SUSTAINABILITY REPORTING AND FIRM PERFORMANCE IN NIGERIA

HENRY EMIFE MONYE-EMINA
Department of Accounting, Faculty of Management Sciences
University of Benin, Benin City. Edo State, Nigeria.
henry.monye-emina@uniben.edu

GODSTIME OSAROBO IKHU-OMOREGBE
Department of Accounting, Faculty of Management Sciences
University of Benin, Benin City. Edo State, Nigeria.

Abstract

This study examined sustainability reporting and firm performance of eighteen (18) listed consumer goods companies in the Nigeria Exchange Group for the period 2014 to 2023. The study specifically investigated the influence of both environmental sustainability disclosure and social sustainability disclosure on corporate firm performance (like, ROA and EPS). The research design used for the study is the ex-post facto design and the secondary source of data. The data gathered were analyzed by using descriptive statistics, correlation and fixed effect panel regression. The finding of the study reveals that Environmental sustainability reporting boost ROA and decreases EPS, however neither effect is statistically significant based on the regression result. The study also found that social sustainability reporting statistically impacts ROA and EPS positively and negatively. The study therefore recommends that business managers should be sincere about sustainability reporting to prevent losses.

Keywords: Sustainability reporting, Environmental sustainability disclosure, Firm performance, Social sustainability.

Jel Classification: M41, M42.

1. INTRODUCTION

Sustainability reporting strategies decrease the information gap between management and stakeholders, this increasing openness and transparency (Rayan, 2020). Du and Zhang (2020) believe that company managers’ good environmental reactions can reduce risks, defend their brand, acquire a competitive edge, alleviate poverty, and improve their local environment. Olowookere, et al., (2023) found that sustainability reporting aids business performance analysis. Sustainability reporting is important to stakeholders, but Omaliko et al. (2020) observed that complying with non-financial information disclosure rules can be expensive, limiting most firms' profit maximization goals. This study argues that sustainability reporting information should be examined for economic benefits. This study was motivated by the lack of literature on how sustainability reporting affects Nigerian listed companies, particularly consumer goods companies, which are notorious for their environmental impact (Emeke.at el., 2021). Nigerian listed companies' slow sustainability reporting adoption has two key causes. The first is that South Africa requires sustainability reports, while Nigeria voluntarily provides them (Hu.et al., 2020). Second, how sustainability reporting affects company performance is unknown. Emeke et al. (2021) opined that stakeholders' comprehension of non-financial corporate operations affects performance. Concerns over the latter have led to empirical studies on sustainability reporting's effects on organizational outcomes, notably corporate firm performance. Most sustainability reporting studies have examined disclosure factors or significance (Dyduch & Krasodomska, 2017; Giannarakis, 2014; Hahn & Kühnen, 2013; Kuzey & Uyar, 2017; Sharma et al., 2020; Vitolla, 2020). Few studies have evaluated sustainability disclosures and firm performance. Few studies have examined how sustainability disclosures affected accounting-based performance measures, particularly ROA. Few accounting and market-based performance indicator studies were inconclusive, underlining the need for more empirical study. Sustainability information disclosure enhances Accounting and market-based business performance proxies, according to Emeka-Nwokeji and Osisioma (2019), Amran and Siti-Nabiha (2017), Ifurueze, et al., (2013), and Menass. Moreso, studies also suggested methodological issues may have caused the inconsistent data. Most research (Okole & Igaga, 2020; Iswati, 2020; Menike, 2020; Emeka-Nwokeji & Osisioma, 2019; Erhirhie & Ekwueme, 2019) employed sustainability reporting as a single variable and did not analyze how social and environmental sustainability aspects affect performance proxy Second, the three-part sustainability reporting research (Gunarsih & Ismawati, 2018; Ezeokafor & Amahalu, 2019; Asuquo, et al., 2018) used "economic aspect of sustainability" irrespective of company performance. Economic sustainability reporting is how organizations provide goods and services people want to generate income, growth, and jobs, according to Gould (2011). He dubbed it ‘economic viability’. This study implies that integration of the 'economic viability' variable with firms' economic performance measures may be superfluous. Most Nigerian studies have concentrated on banking and oil and gas (Okolie & Igaga, 2020; Buallay, Hamdan, & Barone, 2019). Consumer products are environmentally detrimental but ignored. Despite banks' less environmentally destructive economic activities, empirical studies of industries other than oil and gas are scarce. This study studied the financial impact of social and environmental sustainability reporting on Nigerian consumer goods companies due to methodological concerns and to add to literature. The study assessed organizational performance from 2014 until 2023 using accounting and market-based measures.

2. LITERATURE REVIEW

2.1. CONCEPT OF FIRM PERFORMANCE

Financial performance can be calculated and interpreted in various ways. Joshua, et al., (2019) are of the view that corporate financial performance measures a company's capacity to meet economic goals and use resources profitably. Financial performance is a firm's ability to make money from its major assets (Dioha, et al.,2018). Financial performance influences corporate earnings, gains, and value appreciation, (Abubakar. et al., 2018). Financial performance is key to business asset efficiency. Low financial performance can impede an organization's aims (Adebayo & Onyeiwu, 2018). Odusanya. Et al., (2018) believed high-performing enterprises might create value, employ more people, reduce unemployment, innovate, practice social responsibility, and benefit the nation in taxation, income, and advancement.

2.2. ENVIRONMENTAL SUSTAINABILITY REPORTING

Sustainability and environmental reporting have been important in accounting and the environment for 20 decades (Grey, 2014). Environmental reporting aids strategic corporate performance evaluation. Environmental reporting is a hot topic among academia, management, and stakeholders despite its long history. Corporate environmental sustainability reporting informs stakeholders and the public about a company's environmental consequences, according to Deegan and Rankin (2019). Environmental communication affects the company image. People use the environment to promote their reputation. This includes using natural resources wisely, assessing operations' impacts on Earth's ecosystems, complying with environmental laws, leading climate change efforts, using energy efficiently, promoting renewable energy, conserving resources, instituting pollution prevention programs, adopting a sustainable development strategy, and involving stakeholders Environment accounting demands resource utilization explanation (Schaltegger & Burritt, 2020). According to the European Environmental Agency (EEA, 2018), environmental reports are the greatest approach for enterprises to convey their environmental actions and present an objective and trustworthy picture. Companies release environmental reports to inform stakeholders of their ecological duties, provide transparency in operations, and establish themselves as responsible partners in environmental conservation and community progress. Grey (2014) says environmental reporting requires a management framework. This system supports exhaustive environmental accounting. Environmental reporting is widely used by companies to show their environmental commitment. However, environmental accounting, data collecting, and report generation are difficult. Many obstacles may impede this procedure. A prior study evaluated many influential factors. According to Doody (2018), knowledge gaps, owner and manager attitudes, human resource constraints, budgetary constraints, consumer perceptions, organizational operational structures, and legislation and certification requirements hinder environmental practice implementation. Hillary and Burr (2018) list environmental reporting and management obstacles, to include insufficient internal skills, knowledge, and experience; management system complexity; unknown benefits; restricted people; and external support cost. Environmental reporting improves communication, shows environmental responsibility, and informs decision-making. Detailed documentation of an organization's ecological impact and sustainability activities is called "environmental reporting". This includes developing and executing environmental policies, goals, programs, outcomes, and organizational structures. These activities comply with 2014 Japanese Ministry of the Environment reporting standards. Internal and external factors—real and intangible, economic or ethical—drive environmental reporting. Reasons for reporting have changed. The GRI (2019) cites many reporting reasons, dedication, transparency, market competitiveness, strategy development, sustainability, and regulatory compliance. Modern management tools like corporate environmental reporting help organizations engage stakeholders, improve operations, acquire advantages, and ensure long-term sustainability. They achieve business community goals by distinguishing firms by environmental risk. Environmental disclosure reduces information asymmetry, helping organizations meet stakeholder needs, develop society, maintain legitimacy (Reverte, 2019), reputation (Reynolds & Yuthas, 2018), and long-term profitability. Sustainability reporting requires corporate environmental reporting, according to the ACCA (2013). It helps a corporation set long-term goals and encourage sustainability. To develop corporate environmental reports, an efficient internal system collects, analyzes, and manipulates environmental data. This method is carefully planned to manage environmental problems and integrate environmental considerations into business operations. Accounting and disclosure of environmental issues are vital to environmental management because businesses must address their environmental impacts (Batra, 2018).

2.3. SOCIAL SUSTAINABILITY REPORTING

Human resource practices including training, health and safety, diversity and equal opportunity, and wage discrimination must be improved for social sustainability. Ensure customer health and safety, implement effective product labelling and communication, answer customer complaints, and follow product rules to resolve consumer issues. To defend human rights, social sustainability encourages freedom of association, child labour eradication, non-discrimination, and safety. Stakeholder and community issues include engaging with the local community, fighting corruption, committing to public policy, opposing anti-competitive action, and respecting the law (GRI 3.1, 2011). The ethical posture of organizations that emphasized social responsibility and profit popularized the idea. Social sustainability is a company's commitment to social and environmental responsibility and financial success. Companies engage with market stakeholders like consumers, shareholders, and suppliers, internal stakeholders like employees and the board of directors, and social stakeholders like government and non-governmental organizations. Zink and Steimle (2018) claim that multiple stakeholders' economic, environmental, and social interests affect corporate responsibility. Corporate social sustainability practices are strategic business decisions based on possible benefits, not altruism or external demands (Akinyomi, 2018). Social sustainability in firm-operating nations is voluntary engagement in activities beyond legal requirements, according to McWilliams and Siegel (2021). Businesses do this to benefit themselves and society. All businesses try to operate responsibly and enhance lives to benefit the economy. Mughal (2014) acknowledges that all businesses behave ethically and grow economically, which is essential to governance. Tilt (2019) discovered that social sustainability helps organizations inform stakeholders about their social and environmental implications. Dutta and Bose (2017) discussed disseminating financial and non-financial reporting body resource and social performance data. Social sustainability is also an organization's commitment to operate economically and environmentally sustainably while considering all stakeholders (Carrol, 2017). Dahlsrud (2018) considers social sustainability a social construct without a common definition. Corporate social responsibility, principles, and, most importantly, ethics must be disclosed to thrive (Logsdon & Yuthas, 2019). The European Commission extended social sustainability in 2020. Corporate social responsibility is defined as companies going beyond their legal and corporate purposes. These bigger obligations encompass social and environmental worlds, with "social" meaning society, not merely policy. Profit, people, and planet—economic, social, and environmental—encapsulates the idea. Rahman (2019) examined social sustainability's elements. The study identified eleven social sustainability dimensions. These include social responsibility, stakeholder engagement, quality of life, economic development, ethical corporate practices, legal frameworks, voluntary participation, human rights, environment, transparency, and accountability. Sustainability's social component includes employee well-being and safety. Scholars call reporting on working conditions "employee washing," given corporate workers' health and security. Such reporting generally creates a positive picture of firms, which should correctly reflect employee work conditions and experiences if researched. The workplace's design and management effect employees' interactions. Physical layout, counting methods, constructed environment, division of labor, technology utilization, supervisory structures, HR management strategies, and colleague collaboration are examples. Physical, mental, and emotional workload determine employee success or failure. Granerud (2017), Montero et al. (2019), and Dijkman (2019) suggest CSR boost employee welfare.

2.3.1. REVIEW OF PRIOR EMPIRICAL STUDIES

Makori and Jagongo (2018) describe green accounting as accurately reflecting in enterprises' annual reports the expected social costs of production externalities on the environment and the number of deliberate intervention expenses to narrow the marginal social and private cost difference. Huang and Kung (2018) suggested firms use environmental disclosure to show social responsibility and satisfy stakeholders. Thus, business annual reports and accounts must include green expenses to enhance green cost responsiveness. Researchers believe exposing a firm's green costs increases responsiveness (Shelly, et al., 2017; Cortez & Cudia, 2011; Muller, et al., 2011), reduces medium- and long-term expenses (Hasan & Hakan, 2018), and influences profitability and performance. Recently, public understanding and concern about corporate environmental impacts has expanded (Ahmad & Sulaiman, 2017). Wilmshurst and Frost (2020) suggest top management may be compelled to explain the company's environmental impact if community members become more interested. Disclosures make yearly reports more accessible. The disclosures attempt to attract investors with appropriate information (Lang & Lundholm, 2019). However, firms can lessen political and social risk with these methods. Historical organizations have managed and influenced stakeholder perceptions using a given method (Guidry & Patten, 2018). Academics have examined environmental sustainability and financial success since the 1970s. This issue has been extensively investigated by Ambec and Lanoie (2018), Barnett and Salomon (2018), Endrikat et al. (2019), and Margolis and Walsh (2020). Many academics have explored whether firms receive financial incentives for environmental reform. Corporations may pay more to protect and improve the environment, lowering their potential to maximize profits (Friedman, 2019). Without unambiguous ownership rights for public assets like air and water quality, society pays for corporations' pollution (Figge & Hahn, 2014; McWilliams, et al., 2019). Corporate internalization of externalities increases expenses and reduces profitability. Win-win proponents like Porter and van der Linde (2019) believe environmental performance typically presents undiscovered profit-maximizing potential. Ambec and Lanoie (2018) suggested various methods firms might reduce their environmental effect to boost income or cut costs. Porter and van der Linde (2018) discovered that greener production process R&D could generate revenue or save costs. Fujii, Iwata, et al., (2013) and Lankoski (2018) suggest an inverted U or U-shaped curve between financial and environmental performance to incorporate both viewpoints. How does the cost curve shape affect environmental performance? As environmental performance improves, "additional cost" or "win-win," inverted U or U shape, is more prevalent. Evidence suggests a beneficial relationship between environmental and financial performance. More corporations will invest in stringent environmental regulations if they produce quick benefits. Scientific research show companies reject proactive environmental regulations. Scholars have studied environmental sustainability and financial performance for decades with mixed outcomes. Recent research reveals a mutually beneficial relationship.

2.3.2. SOCIAL SUSTAINABILITY REPORTING AND FIRM PERFORMANCE

Financial reporting is sometimes criticized for prioritizing historical, quantitative, and short-term performance overvalue creation. Corporate reporting relies solely on accounting regulations, allowing firms to delegate environmental and social costs. Businesses do not link financial performance to their economic, social, or environmental context (Terry, 2018). Bayoud et al. (2012) say complex company reports are making them less valuable for analysts and investors, even the most sophisticated users. Modern financial stakeholders need data to evaluate a company's social and financial responsibilities. Companies should submit more than accounting-compliant financial statements. Companies should prioritize social and ethical responsibility while lowering environmental impact. Organizations must benefit the community and satisfy stakeholders. Most nations require business reporting to include non-financial data. Studies have linked corporate social sustainability to commercial performance, but there is no consensus, and it is hard to quantify (Waddock & Graves, 2019). Corporate social sustainability spans academic fields, which may explain the discrepancies. Some of these fields include strategic thinking, human resource management, cultural challenges, and shareholder and stakeholder concerns. Another study reveals that mechanisms are difficult to understand without explanatory variables. Business social sustainability and performance are well studied. Does CSR effectiveness affect company success? The results were ambiguous. A relationship like this may appear tempting, but other research has found negative or mixed results (Carol and Mittal, 2008).

Corporate social sustainability performance was largely analyzed utilizing varied vendor databases. Margolis et al. (2019) presented alternative indicators to fill a study gap. Previous studies solely examined a linear relationship between firm social sustainability and financial performance. Recent microeconomic theory improvements imply a non-linear framework (Manasakis et al., 2017; Garca-Gallego & Georgantzis, 2019). Barnett and Salomon (2017) found little empirical research on corporate social sustainability and firm performance despite economic intuition. Companies involved in socially responsible programs pay more attention. They perform worse as their sustainability rating climbs linearly. Holder-Webb, Cohen, Nath, and Wood (2019) suggest corporations report social responsibility for numerous reasons. Margolis and Walsh (2018) said CSR boosts company performance. The shareholder method showed a positive relationship between CSR and financial performance. According to Alharthey (2016), CSR helps enterprises satisfy stakeholders, improving capital and shareholder value. Investors like CSR-focused firms. Branco and Rodrigues (2018) indicated that socially responsible activities increase profits and improve social and environmental behavior. Corporate performance was favorably connected with CSR disclosures by Bayoud et al. (2017).

2.4 REVIEW OF THEORIES

2.4.1 STAKEHOLDER THEORY

Edward Freeman R. introduced the stakeholder theory in 1984. The stakeholder theory argues that there is an organizational responsibility in the disclosure of corporate information for stakeholders concerning the most important activities, which is the main source of disclosure through financial statements (Maria, Ana, & Maria, 2011). In this respect, Rodrigues (2006) considers that, due to the complexity of the economic reality and the increasing ownership of intangible assets by groups, these statements continually detour from the purpose of providing external users with a picture of the business reality. The content analysis of corporate reports by several stakeholders justifies the importance of this theory in our study

(Guthrie, Perry, & Riccert, 2006). According to stakeholder theory, even if they choose not to use it, all stakeholders have a right to receive information about how organizational activities impact them (Deegan, 2000). The annual report efficiently communicates with the various interest groups deemed to have an interest in controlling certain aspects of an organization (Guthrie et al., 2004).

2.4.2. LEGITIMACY THEORY

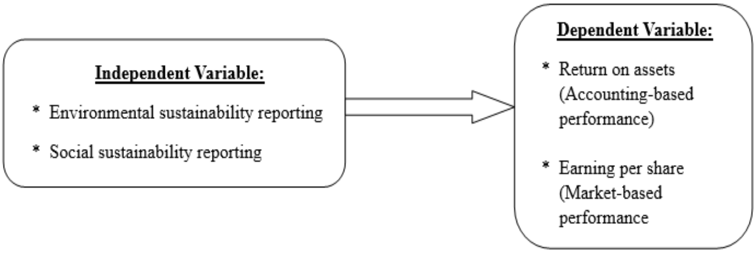
Legality determines legitimacy, according to Deegan (2002). Legitimacy theory states that organizations must follow community norms (Supriyadi & Sulistiyo, 2019). This guarantees that outside parties accept the company's status and operations (Supriyadi & Sulistiyo, 2019). Legitimacy aligns attitudes and views that all firm actions are desirable, appropriate, and follow social norms (Suchman, 1995).

3. CONCEPTUAL FRAMEWORK

Based on the aforementioned theoretical reviews, the study concludes that the stakeholder's theory best explains the predicted correlations between the chosen sustainability reporting categories and the corporate firm performance metrics of listed consumer goods companies in Nigeria. This is justified considering that the stakeholder theory stresses the need for companies to move beyond the traditional focus on profit maximization to a broader approach of accommodating the interests of all the organization’s stakeholders, which is where sustainability reporting comes in. The study employs the secondary data from Nigeria's listed non-financial firms audited annual reports is analyzed using the ex post facto research method in this study. We included all twenty-one consumer products companies listed on the Nigerian Exchange Group (NGX) as of December 31, 2023.

Pre-regression analyses included descriptive statistics and correlation. The former analyzed data mean, maximum, minimum, and standard deviation, while the latter examined variable relationships and collinearity. Regression determined the direction of any potential influence and the association between sustainability reporting.

The study employs Abd-Mutalib & Shafai (2023) and Emeka-Nwokeji et al. (2019) panel regression models based on Figure 1's conceptual framework. This study incorporated accounting-based ROA and market-based EPS company performance indicators to the models. The functional model is Society and environment disclosures (Y1) = f (1). Based on ROA and EPS, Y1 measures company performance. Environmental and social disclosures represent sustainable disclosure, the independent variable. Consequently, the study presents its framework, which illustrates the expected relationships among the selected variables, as depicted in the figure below.



The above figure presents the systematic diagram created in this study. The systematic diagram suggests that variances in both accounting (ROA) and market performance (EPS) can be influenced by the degrees of both economic and social sustainability reporting practices. Other factors may affect firm performance besides the variables (Aifuwa, 2020; Buallay et al., 2019). To account for firm sizes and debt ratios, the analysis controlled for business size and leverage. According to Aifuwa (2020), large companies are more likely to comply with disclosure standards due to their visibility, but highly leveraged corporations may lack the financial resources to adopt cost-effective sustainability practices. The model is presented below:

Model 1: Return on Assets (ROA)

$$ROA_{i,t} = \beta_0 + \beta_1 ENVD_{i,t} + \beta_2 SOCD_{i,t} + \beta_3 FSIZE_{i,t} + \beta_4 LEV_{i,t} + \epsilon_{i,t} \ldots\ldots(1)$$

Model 2: Earnings Per Share (EPS)

$$EPS_{i,t} = \beta_0 + \beta_1 ENVD_{i,t} + \beta_2 SOCD_{i,t} + \beta_3 FSIZE_{i,t} + \beta_4 LEV_{i,t} + \epsilon_{i,t} \ldots\ldots(2)$$

Where: ROA= Return on equity (Dependent variable); EPS = Earnings per share (Dependent variable); ENVD = Environmental sustainability disclosure; SOCD = Social Sustainability Disclosure; FSIZE = firm size; LEV = Leverage; β_0 = Model intercept; β_2…... β_3= Coefficient to be estimated, where β_1…... β_4> 0; *it* = Cross Section of listed companies with time variant; and $\boldsymbol{\mu}$= stochastic error term.

Table 3.1 *Measurement of Variables*

Variable	Type	Measurement	Sources	Apriori
Return on assets (ROA)	Dependent	Net income divided by total assets	Ioannou and Serafeim (2021)	
Earnings per share (EPS)	Dependent	Net income divided average number of shares outstanding	Ioannou and Serafeim (2021)	
Environmental sustainability disclosure (ENVD)	Independent	Content Analysis based on the Global Reporting Initiative (GRI, 2018)	Daniel, Mogaka, Makori, Ambrose and Jagongo (2021)	+
Corporate Social sustainability disclosure (SOCD)	Independent	Content Analysis based on the Global Reporting Initiative (GRI, 2018)	Lo & Sheu, (2017)	+
Firm size (FSIZE)	Control	Natural logarithm of total assets	Dobbs & Standa, (2016)	+
Leverage (LEV)	Control	Total debt divided by total assets	Hussain (2015)	-

Source: Researcher's Compilation, 2024

4. DATA ANALYSIS AND DISCUSSIONS

This study investigated sustainability reporting and Nigerian publicly listed consumer goods businesses' performance from 2014 to 2023. The study used return on assets (ROA), an accounting-based statistic, and earnings per share (EPS), a market-based metric, as well as company size and leverage as control variables, as per the literature. Pre-regression analysis included descriptive statistics, a correlation matrix, and data normality. Table 4.1 shows the mean, maximum, minimum, standard deviation, and sum for each variable of interest for the selected sector of Nigerian listed non-financial businesses in this study.

Table 4.1: *Descriptive Statistics*

	ROA	**EPS**	**ENVD**	**SOCD**	**FSIZE**	**LEV**
Mean	0.064474	3.114708	0.275231	0.314739	17.09819	1.349355
Median	0.035991	0.575285	0.291667	0.306122	17.58665	0.608947
Maximum	6.174312	61.77393	0.458333	0.428571	20.31832	19.55710
Minimum	-2.35991	-5.74275	0.000000	0.244898	10.95583	0.193620
Std. Dev.	0.560698	10.16655	0.100771	0.051455	2.283582	3.213306
Jarque-Bera	52934.89	3132.278	25.03257	17.11495	21.35892	3063.173
Probability	0.000000	0.000000	0.000004	0.000192	0.000023	0.000000
Observations	180	180	180	180	180	180

Source: EViews 10 (2024)

Table 4.1 shows a 6.45% mean return on assets (ROA). The median value of 0.036 is lower than the mean value of 0.0645, demonstrating that consumer goods companies' return on assets (ROA) is heterogeneous throughout the 10-year period. The sampled companies' cross-sectional ROAs vary greatly, with a standard deviation of 56% surpassing the mean of 6.5%. Many sampled consumer goods manufacturers' ROAs vary. The average EPS is ₦3.115. The median figure of ₦0.58 (58k) is lower than the mean value, demonstrating EPS variation among consumer goods companies. The study found significant EPS heterogeneity across 10 years. Significant variation between maximum ₦61.77 and minimum -₦5.74 confirms this claim. Negative EPS implies that certain sampled firms had negative earnings over the evaluated periods, resulting in a negative net loss per share. The tested company discloses 27.5% of environmental sustainability information, according to the mean ENVD value. The greatest and minimum numbers show that some sample companies reported 46% of GRI-G4's environmental sustainability standards, while others did not reveal any in certain years. About 50% of consumer products companies submitted environmental information at or below the median value of 29%. Some consumer products firms disclose high environmental sustainability values, which may offset poor values.

The mean SOCD result shows that studied organizations disclose 31.5% of CSR. Companies in the sample disclose more social sustainability information than environmental sustainability. Unlike the ENVD, the minimum SOCD was 0.245, suggesting all sampled companies reported on their social performance in the 10-year period, with the lowest SOCD being 24.5%. One sample company revealed up to 43% of the social sustainability requirement in one year, as shown in the maximum value. The mean debt-to-assets ratio (LEV) was 1.35, which is over 100% and indicates that debt makes up the capital of most of the enterprises examined. Overall, sample companies are substantially leveraged.

4.1. CORRELATION ANALYSIS

Table 4.2: *Result of the Correlation matrix*

Correlation						
Probability	ROA	EPS	ENVD	SOCD	FSIZE	LEV
ROA	1.000000					

EPS	0.074393	1.000000				
	0.3209	-----				
ENVD	-0.020891	0.075738	1.000000			
	0.7807	0.3123	-----			
SOCD	-0.039022	-0.085894	0.502038	1.000000		
	0.6030	0.2516	0.0000	-----		

FSIZE	0.270432	0.058848	0.565355	0.458517	1.000000	
	0.0002	0.4326	0.0000	0.0000	-----	
LEV	0.053501	-0.058084	-0.245577	-0.249395	-0.570708	1.000000
	0.4757	0.4386	0.0009	0.0007	0.0000	-----

Source: *EViews 10 (2024)*

Table 4.2 shows that environmental (ENVD) and social (SOCD) disclosures had negative correlation values of -0.021 and -0.039, respectively. Both move in opposing directions with ROA because of the negative coefficients. One glance at their probability values (0.78 and 0.60) suggests they are not statistically significant. Leverage had a negative correlation coefficient of -0.05 and a non-significant probability value of 1.38, indicating an adverse relationship between leverage and performance proxy. All other variables (EPS and FSIZE) had positive correlation coefficients, aligning with the performance proxy. The only one with statistically significant probability values of 0.007 at the 1% level of confidence is FSIZE. According to the correlation, large firms have a higher ROA.

4.2. PANEL REGRESSION

The panel estimation approaches for fixed-effect and random-effect models were conducted. However, to determine the most suitable option, Hausman's Test was utilized, and the resulting outcome is presented below:

Table 4.3: *Hausman Test Results*

(ROA)	**Model 1**			**(EPS)**	**Model 2**		
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	24.338276	7	0.001*	Cross-section random	24.183096	9	0.004*

Source: *EViews 10 Output (2024) *Significant, showing desirability of the fixed effect models*

Based on the data presented in Table 4.3, it is evident that the fixed effect models are more suited than random effect models in capturing the relationships in the panel estimations.

Table 4.4 *Regression Results*

Fixed Effects:	Model 1 (ROA)				*Fixed Effects:*	Model 2 (EPS)		
Variables	**Coefficient**	**t-Statistic**	**Prob.**		**Variables**	**Coefficient**	**t-Statistic**	**Prob.**
C	0.678739	5.994784	0.0000***		C	-12.73728	-2.741776	0.0068***
ENVD	0.005278	0.582433	0.5611		ENVD	-10.97883	-0.643967	0.5205
SOCD	-1.135409	-2.457281	0.0151**		SOCD	24.01211	1.927020	0.0556*
FSIZE	0.721634	2.611647	0.0099***		FSIZE	0.598130	2.178157	0.0308**
LEV	-0.140811	-7.258131	0.0000***		LEV	-0.005215	-0.057107	0.9545
R^2			0.750849		**R^2**			0.851071
Adjusted R^2			0.712271		**Adjusted R^2**			0.828012
F-stat (p-value)			19.5(0.000)		**F-stat (p-value)**			36.9(0.000)
Durbin Watson			1.528207		**Durbin Watson**			1.884241

Source: EViews 10 (2024) ***, **, *significant at 1%, 5% and 10% levels respectively

Table 4.4 shows that the fixed effect models' F-statistic values of 19.5 (p-value = 0.000) and 36.9 (p-value = 0.000) are statistically significant at 1%. The results suggest that both models can draw conclusions from the testing. The two fixed effect models had R-squared about 75% and 85%, respectively. Thus, Model 2 with EPS as the dependent variable is more explanatory than Model 1 with ROA. The modified R-square values of 0.71 and 0.83 demonstrate that ENVD, SOCD, FSIZE, and LEV couldn't explain 29% and 17% of the systematic cross-sectional variations in ROA and EPS, respectively, when degrees of freedom were considered. This shows that both theories explain well. Model one shows that social responsibility (SOCD) and leverage (LEV) have negative coefficients (-1.135 and -0.141, respectively) on the proxy measure of corporate firm performance, return on assets (ROA). Conversely, environmental disclosure (ENVD) and business size (FSIZE) have positive coefficients of 0.005 and 0.722. Only SOCD, FSIZE, and LEV have statistical significance at the 5%, 1%, and 1% significance levels, respectively, based on their probability values. Assuming all other factors are stable, a one-unit rise in SOCD predicts a 1.135-unit fall in ROA. No statistically significant effect of environmental disclosure (ENVD) on ROA. In model two, which employed EPS as a proxy for firm market performance, the coefficients of the two independent variables were opposite to model one. ENVD was negative (-10.97788) and SOCD was positive (24.012), but only the latter was statistically significant at the 10% level of significance since its probability value (0.056) was greater than 5% but less than 10%. These findings suggest that high CSR (social sustainability) information disclosures improve market performance, holding other variables constant.

4.3 DISCUSSION OF FINDINGS

The study found contradictory results on environmental sustainability disclosure and firm performance. For example, return on assets anticipated a positive impact but EPS model 2 predicted a negative coefficient. None were statistically significant because all results had high p-values that exceeded the three significance thresholds. Otherwise, reporting environmental sustainability measures did not increase firms' financial performance over 10 years. This includes ROA's accounting-based and EPS's market-based measurements. Consumer products accounting and market performance seem unaffected by environmental sustainability disclosure compliance. The findings contradicted Ali (2015), who concluded that environmental sustainability disclosure expenses hurt business performance. This study refuted Plumlee, Brown, Hayes, and Marshall (2021), who showed that environmentally sustainable enterprises had greater costs and underperformed financially. This study supports Malik, Al Mamun, and Amin (2018), who discovered that environmental sustainability disclosure influences company performance differently. Environmental sustainability research suggests that companies who ignore their environmental responsibilities are more likely to encounter protests like the Niger Delta. These conditions may hurt workplace morale and performance. The study found that managers communicate environmental information to satisfy stakeholders, improve society, retain legitimacy, maximize long-term profit, and reduce systemic knowledge asymmetry. They may not affect the firm's success immediately, but they may later. Morsing and Schultz (2020), Merkl-Davies and Brennan (2020), and Du et al. (2020) backed this position. Like Markori and Jagongo (2021), Bassey Effiok and Efon (2021), Oti, Effiong, and Tafang (2021), and Asuquo (2021), environmental reporting did not affect ROA.

The study demonstrated a statistically significant negative correlation between Nigerian consumer goods companies' social sustainability disclosure and ROA and EPS. CSR and other social sustainability initiatives lower corporate profitability at 10% relevance. Engagement may increase market performance, notably EPS, as shown by a favorable association. This variable only reached statistical significance with 10% confidence, therefore its effect on EPS is small. The above interpretation confirms Ali (2015)'s conclusion that social duty has a statistically significant negative effect. Social sustainability disclosure's high expenses hinder business performance over time, the author said. Compared to relevant studies, the results differed from Asuquo (2021). Asuquo discovered that several Nigerian firms were actively involved in social sustainability measures, which were still emerging. Asuquo (2021) suggests donating money or public amenities to reduce performance impacts. This result also supported Ndukwe's (2019) observation that companies that invest in sustainable business practices like employee training and welfare, health and safety at work, pollution prevention, energy efficiency, and community support programs pay more, which hurts profits and puts them at a short-term economic disadvantage. Yoon et al. (2006) caution that social sustainability projects might hurt a company's reputation if customers see them as dishonest, especially if they think the company is engaging simply to boost its image. The study indicated that a single error resulting in negative publicity will affect a company's reputation more without social sustainability. Thus, social sustainability risks cost (Yoon et al., 2020; Bhattacharya & Sen, 2020). In contrast, Odetayo Adeyemi and Sajujigbe (2021) reported identical earnings per share model results (model 2). They believe corporate social responsibility can increase a firm's market value, long-term profitability, and survival. Good PR and ethics achieve this. This minimized business and legal risks, strengthening shareholder trust. To achieve sustainable growth, Odetayo et al. (2021) say a company must favorably impact its immediate surrounds and stakeholders, such as consumers, employees, investors, communities, and others. According to Margolis et al. (2020), social sustainability offered companies a competitive edge by increasing market shares and protecting stakeholder interests. The study found that socially responsible companies last longer. The findings match Nik Ahmad and Abdul Rahim (2020) and Rashid and Ibrahim. These studies suggest that a proactive social sustainability plan can enable a company to acquire big finance resources, offsetting any immediate financial losses from social disclosure.

5. RECOMMENDATION AND CONCLUSION

Below are the key conclusions from the panel regression analysis: Positive but not statistically significant correlation exists between environmental sustainability and ROA of listed consumer products businesses in Nigeria. Same minimal influence on firm's EPS. This study concluded that environmental sustainability did not improve accounting or market performance. ROA's financial success is statistically harmed by social sustainability reporting. Social sustainability reporting slightly increased EPS by 10%. Social sustainability reporting reduces return on assets, however consumer products companies that prioritize social and CSR practices have higher EPS, all things being equal. This 2014–2023 study explored how sustainability reporting affected Nigerian Exchange Group consumer products companies. It used two-panel regression models with ROA and EPS as dependent variables. Our key explanatory factors were environmental and social sustainability reporting. The study accounted for corporate size and leverage. From 2014 to 2023 eighteen consumer products businesses were studying 180 firm-year observations, eliminating three due to data shortages. The fixed effect panel regression methods showed that social sustainability reporting decreased return on assets but boosted earnings per share for the corporations analyzed. Social responsibility cost more than it earned, yet it helped the company succeed in the market. Environmental sustainability reporting positively and negatively influences return on assets and earnings per share, the study revealed. We found no statistical significance for these effects. This study supports agency theory by showing that environmental reporting boosts profits. The firm may not improve considerably. This study suggests investors, customers, and other stakeholders will trust and satisfy selected consumer goods firms. Perception of management's products and services should boost financial returns. This study recommended company sustainability activities that matched expectations. The study indicated that replacing environmental reporting boosts profitability before interest and tax significantly. Since investors may earn, that was commendable. The organization's financial performance suffered from social responsibility reporting policies. We developed many basic approaches to address undesirable and inconsequential impacts. Environmental reporting policies, including disclosure requirements, improve business health and longevity. Managers should pursue social sustainability goals with authenticity and openness to avoid financial disasters. Managers must prioritize consumer needs to boost social sustainability engagement policy acceptance and avoid corporate losses. Corporate social responsibility measures may benefit all parties financially by aligning company goals with stakeholder goals. The study evaluated Nigerian listed consumer products companies' reporting on two key sustainability reporting areas, expanding sustainability disclosure knowledge. Using ROA and EPS performance indicators is a departure from traditional accounting literature, which focuses on financial ratios to evaluate corporate success. The study only covers NGX consumer products manufacturers. Thus, the findings may not apply to other Nigerian Exchange Group regions. To boost generalizability, future studies can cover more environmentally detrimental economic sectors. Future study should examine how sustainability information releases affect market-based multivariant corporate performance measures like Tobin's q. The study measured firm performance via ROA and EPS. To compare how sustainability reporting disclosures affect performance indices in financial and non-financial organizations, researchers should compare them.

REFERENCES

Abd-Mutalib, H., & Shafai, N.A. (2023). Firm financial performance and sustainability reporting: the role of institutional investors' ownership. *International Journal of Business Governance and Ethics, 17*(2), 10-22.

Abdullah, M.I., Ashraf, S., & Sarfraz, M. (2017). The organizational identification perspective of CSR on creative performance: the moderating role of creative self-efficacy, *Sustainability*, 9 (11), 21-25.

Akinwunmi, A.J., Adeyemi, A.A., Alao, A.A., & Ajayi-Owoeye, O.A. (2020). Foreign ownership structure as a monitoring tool for audit quality: Evidence from Nigeria. *European Journal of Business, Economics and Accountancy, 8*(1), 61-76.

Aras, G. & Crowther, D. (2020). Corporate sustainability reporting: A study in disingenuity *Journal of Business Ethics*, 87, 279 –288.

Baboukardos D., & Rimmel, G. (2021). Value relevance of accounting information under an integrated reporting approach: A Research Note. *Economic Journal of Accounting and Public Policy*, 35(4), 56-63.

Barton, J., Hansen, T.B. & Pownall, G. (2020). Which performance measures do investors around the world value the most—and why? *The Accounting Review*, 85, 753-789.

Berenson, I. & Levine, M (2019). *Basic business statistics: Concepts and applications,* New Delhi, Prentice-Hall of India Pvt Ltd.

Choi, S., & Lee, S. (2018). Revisiting the financial performance–corporate social performance link, *International Journal of Contemporary Hospitality Management*, 30(7) 2586-2602.

Deegan, C. (2020). Organizational legitimacy as a motive for sustainability reporting, in Unerman, J., Bebbington, J., & O'Dwyer, B. (Eds.) *Sustainability accounting and accountability* London: Routledge.

Dermawan, E.S., & Indrajathi, M.D. (2017). The quality of operating profit and other comprehensive income; Evidence from Indonesia stock exchange. *International Journal of Economic Perspectives*, 11, 1545-1557.

Dillard, J. F. (2020). Legitimating the Social Accounting Project: An ethic of accountability, in Unerman, J., Bebbington, J., & O'Dwyer, B. (Eds.) *Sustainability Accounting and Accountability* (37-53), London: Routledge.

Dipiazza Jr., S.A. & Eccles, R. C. (2020). *Building public trust: The future of corporate reporting,* New York: John Wiley & Sons, Inc.

Duke II, J., & Kankpang, K. (2021). Implications of corporate social responsibility for the performance of Nigerian firms. *Advances in Management & Applied Economics*, 3 (5).73-87.

Edwards, J.B. (2021) Modern gross profit analysis. *The Journal of Corporate Accounting and Finance*, 27, 45-55.

Edwards, R.A. (2020). *The sustainability revolution: Portrait of a paradigm shift,* Canada: New Society Publishers.

Ekwueme, C. (2021). Social responsibility accounting: An overview, in M.A. Mainoma (Ed.) Contemporary issues in accounting development (45-63), A publication of the Association of National Accountants of Nigeria (ANAN) MCPD 2011.

Elhennawy, E.M. (2021). The impact of ownership structure on the quality of financial reporting: An empirical study on firms listed on the Egyptian Stock of Exchange. *EasyChair Preprint,* 5299. Retrieved from https://easychair.org/publications/preprint_open/L4wg

Emeka-Nwokeji, N. A, Osisioma BC, & Benjamin C. (2019) Sustainability disclosures and market value of firms in emerging economy. *European Journal of Accounting*, *Auditing and Finance Research*. 5(2), 115-120.

Epstein, M. J. (2018). *Making sustainability work: Best practices in managing and measuring corporate Social, environmental, and economic impacts,* UK: Greenleaf Publishing Limited.

Ezejiofor, R. A. John-Akamelu, R. & Chigbo, B. E. (2016). Effect of sustainability environmental cost accounting on financial performance of Nigerian corporate organizations. *International Journal of Scientific Research and Management (IJSRM), 4*(8), 4536-4549.

Gould, S. (2011). Accounting for Sustainability. *Finance & Management: Accounting Plus Issues, 01,* 1-20. Retrieved from https://www.ifac.org/_flysystem/azure-private/news/files/2011-03-cpa-ireland-accountancyplus-accounting-for-sustainability-stathis-gould.pdf

Guthrie, J., & Parker, L.D (2019). Corporate social disclosure practices: comprehensive international analysis. *Advances In Public Interest Accounting*, 3, 159-175.

Hongming, X., Ahmed, B., Hussain, A., Rehman, A., Ullah, I., & Khan, F. U. (2020). Sustainability Reporting and Firm Performance: The Demonstration of PakistaniFirms. *SAGE Open*, *10*(3). https://doi.org/10.1177/2158244020953180

Ioannou, I. & Serafeim, G. (2021). *The consequences of mandatory corporate sustainability Reporting.* In Harvard Business School Research Working Paper No. 11-100; Harvard Business School: Boston, MA, USA.

Ivan, O.R. (2019). Sustainability in accounting basis: A conceptual Framework, *Annales Universittatis Apulensis Oeconomica,* 11(1), 106-116.

Kenth, P., & Stewart, J. (2018). Corporate governance and Disclosure on the transition to international financial Reporting standards

Khan, M. Y., & Jain, P. K. (2020). Financial management: Text, problems, and cases (4th ed.), New Delhi: Text McGrow-Hill Publishing Company Limited.

Kolk, A. (2020). A decade of sustainability reporting: Development and significance, *International Journal of Environment and Sustainable Development* 3(1), 51-64.

KPMG (2020). Impact of COVID-19 on the Nigerian consumer and industrial markets. Retrieved from https://assets.kpmg.com/content/

dam/kpmg/ng/pdf/advisory/impact-of-covid-19-on-the-nigerian-consumer-markets-sector.pdf

LiDestri, A.M., Picone, P.M. & Mina, A. (2020) Bringing strategy back into financial systems of performance measurement: Integrating EVA and PBC. *Business Systems Review*, 1, 85-102

Makori, D. M., & Jagongo, A. (2021). Environmental Accounting and firm profitability: An empirical analysis of selected firms listed in Bombay Stock Exchange, India, *International Journal of Humanities and Social Sciences*, 3 (8), 41-56.

Marshall, D. H., Mc Manus, W, W., & Viele, D. F. (2020). *Accounting: What the numbers mean* (6th ed.), New York: Irwin.

Ndukwe, A. G. A. (2019). Corporate risk reporting practices and their determinants: A study of selected quoted firms in Nigeria, *Nigeria Research Journal of Accountancy* 1 (1), 32-40.

Nyirenda and Ngwakwe, C. C. (2018). Environmental responsibility and firm performance: Evidence from Nigeria, *International Journal of Social, Management, Economics and Business Engineering*, 2 (10), 187-194.

O'Dwyer, B. O., Unerman, J, & Hession, A. (2020). User needs in sustainability reporting: Perspectives of stakeholders in Ireland, *European Accounting Review* 14(4), 759-787.

Olowookere, J.K., Shittu, R.M., & Olorede, T.S. (2023). Ownership Structure and Voluntary Disclosure among Nigerian Listed Non-Financial Firms. *Izvestiya, Varna University of Economics, 1*, 41-59.

Oprean-Stan, C., Oncioiu, I., Iuga, I. C., & Stan, S. (2020). Impact of sustainability reporting and inadequate management of ESG Factors on corporate performance and sustainable growth. *Sustainability*, *12*(20), 8536. MDPI AG.

Osisioma, B. C. (2019). Analysis of financial statements. In Osisioma, B. C. (Ed.) Studies in accounting: Text and reading, revised, and enlarged, (338-359),

Schaltegger, S., & Burritt, R.L. (2020). Sustainability accounting reporting. Fad or trend? *Accounting Auditing and Accountability Journal*. emerald.com

Udin, S., Khan, M. A., & Javid, A. Y. (2017). The effects of ownership structure on likelihood of financial distress: An empirical evidence. *Corporate Governance: The International Journal of Business in Society*, *17*(4), 589-612. https://doi.org/10.1108/CG-03-2016-0067

Unerman, J., Bebbington, J., & O'Dwyer, B. (2007), (Eds.), *Sustainability accounting and accountability* (104-126), London: Routledge.

Yan, M., Jia, F., Chen, L., & Yan, F. (2022). Assurance process for sustainability reporting: Towards a conceptual framework. *Journal of Cleaner Production*, 377(1), 134156. DOI: https://doi.org/10.1016/j.jclepro.2022.134156