study.

## CONCLUSION AND RECOMMENDATIONS

The accounting literature suggests that there are robust empirical studies on sustainability disclosures and financial performance in developed countries; however, there are few empirical studies that had assessed whether sustainability disclosure (sustainability reporting index and disclosure on environmental laws and regulations) affect the performance of publicly listed companies in Nigeria. In order to fill the lacuna in the accounting literature, the study used the multivariate regression in assessing the relevant sustainability disclosure variables that predict performance.

Using the multivariate regression results, it was concluded that sustainability disclosures has no significant effect on the performance of publicly listed manufacturing companies in Nigeria. On the basis of the findings, the study recommends that management of publicly listed manufacturing companies should gear efforts toward enhancing their disclosure on sustainability disclosure (in particular, index of sustainability reporting); this may further strengthen the financial performance of publicly listed manufacturing companies in Nigeria.

Furthermore, management of publicly listed manufacturing companies should determine measures of sustainability disclosure affecting performance the most and focus more on



them. The study contributes to knowledge by establishing that when listed manufacturing companies engage in sustainability disclosure, financial performance remains unchanged or unaffected. Thus, the study established that sustainability disclosures do not predict financial performance.

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