

# SUSTAINABILITY REPORTING AND FINANCIAL STABILITY OF LISTED FIRMS IN NIGERIA

## RELATÓRIOS DE SUSTENTABILIDADE E ESTABILIDADE FINANCEIRA DE EMPRESAS LISTADAS NA NIGÉRIA

Article received on: 6/30/2025

Article accepted on: 9/29/2025

**Moses T. Lawrence (PhD, FCA)\***

\*Department of Accounting and Finance, Mountain Top University  
Ogun State, Nigeria

Orcid: <https://orcid.org/0009-0008-2360-9077>  
[lawtmose@gmail.com](mailto:lawtmose@gmail.com)

**John Akinyomi (PhD, FCA) \***

\*Department of Accounting and Finance, Mountain Top University  
Ogun State, Nigeria

Orcid: <https://orcid.org/0000-0002-9824-6230>  
[ojakinyomi@mtu.edu.ng](mailto:ojakinyomi@mtu.edu.ng)

**Taleatu T. Akinwumi (PhD, FCA) \***

\*Department of Accounting and Finance, Mountain Top University  
Ogun State, Nigeria

Orcid: <https://orcid.org/0000-0001-7584-2470>  
[ttakinwunmi@mtu.edu.ng](mailto:ttakinwunmi@mtu.edu.ng)

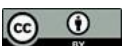
The authors declare that there is no conflict of interest

### Abstract

Sustainability reporting offer insights into an organization's environmental, social, and governance performance, emphasize significant challenges, and outline the organization's reform strategies. It then becomes imperative for a company to devise a sustainability strategy if they must survive in this century. However, ignoring the environment while trying to achieve the goal of the organization will not only make things worse, but will make businesses unsustainable in the long run. The effect of sustainability reporting on the financial stability of listed entities in Nigeria was investigated using a quantitative approach, with data extracted from the annual reports of 76 listed companies spanning a period of fourteen years (2010–2023). The sustainability reporting variables included economic, environmental, social, and governance disclosures, while the performance indicators comprised profitability, financial stability, liquidity, investment returns, and corporate image. Panel regression analysis, specifically the random effects model, was conducted based on the Hausman test results, ensuring robust and reliable findings. Financial

### Resumo

Relatórios de sustentabilidade oferecem insights sobre o desempenho ambiental, social e de governança de uma organização, enfatizam desafios significativos e delineiam as estratégias de reforma da organização. Torna-se, então, imperativo para uma empresa elaborar uma estratégia de sustentabilidade se quiser sobreviver neste século. No entanto, ignorar o meio ambiente ao tentar atingir o objetivo da organização não só piorará as coisas, como também tornará os negócios insustentáveis a longo prazo. O efeito dos relatórios de sustentabilidade na estabilidade financeira de entidades listadas na Nigéria foi investigado usando uma abordagem quantitativa, com dados extraídos dos relatórios anuais de 76 empresas listadas abrangendo um período de quatorze anos (2010-2023). As variáveis dos relatórios de sustentabilidade incluíram divulgações econômicas, ambientais, sociais e de governança, enquanto os indicadores de desempenho compreenderam lucratividade, estabilidade financeira, liquidez, retorno de investimentos e imagem corporativa. A análise de regressão em painel, especificamente o



stability, as measured by the Debt-to-Equity Ratio (DTER), was found to be significantly influenced by sustainability reporting, with varying effects across its dimensions. Economic disclosures were positively associated with financial stability. Environmental disclosures exhibited a strong negative effect on financial stability. Social disclosures were positively related to financial stability. Governance disclosures were found to have an insignificant effect on financial stability. The results of this study align with stakeholder theory, which posits that addressing stakeholder concerns, such as economic and social transparency, enhances financial outcomes.

**Keywords:** Financial Stability. Sustainability Reporting. Listed Entities. Nigeria.

*modelo de efeitos aleatórios, foi conduzida com base nos resultados do teste de Hausman, garantindo resultados robustos e confiáveis. A estabilidade financeira, medida pelo Índice de Dívida sobre Patrimônio Líquido (DTER), foi significativamente influenciada pelos relatórios de sustentabilidade, com efeitos variados em suas dimensões. As divulgações econômicas foram positivamente associadas à estabilidade financeira. As divulgações ambientais apresentaram um forte efeito negativo sobre a estabilidade financeira. As divulgações sociais foram positivamente relacionadas à estabilidade financeira. As divulgações de governança tiveram um efeito insignificante sobre a estabilidade financeira. Os resultados deste estudo estão alinhados com a teoria das partes interessadas, que postula que abordar as preocupações das partes interessadas, como a transparência econômica e social, melhora os resultados financeiros.*

**Palavras-chave:** Estabilidade Financeira. Relatórios de Sustentabilidade. Entidades Listadas. Nigéria.

## 1 INTRODUCTION

Sustainability reporting is essential, as organizations aiming to enhance company resilience must convey their advancements in environmental, social, and governance (ESG) matters to all stakeholders (KPMG, 2023). The sustainability report is anticipated to offer insights into an organization's environmental, social, and governance performance, emphasize significant challenges, and outline the organization's reform strategies (Adeniran & Olorunfemi, 2020). It then becomes imperative for a company to device a sustainability strategy if they must survive in this century, according to Okwuosa and Adesina (2021). However, ignoring the environment while trying to achieve the goal of the organization will not only make things worse but will make businesses unsustainable in the long run (Buallay, 2021). When this occurs, the entire economy will be impacted, and businesses that might have addressed the initial issue but allowed it to deteriorate will ultimately be the most affected.

Sustainability reporting is currently a contemporary issue in accounting studies (Muhammad, Fong, Chung, Jiri, & Awais (2018). Many researchers are going into this area to empirically document how companies are coping with the demand for

sustainability, especially in this 21<sup>st</sup> Century. These researchers include but not limited to Korolo and Korolo (2023), Okon *et al.* (2023), Umoren and Ukpong (2022), Okolie and Igaga (2020), Clarissa and Rasmini (2018), the list is inexhaustible.

Following from the above, Olabode (2023) made it clear, that since businesses are the major contributors to the environmental pollution in the world, they must be held accountable for also remedying the situation. The relationship between the business and the immediate environment should be a symbiotic one (Aondoakaa, 2015). While contributing to the economy, there must be a return going to the environment as well, so that businesses can have an enabling environment to operate in.

Nnamani, Onyekwelu, Ugwu and Kevin (2017) maintain that the environment must be in the budget of every economic organization. This is because; profit will become unsustainable in the long run if the environment from which the profit is being made is constantly being ignored without remedy (Unerman, Bebbington, & O'Dwyer, 2007). Economic activities must be socially, environmentally and sustainably accepted before they are carried out (Ezeokafor, 2019).

Following from the above, the Securities and Exchange Commission in Nigeria made it clear in a sustainability stakeholder's forum (Securities Exchange Commission forum, 2019) that to be sustainable, every business must think of three key issues before they reach economic decision. These key issues are People, Planet and Profit. Any attempt to look away from any of these will result in an unsustainable decision which will never be environmentally friendly (Securities Exchange Commission forum, 2019).

It therefore behooves every business organization to consider people who are working in those businesses, people living around the businesses, people who are affected, one way or the other, by the decision of business and people who are less privileged to fight for themselves before they stamp off their business decision. Businesses are also to consider the planet (environment) in which they operate. The planet is important to the operation of any business. If the world becomes inhospitable to commerce, no enterprise will endure. Effiong, Oti, and Akpan (2019) assert that the planet must be seen as a crucial stakeholder in any organizational business choice.

Aondoakaa (2015) endorsed this perspective by vividly illustrating a caricature of unsustainable business decisions focused on "economic growth," which he characterizes as marked by energy- and material-intensive production and exploitative social interactions. Effiong *et al.* (2019) determined that this is socially and environmentally

unsustainable and unacceptable. Aondoakaa (2015) asserts that if businesses operate in a manner detrimental to society, resulting in a disruption of the social harmony essential for stable operations, then such activities are neither economically nor socially sustainable.

It is inappropriate for any firm to assume that its actions do not affect its local environment. This is due to the fact that business activities occur inside the environment. Olabode (2023) underscored the necessity for firms to prioritize sustainable development to mitigate their influence on the Earth. A sustainable development effort is expected to reduce the consumption of natural resources and lower waste and pollutant emissions throughout its life cycle, hence safeguarding the needs of future generations (Hahn & Kuhnen, 2013). Nigeria is uniquely confronted with environmental concerns arising from industrial activities.

Contemporary businesses are progressively being held responsible for their environmental impact. Aondoakaa (2015) asserts that sustainability is no longer a matter of choice. Every firm must assure compliance with sustainability, not solely in terms of reporting. Occasionally, organizations only satisfy reporting obligations without ensuring that their everyday operations are sustainable, particularly in a country where any practices, regardless of quality, are permitted. Unerman, Bebbington, and O'Dwyer (2007) assert that one approach to addressing these concerns is to consider the long-term necessity of ensuring that all economic activities are socially and environmentally sustainable. Short-term economic growth may occur at the expense of societal and environmental well-being. This is unfeasible in the long term. Businesses require a stable society to operate profitably. It is not uncommon for certain enterprises to derive profit from mitigating the effects of social disputes, such as security service providers and hospitals giving ambulance services.

Ekwueme (2011) corroborated the perspective that corporations are being held accountable for their environmental impact. White (2009) concurs that the impetus for firms to allay public apprehension regarding their conduct has heightened the emphasis on sustainability. Organizations are prioritizing the interests of both their stakeholders and stockholders. In other words, there is an augmented stakeholder involvement of firms. The social, environmental, and economic stakeholders constitute the new portfolio of stakeholder engagement necessary for company success (Ezeokafor & Amhalu, 2019). Aondoakaa (2015) asserts that business managers are increasingly recognizing the

necessity of integrating this method into their corporate strategies to ensure future prosperity. Consequently, it is imperative for every corporation to guarantee compliance on their part to endure in the contemporary business landscape of the 21st Century (Ekwueme, 2011).

Given the necessity for business organizations to formulate a strategy that addresses current environmental issues while ensuring future solvability, it is imperative to establish a framework of rules and guidelines to direct compliance with sustainable policies. The worldwide Reporting Initiative (GRI), as the preeminent worldwide standard, was established to guide commercial organizations in achieving compliance with sustainability reporting on a global scale. These regulations will render commercial entities liable and accountable. EY (2013) characterizes the GRI framework as a compilation of reporting guidance documents, all created through a structured collaborative process aimed at assisting corporations in the preparation of sustainability reports and ESG disclosures. KPMG (2022) identifies numerous advantages of utilizing the GRI framework for sustainability reporting. These benefits encompass, but are not limited to, the standardization of sustainability reports, guidance on material issues, and harmonization with other sustainability standards such as OECD guidelines for multinational organizations, ISO 26000, the UN Global Compact, and other reports that clarify sustainability compliance in reporting.

Sustainability reporting in Nigeria is governed by environmental reporting regulations established by the Federal Ministry of Environment, with enforcement by the National Environmental Standards and Regulations Enforcement Agency (NESREA). In 2015, the Central Bank of Nigeria, the financial market regulator, promulgated the Nigerian Sustainable Banking Principles (NSBPs). This is a framework for sustainability reporting that financial institutions have adhered to with varying degrees of success. Since 2015, significant learning has occurred, and despite the CBN's frequent monitoring, it continues to be regarded as a learning curve (Akinbode, Mcown & Ewelim, 2019).

Akinbode *et al.* (2019) classified the Nigeria Sustainability guidelines into nine distinct groups. Businesses should operate and manage themselves with ethics, transparency, and accountability. Businesses should influence public and regulatory policy responsibly. Businesses must offer products and services that are safe and promote sustainability throughout their life cycle; they should interact with and deliver value to their customers and consumers responsibly. Businesses must advocate for the wellbeing

of all employees, honor the interests of all stakeholders, and be attentive to the needs of those who are disadvantaged, vulnerable, and marginalized. Businesses must uphold and advocate for human rights, foster inclusive growth and equitable development, and respect, safeguard, and endeavor to restore the environment.

Akinbode *et al.* (2019) assert that the issue of these guidelines by NGX compels listed firms to undertake actions demonstrating their advancement and commitment to sustainable development. Experience with the CBN NSBPs indicates that, in the next years, NGX may prioritize information dissemination and guidance to educate firm boards and management, while addressing cross-industry challenges. This action clearly indicates that the nation is progressing towards the promotion of responsible enterprises.

Consequently, it is evident that Nigeria is a significant contributor to sustainability in Africa. Companies listed on the Nigeria Exchange Group adhere to the sustainability disclosure guideline, while other unlisted multinationals comply predominantly with the provisions of the Global Reporting Initiative (GRI). The main objective of this research is to investigate the impact of sustainability reporting on the financial stability of listed entities in Nigeria.

## **2 METHODOLOGY**

### **2.1 Research design**

The Researcher adopt *ex post –facto* research design in this study. According to Ekwueme (2011) *ex post-facto* research design is used to research on an event which has happened and was recorded for information purpose (Adeniran, Asifat, Familusi & Folorunso, 2024; Adeniran & Tayo-Ladega, 2024). The research design to be adopted in this study is both descriptive statistics and panel data design. Based on the descriptive statistic and panel data analysis, relevant data was drawn from the Nigeria Exchange group fact book. The secondary data comprises of time-series (t) and cross-sectional data (i) which were assembled into a panel data set and estimated using Stata 13.0 for multiple regression analysis based on ordinary least square (OLS). Also, Stata 13.0 will be used for the descriptive statistic including maximum, minimum, mean, median and standard deviation of the extracted data.

## 2.2 Population of the study

Nigeria Exchange Group (NGX), is a multi-asset exchange with 393 listed securities, comprising 151 listed companies as of 2023 year end. According to KPMG (2022), 50% (76) are struggling to take a grasp of sustainability reporting. only about 50% report on sustainability based on the survey they carried out. Upon review of the NGX fact book, it became clear that only about 50% of listed companies were consistently reporting their sustainability activities from 2010 to 2023. The choice of the firms that constitute the population of this study was based on the ones that have consistently included sustainability reports in their financial Statement from year 2010 to 2023. This comprises 76 companies as per the NGX 2023 fact book reviewed.

## 2.3 Sampling size and sampling techniques

Census sampling Technique was adopted for this study. Census sampling technique Census sampling is a technique that involves reviewing every member of a population to gather information. It is also known as a complete enumeration method. From the study, 76 companies constituted the population. Adopting the census technique means that the total population is also the sample size of the study. Therefore the sample size is 76.

**Table 1**

*List of 76 Samples selected*

S/No	Name of Companies	S/No	Name of Companies
1	Academy Press Plc.	11	Capital Oil Plc [Dip]
2	Afromedia Plc [Mrf]	12	Champion Brew. Plc. [BlS]
3	Aluminium Extrusion Ind. Plc. [BlS]	13	Chams Holding Company Plc
4	Associated Bus Company Plc	14	Chellarams Plc.
5	Austin Laz & Company Plc [Rst]	15	Conoil Plc
6	Berger Paints Plc [Cg+]	16	Custodian Investment Plc [Cg+]
7	Beta Glass Plc.	17	Cutix Plc.
8	C & I Leasing Plc.	18	Cwg Plc
9	Cadbury Nigeria Plc.	19	Daar Communications Plc
10	Cap Plc	20	Dangote Cement Plc [Cg+]
21	Dn Tyre & Rubber Plc [Dip]	31	Guinness Nig Plc [Cg+]
22	Ekocorp Plc. [Bmf]	32	Honeywell Flour Mill Plc [BlS][Cg+]
23	Ellah Lakes Plc.	33	Ikeja Hotel Plc
24	Eterna Plc.	34	Industrial & Medical Gases Nigeria Plc
25	Eunisell Interlinked Plc	35	International Breweries Plc. [BlS]

26	Fidson Healthcare Plc	36	Japaul Gold & Ventures Plc
27	Flour Mills Nig. Plc. [Cg+]	37	John Holt Plc.
28	Ftn Cocoa Processors Plc [Rst]	38	Juli Plc.
29	Golden Guinea Brew. Plc. [BlS]	39	Julius Berger Nig. Plc. [Cg+]
30	Greif Nigeria Plc [Dip]	40	Lafarge Africa Plc. [Cg+]
41	Learn Africa Plc	51	Neimeth International Pharmaceuticals Plc [Cg+]
42	Livestock Feeds Plc.	52	Nestle Nigeria Plc. [Cg+]
43	May & Baker Nigeria Plc.	53	Nigerian Brew. Plc. [Cg+]
44	Meyer Plc.	54	Nigerian Enamelware Plc.
45	Morison Industries Plc.	55	Oando Plc [Mrf]
46	Mrs Oil Nigeria Plc.	56	Okomu Oil Palm Plc.
47	Multi-Trex Integrated Foods Plc [Dwl]	57	P Z Cussons Nigeria Plc. [Cg+]
48	N Nig. Flour Mills Plc.	58	Pharma-Deko Plc. [Mrf]
49	Nascon Allied Industries Plc	59	Premier Paints Plc. [Mrf]
50	Ncr (Nigeria) Plc.	60	Presco Plc
61	R T Briscoe Plc.	71	U A C N Plc.
62	Red Star Express Plc [Cg+]	72	Unilever Nigeria Plc. [Cg+]
63	S C O A Nig. Plc.	73	Union Dicon Salt Plc. [Dwl]
64	Smart Products Nigeria Plc [Mrf]	74	University Press Plc.
65	Tantalizers Plc	75	Updc Plc [BlS]
66	Thomas Wyatt Nig. Plc. [Mrs]	76	Vitafoam Nig Plc.
67	Totalenergies Marketing Nigeria Plc		
68	Tourist Company Of Nigeria Plc. [Dip]		
69	Trans-Nationwide Express Plc.		
70	Tripple Gee And Company Plc.		

Source: Author's construct (2024)

## 2.5 Sources of data

The study used secondary data. The sources of data will include audited annual reports and accounts of companies in the Nigeria Stock Exchange Fact Book. Other sources include textbooks, academic journals, internet and conferences reports. Data was collected from annual reports published in the Nigeria exchange group fact book using Excel. The annual reports was reviewed and all relevant data was extracted and populated on Excel for necessary calculations. According to Ndukwe, (2009), annual reports are generally considered by management and owners of the company to be the best source of Information on the activities of any organization at any point in time. Top Managers of companies consider annual reports as a key medium of communicating the company's performance (Zhang & Yang, 2021).

## 2.6 Method of data collection

The method adopted for this study is purely quantitative. Quantitative data collection is a method of gathering numerical data that can be translated into statistical information. This method ensures that numerical value is assigned to every observation. All data used for the purpose of this was numeric and those that were not numeric were assigned numerical numbers using simple disclosure index (SDI).

## 2.7 Model specification

In order to test for the relevance of the hypotheses regarding the impact of Sustainability Reporting on corporate performance of companies listed on the Nigeria Exchange Group, the Regression model which examines the effect of the multiple independent variable on the dependent variables was adapted from the studies of Akpan & Simeon (2021).

Therefore, the perceived functionally relationship shall be specified as follows:

$$Y_{it} = \beta_0 + \beta_1 X_{it} + \varepsilon_{it} \quad (1)$$

$$DTER = f(ECM, EVM, SOC, GOV) \quad (1a)$$

The hypothesis which states that the sustainability reporting does not have a significant effect on the financial stability (DTER) of listed entities in Nigeria, we have;

$$DTER_{it} = \beta_0 + \beta_1 ECM_{it} + \beta_2 EVM_{it} + \beta_3 SOC_{it} + \beta_4 GOV_{it} + \varepsilon_{it} \dots (i)$$

Where:

**Y** is the dependent variable which describes corporate performance indicators

**X** is the independent variables which represent the components of Sustainability

Reporting as:

$\varepsilon$  = is the error term capturing other explanatory variables not explicitly included in the model.  $\beta_0$  = is the intercept or constant

$\beta_1, \beta_2, \beta_3$  and  $\beta_4$  are the coefficient of the regression.

$it$  = (i= no of cross section and t = time periods

DTER = Debts to Equity ratio,

ECM = Economic disclosures

SOC = Social disclosures

EVM = Environmental disclosures

GOV = Governance disclosures

## **2.8 Measurement of variables**

The study measured sustainability reporting using the approved NGX sustainability guidelines. In the study, corporate performance is measured using both financial and non-financial performance measures. For financial performance, the study used financial stability (Debt To Equity Ratio (DTER)) to measure financial performance. For non-financial performance, the research used corporate image status (CIS) to measure performance. The variables of the study consist of dependent variable (DTER) and independent variables (ECM, SOC, EVM and GOV). The independent variables were measured based on performance selected from NGX guidelines as applied in previous studies. The economic, environmental, social and governance disclosure Index is calculated based on the number of indicators that are disclosed (occurrence) and the level of disclosure (quantitative and qualitative). where a company disclosed information about any indicator, which is the occurrence of an indicator in the company's financial statement, the researcher assigned 1, where company did not disclose about any indicator, the researcher assigned 0. So, for companies that disclosed complete information, they scored 4.

## **2.9 Data validation**

The data collected have been validated already as the annual reports from which they were collected have been duly audited by an independent auditor.

## **2.10 Method of data analysis and statistical treatment**

Multiple Regression analysis was carried out with the aid of Stata 13.0 to identify the effect of sustainability reporting on corporate performance of the sampled listed entities. Simple descriptive statistical methods such as minimum, maximum, mean,

standard deviation, skewness, Kurtosis and Jaque- Bera were used to show overview of the collected data. The descriptive statistics was expressed in both quantitative and qualitative form. The study employed the use of F-test and Hausman test to determine the best estimator from, fixed effect and random effect (Adeniran, Stephens & Akinsehinwa, 2020). If P-values is significant, i.e  $P > 0.05$ , then fixed effect is adopted. Where  $P \leq 0.05$ , the random effect is adopted. P value and F Statistics was compared to test null hypothesis at 0.05 alpha level. A p-value less than or equal to the significance level (0.05) indicates that the variables have significant effect and a p-value more than 0.05 is seen as having insignificant effect. Null Hypothesis is rejected if the P values and F statistics are significant.

Correlation test was carried out to confirm the absence of autocorrelation among the independent variables, while diagnostics test was used to ensure the efficiency of the model

### **2.11 Apriori expectation**

The “a priori expectation” in the model is that all the independent variables of sustainability reporting are expected to have a positive effect on all the dependent variables of corporate performance of the 54 listed firms in Nigeria as measured by Debt to Equity Ratio (DTER). The mathematical expression is represented as  $\beta_1, \beta_2, \beta_3, \beta_4$  and  $\beta_5 < 0$ ,  $\alpha_1, \alpha_2, \alpha_3, \alpha_4$  and  $\alpha_5 < 0$  and  $\Theta_1, \Theta_2, \Theta_3, \Theta_4$  and  $\Theta_4 < 0$  implying that a certain increase in the independent variables will lead to an increase in DTER by a certain unit.

### **2.12 Ethical considerations**

Lots of ethical consideration was given to this research. The researcher ensured that in reviewing the performance, there was no conflict of interest. i.e preferring one company to another. The researcher understands the provision of the Nigeria Data Protection Act (NDPA) and also ensured that information obtained for the purpose of this research is only used for the purpose of this research only. Lastly, the Researcher placed a level of trust on the Annual reports of the companies analysed since they have been audited by an independent auditor.

### 3 DATA ANALYSIS

#### 3.1 Descriptive analysis

Descriptive statistics provide an initial summary of the data, offering insights into the central tendencies, dispersion, and distribution of the variables. This section will elucidate the basic characteristics of the dataset, including mean, median, standard deviation, and range, helping to understand the variability and distributional properties of both the sustainability reporting and corporate performance (See Table 2).

**Table 2:**

*Summary of Descriptive Statistics*

Variable	Mean	Std. Dev.	Min	Max	Skewness	Kurtosis	Jarque-Bera	Observations
<b>DTER</b>	4.402	5.187	0.195	36.864	2.545	10.616	9.871	N = 1064
<b>ECM</b>	2.849	0.572	2.272	4.000	1.427	4.593	3.469	N = 1064
<b>EVM</b>	2.843	1.021	0.000	4.000	-0.703	5.589	4.884	N = 1064
<b>SOC</b>	3.071	1.066	1.897	4.000	5.366	45.158	39.940	N = 1064
<b>GOV</b>	2.790	0.539	2.272	4.000	1.449	4.397	4.064	N = 1064

Source: Author's Computation Using Stata 13.0

#### 3.2 Financial Stability (DTER)

The Debts to Equity Ratio (DTER), an indicator of the financial leverage employed by firms, has a mean value of 4.402. This indicates that, on average, the firms rely significantly on debt financing, with debt levels exceeding equity by more than four times. This high leverage ratio could reflect the financial structure commonly adopted by Nigerian firms, possibly influenced by the limited availability of equity financing or favorable borrowing conditions. However, the standard deviation of 5.187, coupled with the range between 0.195 and 36.864, points to considerable heterogeneity in leverage levels across firms. Some firms exhibit conservative leverage practices, while others are heavily indebted, exposing them to financial risk and potentially constraining their capacity to engage in sustainability initiatives. The wide disparity in leverage levels raises critical questions about the financial stability and risk management strategies of these firms, which may significantly influence their corporate performance and long-term sustainability. The skewness of DTER is 2.545, which is a strong positive skew, meaning

that the majority of the observations are concentrated on the lower end of the scale, with a few extreme high values stretching the distribution to the right. This could indicate that most companies in the sample have a relatively low debt-to-equity ratio, but some companies have extremely high ratios.

The kurtosis is 10.616, which is significantly greater than 3, indicating a highly leptokurtic distribution. This suggests that the DTER variable has a higher concentration of values around the mean and also more extreme outliers than a normal distribution would predict. The data appears to have a heavy tail on the right, which aligns with the high skewness observed. The Jarque-Bera statistic is 9.871, which is highly significant, suggesting that the distribution of DTER is normal

### **3.3 Economic Disclosures (ECM)**

Economic disclosures (ECM), with a mean of 2.849 and a standard deviation of 0.572, demonstrate a relatively uniform level of reporting among the sampled firms. This uniformity may be attributed to compliance with basic regulatory requirements or industry norms, which enforce minimum standards for economic sustainability reporting. However, the low mean value raises concerns about the depth and quality of these disclosures, suggesting that firms may prioritize surface-level compliance over comprehensive reporting. The range from 2.272 to 4.0 further underscores this observation, as no firm significantly exceeds the baseline level of reporting. This limited variability implies that economic disclosures are not yet leveraged as a strategic tool to differentiate firms in the competitive landscape. Moreover, the lack of comprehensive economic disclosures could hinder stakeholders' ability to assess the economic impact of firms' sustainability initiatives, raising questions about transparency and accountability within the corporate sector. The skewness for CIS is 0.568, suggesting a moderate positive skew. This means that most values are concentrated on the lower end of the scale, but there are some higher values that stretch the distribution to the right.

The kurtosis is 3.861, which is greater than 3, indicating that the distribution is leptokurtic. This suggests that CIS values are more concentrated around the mean with a few extreme values, particularly on the higher end. The Jarque-Bera statistic is 2.993, which is not large enough to reject normality at the typical significance levels, though it still indicates a slight deviation from normality.

### 3.4 Social Disclosures (SOC)

Social disclosures (SOC) exhibit a mean of 3.071 and a standard deviation of 1.066, reflecting moderate variability in how firms report on their social sustainability practices. The minimum value of 1.897 indicates that some firms provide minimal social disclosures, possibly due to inadequate investments in community development, employee welfare, or other social responsibility activities. This lack of depth may also reflect a limited understanding of the strategic importance of social disclosures in fostering stakeholder relationships and long-term performance. Conversely, the maximum value of 4.00 highlights a subset of firms that actively engage in social sustainability practices and communicate these efforts robustly. These firms may recognize the reputational and operational benefits of aligning their activities with societal expectations. The considerable gap between the lowest and highest values underscores the uneven adoption of social sustainability practices in the Nigerian corporate environment, raising critical questions about the factors influencing firms' commitment to social responsibility. The skewness for SOC is 5.366, which indicates a strong positive skew. This suggests that most companies have lower social responsibility scores, but there are a few companies with very high values, which are pulling the mean upwards.

The kurtosis is an extreme 45.158, which is far higher than 3, indicating an extremely leptokurtic distribution. This means that the data is highly concentrated around the mean, with a significant number of extreme outliers, particularly on the high end.

### 3.5 Environmental Disclosures (EVM)

Environmental disclosures (EVM), with a mean of 2.843 and a standard deviation of 1.021, reveal moderate reporting on environmental sustainability practices. However, the minimum value of 0.000 indicates that some firms completely omit environmental disclosures, which could signify a lack of prioritization of environmental issues or weak regulatory enforcement in this domain. This absence of disclosure is particularly concerning given the growing global emphasis on environmental accountability as a key component of sustainability. On the other hand, the maximum value of 4.00 shows that a few firms have embraced environmental reporting, likely as a strategic response to

stakeholder demands and international sustainability trends. This variability points to a significant gap in environmental accountability across the sampled firms, with many firms failing to integrate environmental concerns into their corporate strategies. The implications of this finding are critical, as firms that neglect environmental sustainability risk losing stakeholder trust and facing potential regulatory penalties, which could adversely affect their long-term performance. The skewness for EVM is -0.703, indicating a moderate left skew. This means that the majority of companies have lower environmental responsibility scores, with a few companies having exceptionally high values. The kurtosis for EVM is 5.589, indicating a leptokurtic distribution. The data is more concentrated around the mean, with some extreme values present, particularly on the higher end, indicating the presence of outliers.

### **3.6 Governance Disclosures (GOV)**

Governance disclosures (GOV) have a mean of 2.790 and a relatively low standard deviation of 0.539, suggesting a more standardized approach to governance reporting among the sampled firms. This uniformity may result from regulatory frameworks mandating certain governance practices, such as board composition, audit transparency, and compliance reporting. However, the mean value itself is low, indicating that most firms limit their disclosures to meeting the minimum regulatory requirements rather than leveraging governance transparency as a strategic advantage. The range from 2.272 to 4.00 indicates that while some firms demonstrate a higher level of governance accountability, the majority operate within a narrow band of disclosure quality. This lack of differentiation could reflect an underestimation of the role of governance in driving investor confidence and operational efficiency. Furthermore, the low mean raises concerns about the actual implementation of governance principles, as superficial compliance with reporting requirements may not translate into effective governance practices. This raises important questions about the relationship between governance disclosures and corporate performance, particularly in contexts where regulatory enforcement is inconsistent. The skewness for GOV is 1.449, indicating a moderate positive skew. This means that most companies have a lower governance index, but a few companies have high governance scores, pulling the mean to the right. The kurtosis is 4.397, which is greater than 3, indicating a leptokurtic distribution. This suggests that the

GOV values are concentrated around the mean, but there are some extreme outliers, especially on the higher end.

## 4 ANALYSIS

### 4.1 Correlation analysis

Correlation analysis examines the pairwise relationships between variables in the dataset. This section assessed the strength and direction of associations between sustainability reporting and corporate performance. Understanding these relationships is essential for identifying potential predictive variables and provides a preliminary insight into how sustainability reporting may influence corporate performance of listed companies in Nigeria. This also test for multicollinearity among the variables.

### 4.2 Financial stability and sustainability reporting

The Table 3 contains pairwise correlation output for financial stability and sustainability reporting.

**Table 3:**

*Pairwise correlations for Financial Stability (DTER)*

Variables	(1)	(2)	(3)	(4)	(5)
(1) DTER	1.000				
(2) ECM	0.200	1.000			
(3) EVM	-0.088	0.569	1.000		
(4) SOC	0.225	0.544	0.206	1.000	
(5) GOV	0.203	0.965	0.540	0.570	1.000

Source: Author's Computation (2024)

### 4.3 Financial Stability (DTER) and Economic Disclosures (ECN)

The correlation coefficient between financial stability and economic disclosures is 0.200 (Table 3), indicating a weak positive relationship. This suggests that firms with higher financial leverage tend to provide slightly more economic disclosures. The positive relationship may stem from the need for highly leveraged firms to maintain transparency in their financial sustainability to reassure creditors and investors. Economic disclosures

likely signal the firms' ability to meet financial obligations and their commitment to sustainable economic growth. However, the weak magnitude of this relationship suggests that the influence of financial leverage on the extent of economic disclosures is limited, possibly reflecting a compliance-driven, rather than strategy-driven, approach to reporting by most firms.

#### **4.4 Financial Stability (DTER) and Environmental Disclosures (EVM)**

The correlation coefficient between financial stability and environmental disclosures is -0.088 (Table 3), indicating a weak negative relationship. This suggests that firms with higher debt-to-equity ratios are less likely to prioritize or disclose information about their environmental practices. The negative correlation may reflect a tension between high leverage and environmental investment, as highly leveraged firms might focus their financial resources on servicing debt rather than funding environmentally sustainable projects. This finding raises critical concerns about the ability of highly leveraged firms to balance financial pressures with the growing demand for environmental accountability. It may also reflect a lack of integration between financial and environmental strategies, highlighting potential gaps in how firms manage long-term sustainability alongside short-term financial obligations.

#### **4.5 Financial Stability (DTER) and Social Disclosures (SOC)**

The correlation coefficient between financial stability and social disclosures is 0.225 (Table 3), indicating a weak to moderate positive relationship. This suggests that firms with higher leverage are slightly more inclined to engage in or disclose social sustainability initiatives. This positive relationship could indicate that highly leveraged firms seek to enhance their reputations and mitigate stakeholder concerns about financial risk by investing in social programs and reporting on them. Social disclosures may serve as a signaling mechanism to demonstrate a firm's commitment to societal well-being and stakeholder engagement, potentially offsetting the reputational risks associated with high debt levels. However, the weakness of the relationship implies that while social disclosures may be influenced by leverage, they are not a primary focus for most highly leveraged firms.

#### 4.6 Financial Stability (DTER) and Governance Disclosures (GOV)

The correlation coefficient between financial stability and governance disclosures is 0.203 (Table 3), indicating a weak positive relationship. This suggests that firms with higher financial leverage are slightly more likely to provide governance-related disclosures. This relationship could stem from the regulatory and market expectations placed on highly leveraged firms to ensure transparency and accountability in their governance practices. Governance disclosures, such as board composition, risk management, and executive oversight, are critical for maintaining investor and creditor confidence in the face of higher financial risk. However, the weak magnitude of the correlation suggests that while governance practices are influenced by financial leverage, the extent of disclosure may still be driven by compliance rather than a strategic effort to improve governance transparency and mitigate financial risk. The pairwise correlations between the financial stability and the sustainability disclosure variables reveal nuanced relationships. While positive correlations with economic, social, and governance disclosures suggest that financial leverage may encourage firms to enhance transparency and stakeholder engagement in these areas, the negative correlation with environmental disclosures highlights a potential trade-off between financial constraints and environmental sustainability.

#### 4.7 Multicollinearity Test (Variance Inflation Factor (VIF))

According to Adeniran (2019), Adeniran (2025), Adeniran and Fakunle (2025), the Variance Inflation Factor (VIF) is a diagnostic metric used to assess multicollinearity among independent variables in a regression model. Multicollinearity occurs when two or more predictors in a model are highly correlated, potentially inflating the variance of the estimated coefficients and reducing the model's reliability. A VIF value greater than 10 is generally considered indicative of severe multicollinearity, while values closer to 1 suggest low or no multicollinearity Adeniran and Fakunle (2025). The following analysis examines the VIF results for the independent variables - economic (ECM), governance (GOV), social (SOC), and environmental (EVM) disclosures and their implications for the study (See Table 4):

**Table 4:***Multicollinearity Test (Variance Inflation Factor (VIF))*

Variable	VIF	1/VIF (Tolerance Value (TV))
ECM	3.380	0.296
GOV	4.630	0.216
SOC	1.510	0.662
EVM	1.510	0.662
<b>Mean VIF 1/VIF</b>	<b>2.758</b>	<b>0.458</b>

Source: Author's Computation (2024)

**4.8 Benchmark: VIF<10, TV>0.2**

The Variance Inflation Factor (VIF) analysis provides insight into the level of multicollinearity among the independent variables - economic, governance, social, and environmental disclosures.. Governance disclosures exhibit the highest VIF value of 4.630, suggesting a moderate level of multicollinearity, likely due to conceptual or empirical overlap with other variables, particularly economic disclosures. Both dimensions emphasize transparency and accountability, which could result in shared explanatory variance. Economic disclosures, with a VIF of 3.380, also show moderate multicollinearity, though within acceptable limits. These results imply that while governance and economic disclosures may be interrelated, their inclusion does not pose a severe threat to the reliability of coefficient estimates. Social and environmental disclosures exhibit VIF values of 1.510 each, reflecting low multicollinearity and confirming their conceptual and empirical independence from the other predictors. This independence is crucial, as it ensures that their unique contributions to corporate performance can be reliably assessed in the model. With a mean VIF of 2.758, the results indicate that multicollinearity is not a significant concern in the regression model, as none of the variables approach the critical threshold of 10 (Table 4.3). Overall, the results suggest a robust regression framework, where the explanatory variables retain their distinctiveness, minimizing the risk of inflated standard errors or unreliable estimates.

#### 4.9 Panel regression analysis

The study used the Panel least square estimation technique to analyse the effect of sustainability reporting on financial stability, the result of the regression is presented in Table 5.

**H<sub>0</sub>:** Sustainability reporting does not have a significant effect on the financial stability of listed entities in Nigeria.

$$DTER_{it} = \beta_0 + \beta_1 ECM_{it} + \beta_2 EVM_{it} + \beta_3 SOC_{it} + \beta_4 GOV_{it} + \varepsilon \dots (ii)$$

**Table 5:**

*Panel Effect Regression for Model Two*

Variable	Fixed Effects	Random Effects
<b>ECM</b>	2.267 (1.085) [0.037] **	2.285 (1.045) [0.029] **
<b>EVM</b>	-1.105 (0.183) [<0.001] ***	-1.127 (0.177) [<0.001] ***
<b>SOC</b>	0.646 (0.182) [<0.001] ***	0.643 (0.175) [<0.001] ***
<b>GOV</b>	-0.328 (1.104) [0.766]	-0.320 (1.064) [0.764]
<b>C</b>	0.019 (0.158) [0.906]	0.017 (0.578) [0.977]
<b>R-squared</b>	0.969	0.456
<b>Adjusted R-squared</b>	0.966	0.454
<b>F-statistic</b>	383.890 [ <0.001] ***	221.791 [ <0.001] ***
<b>Durbin-Watson Stat</b>	2.545	2.366
<b>Number of obs</b>	1064	
<b>Hausman Test</b>	Chi-Sq. = 3.548 [0.471]	-
<b>Cross-Section Dependence Tests</b>	Pesaran CD = 37.27 [ >0.05] **	

( ): Standard errors. [ ] p-values.\*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.10.

Dependent variables: Financial Stability (DTER)

Source: Author's computation

Model Two examines the effect of sustainability reporting on the financial stability (DTER) of listed entities in Nigeria. The regression results presented in Table 5 utilize fixed effects and random effects estimators. The Hausman test result (Chi-Sq. =

3.548,  $p=0.471$ ) indicates no significant difference between the two models, making the random effects model the preferred specification. The interpretation considers the significance, direction, and magnitude of coefficients, along with the model diagnostics. The Durbin-Watson statistics (2.545 for fixed effects and 2.366 for random effects) suggest no significant autocorrelation in the residuals. The Pesaran cross-sectional dependence test ( $CD = 37.27$ ,  $p>0.05$ ) reveals no significant cross-sectional dependence in the fixed effects model, affirming the independence of observations across entities

Economic disclosures (ECM) demonstrate a significant positive effect on DTER in both fixed effects ( $\beta=2.267, p=0.037$ ) and random effects ( $\beta=2.285, p=0.029$ ) models, indicating that firms with greater economic transparency are more likely to employ higher financial leverage. This finding suggests that economic disclosures may boost creditor confidence, enabling firms to access additional debt financing. Conversely, environmental disclosures (EVM) show a strong negative and highly significant relationship with DTER ( $\beta=-1.105, p<0.001$  for fixed effects and  $\beta=-1.127, p<0.001$  for random effects), implying that greater environmental reporting is associated with lower debt levels. This could reflect the perception that environmentally conscious firms are less financially risky or that these firms prioritize less leverage-intensive funding structures to maintain operational flexibility for sustainability initiatives. Social disclosures (SOC) exhibit a significant positive relationship with DTER ( $\beta=0.646, p<0.001$  under both models), suggesting that investments in social responsibility enhance firms' reputational capital, making them more attractive to creditors. Governance disclosures (GOV), however, do not show a statistically significant relationship with DTER ( $p=0.766$  for fixed effects and  $p=0.764$  for random effects), indicating that governance transparency does not directly influence financial leverage decisions in this context.

#### 4.10 Decision

The random effects model achieves an adjusted  $R^2$  value of 0.454, suggesting that approximately 45.4% of the variation in DTER is explained by the sustainability reporting variables. In comparison, the fixed effects model exhibits a higher adjusted  $R^2$  value of 0.966, indicating better explanatory power when accounting for entity-specific characteristics. Both models yield highly significant F-statistics ( $p<0.001$ ), confirming

the joint significance of the explanatory variables. These findings collectively provide evidence to reject the null hypothesis ( $H_0$ ). Therefore, the study rejected the null hypothesis in favour of the alternative hypothesis and concluded that sustainability reporting significantly influences the financial stability (debt-to-equity structure) of listed firms in Nigeria. This highlights the importance of environmental and social disclosures in shaping firms' financial leverage strategies, with governance disclosures playing a less prominent role.

Model two can now be restated as follows:

$$\text{DTER}_{it} = 0.017 + 2.285\text{ECM}_{it} - 1.127\text{EVM}_{it} + 0.643\text{SOC}_{it} - 0.320\text{GOV}_{it} + \varepsilon$$

.....(iii)

#### 4.11 Further diagnostic test

Heteroskedasticity occurs when the variance of the residuals is not constant across observations, which can lead to inefficient estimates and invalid statistical inferences in regression analysis. The diagnostic test results in Table 6 assess the presence of heteroskedasticity across the models using the F-statistic, its corresponding probability (Prob. F), and the observed  $R^2$  values.

**Table 6:**

*Heteroskedasticity Results Table*

Model	F-statistic	Prob. F	Obs*R-squared
<b>DTER</b>	23.816	0.184	110.933

Source: Author's Computation (2024)

The heteroskedasticity results for the model Financial Stability (DTER) indicate no significant evidence of heteroskedasticity. The Prob. F values exceed the conventional significance thresholds ( $p > 0.05$ ), suggesting that the assumption of no homoskedasticity cannot be rejected. Financial stability (DTER) model is 0.184, which confirm the presence of constant variance in the residuals.

The absence of heteroskedasticity across the models supports the reliability of the regression estimates. This diagnostic result enhances the validity of the statistical inferences drawn from the models, ensuring that the estimated coefficients and their

standard errors are robust. Consequently, the models satisfy one of the critical assumptions of linear regression, strengthening the overall robustness and credibility of the study's findings.

## 5 CONCLUSION

The aim of this study was to examine the effect of sustainability reporting on the financial stability of listed entities in Nigeria. Using a quantitative approach, data were extracted from the annual reports of 76 listed companies spanning fourteen years (2010–2023). The sustainability reporting variables included economic, environmental, social, and governance disclosures, while the performance indicators comprised profitability, financial stability, liquidity, investment returns, and corporate image. Panel regression analysis, specifically the random effects model, was conducted based on the Hausman test results, ensuring robust and reliable findings.

Financial stability, as proxied by the Debt to Equity Ratio (DTER), was found to be significantly influenced by sustainability reporting, with varying effects across its dimensions. Economic disclosures were positively associated with financial stability, suggesting that firms with greater economic transparency tend to utilize higher leverage. This aligns with the findings of Mendi *et al.* (2024), who demonstrated that firms showcasing robust economic reporting attract creditor confidence and have easier access to external financing. In the Nigerian context, where access to equity financing is limited, debt becomes a vital source of capital for firms. Economic disclosures likely act as a signaling mechanism, reassuring creditors of a firm's ability to generate consistent returns and manage financial obligations effectively.

Environmental disclosures exhibited a strong negative effect on financial stability, implying that firms with significant environmental reporting may experience reduced leverage. This result is consistent with Yaghoub *et al.* (2020), who highlighted the resource-intensive nature of environmental practices, which often compels firms to rely less on debt to maintain operational flexibility. In Nigeria, where environmental regulations are inconsistently enforced, firms undertaking environmental sustainability initiatives voluntarily may divert resources from debt servicing or expansion. This finding, however, contrasts with Reddy and Gordon (2022), who reported that

environmentally proactive firms in developed markets often achieve improved financial stability due to enhanced stakeholder trust and operational efficiency.

Social disclosures were positively related to financial stability, supporting the argument that investments in social initiatives enhance stakeholder relationships and reduce perceived financial risks. Abdulsalam *et al.* (2020) emphasized that firms engaging in social responsibility practices, such as employee welfare and community development, benefit from stronger reputational capital, making them more attractive to creditors. In the Nigerian context, where societal challenges such as poverty and unemployment are significant, firms that align their operations with social priorities are likely to gain goodwill and operational advantages. However, this finding diverges from Nguyen and Nguyen (2020), who observed a negligible relationship between social disclosures and financial stability in smaller firms, suggesting that the scale of social initiatives matters.

Governance disclosures were found to have an insignificant effect on financial stability, a result that deviates from theoretical expectations and prior empirical evidence. Governance practices, such as board accountability and risk management, are expected to enhance financial resilience by improving decision-making and mitigating operational risks. Ofoegbu and Asogwa (2020) demonstrated a significant positive relationship between governance disclosures and financial stability, attributing it to the role of governance in enhancing transparency and investor confidence. The insignificant finding in this study may reflect the challenges of governance implementation in Nigeria, where weak enforcement mechanisms and superficial compliance undermine the potential benefits of governance practices.

The results of this study align with stakeholder theory, which posits that addressing stakeholder concerns, such as economic and social transparency, enhances financial outcomes. However, the negative impact of environmental disclosures challenges this theory, highlighting the cost implications of sustainability initiatives in the short term. The resource-based view also provides a partial explanation, as firms leveraging their social and economic capital to build stakeholder trust tend to achieve greater financial stability. However, the findings underscore the need to balance stakeholder demands with financial imperatives, particularly in resource-constrained environments like Nigeria.

In the Nigerian context, several factors amplify the significance of these findings. First, the limited access to equity financing compels firms to rely on debt, making economic disclosures a critical tool for maintaining creditor confidence. Second, the voluntary nature of environmental reporting in Nigeria reduces its widespread adoption, leading to mixed perceptions among stakeholders about its financial impact. Third, the societal expectations placed on firms to address pressing social challenges enhance the importance of social disclosures in maintaining financial stability. However, the weak enforcement of governance practices and the prevalence of token compliance undermine the potential benefits of governance disclosures, limiting their impact on financial stability.

### **Recommendations**

Based on the findings, the following recommendations are proposed:

1. Firms should provide detailed economic disclosures that align with stakeholder expectations and emphasize their contribution to long-term financial stability.
2. Regulatory bodies should enforce stricter governance standards to enhance the credibility and effectiveness of governance disclosures.
3. Policymakers and industry associations should create tailored sustainability reporting frameworks that reflect the unique challenges and opportunities in different sectors.

### **Suggestions for Further Studies**

Future research should focus on conducting comparative studies across industries and regions to provide a more nuanced understanding of how sustainability reporting practices and impacts vary. For instance, the oil and gas sector, which faces stringent environmental scrutiny, may differ significantly from sectors such as telecommunications or banking in their approach to sustainability disclosures. Such comparisons would provide insights into sector-specific challenges and opportunities, helping to identify best practices.

Additionally, a mixed-method approach that combines quantitative analysis with qualitative insights would enrich the understanding of sustainability reporting. By incorporating interviews or surveys with stakeholders such as corporate managers, regulators, and investors, future studies can capture the perceptions, motivations, and expectations surrounding sustainability disclosures. This would provide a more holistic view of their value and impact.

Further studies should also investigate the influence of regulatory frameworks and enforcement mechanisms on the adoption and effectiveness of sustainability practices in emerging markets. Nigeria, as an example, has a voluntary sustainability reporting framework, which may affect the depth and consistency of disclosures. Comparative research examining countries with stricter mandatory frameworks could shed light on the effectiveness of policy interventions.

Lastly, future research could explore the interplay between sustainability reporting and other corporate strategies, such as innovation, digital transformation, and market expansion. Understanding how sustainability efforts align with broader business strategies could provide valuable insights into their long-term impact on corporate performance and competitiveness.

**Author contributions:** **MTL:** Conceptualization, Writing - original draft, Introduction, Method, Editing. **JA:** Conceptualization, Proofreading, Editing. **TTA:** Editing. The authors read and approved the final manuscript.

**Institutional Review Board Statement:** Not applicable.

**Data availability:** Data is provided within the manuscript.

**Funding:** This research received no external funding.

**Acknowledgement:** The authors appreciate the editor and reviewers for adding valuable input to the manuscript.

**Ethics Approval and Consent to Participate:** Not applicable

**Clinical Trial Number:** Not applicable.

**Informed Consent Statement:** Not applicable

**Consent to Publish:** Not applicable

**Conflicts of Interest:** The author declares that there is no competing interest.

## REFERENCES

- Abdulsalam, N. K., Abdulrahman, B. S., Garba, I. T., Mohammed, A. B., and Abubakar, S. Y. (2020). The implication of corporate social cost on the profitability of oil marketing companies. *Journal of Research in Business and Management*, 2, 1-8.
- Abdulsalam, N. K., and Babangida, M. A. (2020). Effect of sales and firm size on sustainability reporting practice of oil and gas companies in Nigeria. *Quest Journal of Research in Business and Management*, 8, 1-8.
- Adeniran, A. O. (2025). Understanding Cronbach's Alpha in Social and Management Studies. *Current Science Research Bulletin*, 2 (2), 11-16. Available on: <https://csrbjournal.org/index.php/csrb>

- Adeniran, A. O. (2019). Application of Likert Scale's Type and Cronbach's Alpha Analysis in an Airport Perception Study. *Scholar Journal of Applied Science Research*, 2(4), 01-05.
- Adeniran, A. O., Asifat, J. T., Familusi, O. B., and Folorunso, S. S. (2024). Critical Analysis of Research Methods and Misperceptions of Statistical Analysis. *International Journal of Innovation in Management Economics and Social Sciences*, 4(3), 29-50. <https://doi.org/10.59615/ijimes.4.3.29>
- Adeniran, A., O., and Fakunle, O., S. (2025). Adoption of Likert-Type Scales for Airline Service Quality Assessment. *Systemic Analytics*, 3(1), 20-26.
- Adeniran, A. O., and Obembe, O. E. (2020). The Significance of Strategic Management Accounting on the Performance of Transport Businesses in Nigeria. *Insights into Regional Development*, 2(3), 677-688. [https://doi.org/10.9770/IRD.2020.2.3\(5\)](https://doi.org/10.9770/IRD.2020.2.3(5))
- Adeniran, A.O., and Olorunfemi, S.O. (2020). The Essence of Knowledge Management in the Air Transportation Sector. *International Journal of Human Capital and Urban Management*, 5(2): 175-186.
- Adeniran, A. O., Stephens, M. S., & Akinsehinwa, F. O. (2020). Factor Analysis of Passengers' Satisfaction at Murtala Muhammed Airport (MMA2). *Aeronautics and Aerospace Open Access Journal*, 4(1):13–24. DOI: 10.15406/aoaj.2020.04.00101
- Adeniran, A. O., and Tayo-Ladega, O. (2024). Critical Analysis of Phenomenological Research Design in a Qualitative Research Method. *Management Analytics and Social Insights*, 1(2), 186-196. <https://doi.org/10.22105/ad338t15>
- Akinbode D., Mcown J., and Ewelim, K. (2019) Nigeria's new SEC guidelines to boost sustainability reporting. *Development In Practice Journal*, 10, 2-8.
- Akpan, D. C., and Emenyi, E. O. (2020). Effect of triple bottom line reporting on financial and operating performance: Implications for Nigeria's oil and gas sector. *FUO Quarterly Journal of Contemporary Research*, 8, 64-95
- Akpan, D. C., and Simeon U. J. (2021). Corporate sustainability disclosures and cash flow return on investment of shareholders of oil and gas companies in Nigeria. *International Journal of Innovative Finance and Economics Research*, 9,111-124.
- Aondoakaa, K. (2015). Impact of Sustainability Reporting on Financial Performance of companies listed on The Nigeria Stock Exchange. PhD Thesis University of Nigeria Nsuka, 1, 1-56
- Buallay, A. (2020). Sustainability reporting and firm's performance: Comparative study between manufacturing and banking sectors, *International Journal of Productivity and Performance Management*, 69. 431-445.
- Buallay, A. (2022). Sustainability reporting in food industry: an innovative tool for enhancing financial performance, *British Food Journal*, 6, 1939-1958.

- Clarissaa, S., and Rasmini, N. (2018). The effect of sustainability reports on financial performance with good corporate governance quality as a moderating variable. *International Journal of Sciences: Basic and Applied Research (IJSBAR)*, 40, 139-149.
- Coelho, R., Jayantilal, S., and Ferreira, J. (2023). The impact of social responsibility on corporate financial performance: A systematic literature review. *Corporate Social Responsibility and Environmental Management*. 30, 1535–1560.
- Effiong, S. A., Oti, P. A., and Akpan, D. C. (2019). Triple bottom line reporting and shareholder's value in oil and gas marketing firms in Nigeria. *Academy of Accounting and Financial Studies Journal*, 23, 1528-2635
- Ekwueme, C. (2011). Social responsibility Accounting: An overview, in M.A. Mainoma (Ed.) *Contemporary issues in accounting development*, A publication of the Association of National Accountants of Nigeria (ANAN) MCPD 2011.
- Ezeokafor, F. C., and Amahalu, N. N. (2019). Effect of sustainability reporting on corporate performance of quoted oil and gas firms in Nigeria. *Journal of Global Accounting*, 6, 22-34.
- Freeman, I., and Hasnaoui, A. (2010). The meaning of corporate social responsibility: The vision of four nations. *Journal of Business Ethics* 100: 419–443.
- Global Reporting Initiative (2019). What is Sustainability reporting, Retrieved June 19, 2024 from <https://www.gri.com>
- Global Research Initiative (2011). Sustainability Reporting Guidelines: G3.1. Retrieved June 10, 2024 available at <http://globalreporting.org>
- Gray, R., and Bebbington, J. (2001). *Accounting for the Environment* (2nd ed.), London: SAGE Publications Ltd.
- Hahn, R., and Kuhnen, M. (2013). Determinants of sustainability reporting: A review of results, trends, theory, and opportunities in an expanding field of research. *Journal of Cleaner Production*, 59, 5-21.
- Harvey, B., and Schaefer, A. (2001). Managing relationships with environmental stakeholders: A study of U.K. water and electricity utilities. *Journal of Business Ethics*, 30, 243–260
- Kent, P., and Stewart, J. (2008). Corporate governance and disclosure on the transition to international financial Reporting standards, Retrieved from [http://epublications.board.eed.au/business\\_pabs/130](http://epublications.board.eed.au/business_pabs/130) on 2nd July, 2024
- Kent, P., and Monem, R. (2008). What drives TBL reporting: Good governance or threat to legitimacy? *Australian Accounting Review* 18, 297–309
- Korolo, E.O., and Korolo, A.S. (2023). Sustainability reporting and corporate financial performance of quoted telecommunication companies in Nigeria. *Gusau International Journal of Management and Social Sciences*, 6, 19-38

- KPMG (2011). Sustainability reporting survey: A Guide and a survey, Retrieved from [www.kpmg.com](http://www.kpmg.com) on 22nd October, 2011.
- KPMG (2022). Big shifts, small steps: a survey of sustainability reporting in Nigeria, a yearly publication of KPMG on sustainability, 14,17-42.
- KPMG (2023). A survey of sustainability reporting in Nigeria, a yearly publication of KPMG on sustainability, 15,27-35.
- Lin, W., and Liu, C. (2005). Performance efficiency evaluation of the Taiwan's shipping industry: An application of data envelopment analysis. *Proceeding of the Eastern Asia Society for Transportation Studies*, 5, 123-174
- Mendi, E., Zohreh, H. Mozghan, S., and Hossein, M. (2024). Effect of sustainability reporting on Financial performance, *Interdisciplinary Journal of Management Studies* 17, 3-25
- Mohammed, U. M. Olumide, M. L., and Adabenege, O.Y. (2021). Sustainability Reporting and Financial Performance of Listed Consumer Goods Firms in Nigeria. *Research Journal of Accounting and Business Management*. 7, 21-32.
- Ndukwe, A. G. A. (2009). Corporate risk reporting practices and their determinants: A study of selected quoted firms in Nigeria, *Nigeria Research Journal of Accountancy* 1, 54-202.
- Nguyen, A. H., and Nguyen, L. H. (2020). Determinants of Sustainability Disclosure: Empirical evidence from Vietnam. *The Journal of Asian Finance, Economics & Business*,7,73- 84.
- Nguyen, L.S., and Nguyen, T.M.P. (2023). The relations among environmental, social disclosure, sustainable development and firm performance: Empirical evidence from mining enterprises listed on the stock market in Vietnam. *Cogent Business &Management* 10 (2): 2211822.
- Nnamani, J., N., Onyekwelu, U. L., Ugwu O., and Kevin B. (2017). Effects of sustainability accounting and reporting on the financial performance of firms in Nigeria Brewery Sector. *European Journal of Business and Innovation Research* 5, 1-15.
- Ofoegbu, G., and Asogwa, C. (2020). The Effect of Sustainability Reporting on Profitability of Quoted Consumer Goods Manufacturing Firms in Nigeria. *International Journal of Innovative Research and Development*, 9, 271-282.
- Okolie, O. A., and Igaga, A. C. (2020). Sustainability reporting and financial performance of deposit money banks in Nigeria. *International Business & Economics Studies*, 2, 68-87.
- Okon, L. J, Philip, I. B., and Okpokpo, O. S. (2023). Sustainability reporting and financial performance. *AKSU Journal of Administration and Corporate Governance (AKSUJACOG)* 3, 1-44

- Okoye, E. I., and Ndum, N. B. (2020). Effect of Sustainability Reporting on Economic Value Added of Manufacturing Firms Listed on Nigeria Stock Exchange. *Journal of Economics, Management and Trade*, 26, 15-33.
- Okwuosa I. I., and Adesina J. B. (2021). An examination of the quality of sustainability disclosure among listed firm in Nigeria. *European Journal of Business Research*, 25, 15-46
- Olabode, O. (2022). The principle of sustainability reporting and financial performance of selected firms in Nigeria, *Gusau Journal of Accounting and Finance*, 2, 15-22
- Olabode, O. (2023). Sustainability reporting and financial performance of listed Manufacturing firms in Nigeria, *Gusau Journal of Accounting and Finance*, 3, 33-39
- Reddy, Y., and Gordon, I. (2022). The impact of sustainability reporting on financial performance: Empirical study using listed firms. *Journal of Asia Entrepreneurship and Sustainability*, 13, 123-168. *Ebullient*
- Umoren, A. O., and Ukpong, E. G. (2022). Corporate attributes and sustainability reporting: A study of Nigerian listed companies. *IDORS Journal of Humanities and Social Sciences*, 7, 8-22,
- Yaghoub, A. Xiaoni, L., and Xavier, C. (2020). Does GRI sustainability reporting pay off? An empirical investigation of publicly listed firms in China. *Business and Society Journals* 24, 234-653
- Zhang, Y., and Yang. Q. (2021). The impact of environmental management on firm economic performance: The mediating effect of green innovation and the moderating effect of environmental leadership. *Journal of Cleaner Production* 292, 126-357.

### **Authors' Contribution**

Both authors contributed equally to the development of this article.

### **Data availability**

All datasets relevant to this study's findings are fully available within the article.

### **How to cite this article (APA):**

Lawrence, M. T., Akinyomi, J., & Akinwumi, T. T. (2025). SUSTAINABILITY REPORTING AND FINANCIAL STABILITY OF LISTED FIRMS IN NIGERIA. *Veredas Do Direito*, 22(3), e223545. <https://doi.org/10.18623/rvd.v22.n3.3545>