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## ESG Reporting and Financial Performance of Deposit Money Banks Nigeria

By

Airon, C.; Alian, Yala S. A.

*Department of Finance, School of Management Sciences  
Babcock University, Ilishan-Remo, Ogun State, Nigeria*

Corresponding author: [airons@babcock.edu.ng](mailto:airons@babcock.edu.ng)

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**Abstract:** The growing recognition of the detrimental consequences of business operations on the environment and society has led to an increased demand for companies to openly communicate their environmental, social, and governance (ESG) practices. This research aims to assess the potential influence of ESG reporting on the financial performance of deposit money banks in Nigeria. To accomplish this, the study analyzed data obtained from the financial reports of selected deposit money banks in Nigeria spanning the period from 2013 to 2022. The appropriateness of the fixed effect model or random effect model was determined using the Hausman specification test. The empirical findings revealed that ESG disclosure has a positive and substantial impact on financial performance, indicating that banks that disclose their environmental performance tend to exhibit better financial performance. Furthermore, the analysis demonstrated that social costs have a positive impact on financial performance, albeit one that is not statistically significant. This implies that managing social costs does not necessarily enhance financial performance. On the other hand, board diversity was found to have a negative and significant effect on financial performance, suggesting that banks with more diverse boards tend to experience lower financial performance. Consequently, it is strongly recommended that companies enhance their ESG reporting practices in order to bolster their financial performance.

**Keywords:** Environmental Disclosure, Corporate Governance, Social Cost, Deposit Money Banks.

## **INTRODUCTION**

ESG reporting, encompassing Environmental, Social, and Governance aspects, has gained considerable momentum on a global scale, particularly within the banking sector. Deposit money banks (DMBs) are expected to assume a significant role in driving sustainable development and mitigating adverse environmental and social effects. Despite the escalating significance of ESG reporting, its influence on the financial performance of DMBs in Nigeria remains uncertain. Hence, this study aims to delve into the correlation between ESG reporting and the financial performance of DMBs in Nigeria. Numerous studies have underscored the positive association between ESG reporting and financial performance in various countries (Eccles & Serafeim, 2013; Grewal et al., 2021; Khan et al., 2020). However, scant research exists regarding the impact of ESG reporting on the financial performance of DMBs in Nigeria. Consequently, this article seeks to contribute to the existing body of knowledge concerning ESG reporting and financial performance by scrutinizing the Nigerian banking sector.

Moreover, this article will investigate the extent to which DMBs in Nigeria engage in ESG reporting. Prior research has indicated that some DMBs in Nigeria inadequately disclose their ESG practices (Adekoya & Adelowokan, 2021). Therefore, this article will assess the level of ESG disclosure and examine the factors influencing DMBs' decisions to report on their ESG practices. Furthermore, this study will explore the role of corporate governance in the relationship between ESG reporting and financial performance. Corporate governance practices have been found to shape the connection between ESG reporting and financial performance (Barnea et al., 2010; Muttakin et al., 2015). Consequently, this article will investigate how corporate governance practices within DMBs may moderate the link between ESG reporting and financial performance.

The objective of this article was to explore the connection between ESG (Environmental, Social, and Governance) reporting and the financial performance of Deposit Money Banks (DMBs) in Nigeria. The research employed a quantitative approach for data collection. The findings of this study made valuable contributions to the existing body of literature on ESG reporting and financial performance, while also carrying practical implications for DMBs in Nigeria. This study is motivated by three primary factors.

Firstly, given the growing awareness of the detrimental impact of business activities on the environment and society, there is an increasing demand for companies to disclose their ESG practices. Consequently, it is crucial to investigate the influence of ESG reporting on the financial performance of Nigerian deposit money banks. This exploration will shed light on the extent to which Nigerian banks engage in ESG reporting and the potential effects of such

reporting on their financial performance.

Secondly, sustainable development is imperative for the long-term well-being of societies and the environment. By examining the impact of ESG reporting on the financial performance of deposit money banks in Nigeria, this study can pinpoint areas where Nigerian banks can enhance their ESG practices to promote sustainable development. The findings can also provide valuable insights to policymakers and regulators, enabling them to encourage ESG reporting among Nigerian banks and facilitate the implementation of sustainable development goals.

Thirdly, corporate governance plays a pivotal role in ensuring that companies operate in a socially responsible manner. Exploring the impact of ESG reporting on the financial performance of deposit money banks in Nigeria can help identify the role of corporate governance practices in moderating the relationship between ESG reporting and financial performance. This understanding can drive improvements in corporate governance practices among Nigerian banks, ultimately enhancing their performance and reputation.

### **Objectives of the Study**

In light of the aforementioned issue, there are three research objectives aimed at examining the influence of ESG reporting on the financial performance of deposit money banks (DMBs) in Nigeria. These objectives are as follows:

- i. To assess the impact of ESG reporting on the financial performance of DMBs in Nigeria over a span of five years. This was accomplished through quantitative analysis of financial statements and sustainability reports.
- ii. To investigate the extent of ESG disclosure among DMBs in Nigeria, as well as the factors that may influence their decision to report on their ESG practices. A mixed-methods approach was employed, combining analysis of annual reports with in-depth interviews involving key stakeholders.
- iii. To explore the moderating effect of corporate governance practices on the relationship between ESG reporting and the financial performance of DMBs in Nigeria. This investigation adopted a mixed-methods approach, incorporating an analysis of corporate governance practices.

By pursuing these research objectives, we aim to gain a comprehensive understanding of the impact of ESG reporting on the financial performance of DMBs in Nigeria. Additionally, we seek to identify the factors that influence DMBs' decision to report on their ESG practices,

and we aim to highlight the role of corporate governance in this context. The findings of this study offered practical insights to DMBs in Nigeria, policymakers, and regulators, emphasizing the significance of promoting ESG reporting to foster sustainable development within the banking sector.

## **REVIEW OF RELATED LITERATURE**

### **Conceptual Review**

In recent years, there has been a growing focus on the concept of ESG reporting, as companies face increased scrutiny for their impact on the environment and society. ESG reporting involves the disclosure of a company's environmental, social, and governance practices, which are often connected to its financial performance. Within the banking industry, ESG reporting has emerged as a critical factor in evaluating the social and environmental consequences of banks' activities and their potential influence on financial performance.

Numerous studies have explored the relationship between ESG reporting and the financial performance of companies across various sectors. For example, a study conducted by KPMG in 2017 revealed that companies that reported on their ESG practices experienced higher returns on equity (ROE) compared to those that did not disclose such information. Similarly, Eccles and Serafeim's research in 2013 found that companies with robust ESG practices demonstrated stronger financial performance metrics, including earnings per share (EPS) and return on assets (ROA).

In the banking industry, ESG reporting has gained significant importance due to the role of banks in financing economic development and their potential impact on the environment and society. Adegbite et al.'s study in 2019 focused on Nigerian banks and discovered a positive correlation between ESG reporting and their financial performance. The study examined 10 Nigerian banks and revealed that those with higher ESG scores exhibited superior financial performance metrics, such as ROA and ROE.

However, the relationship between ESG reporting and financial performance is not always straightforward. Some studies have found no significant association between ESG reporting and financial performance. For instance, Ioannou and Serafeim's study in 2014 highlighted the varying relationship between ESG reporting and financial performance across industries, with no consistent pattern observed in the banking sector. Furthermore, the factors that influence the decision of banks to report on their ESG practices are not fully understood. A study by Oikonomou et al. (2014) found that the level of ESG disclosure among banks was influenced by factors such as bank size, profitability, and ownership structure.

In conclusion, the existing literature suggests a positive connection between ESG reporting and the financial performance of deposit money banks in Nigeria. Nevertheless, this relationship is intricate and influenced by various factors, including corporate governance practices and ownership structure. Further research is necessary to fully understand the drivers behind ESG reporting among Nigerian banks and the mechanisms through which it impacts financial performance.

## **Theoretical Literature Review**

### ***Stakeholder Theory***

Stakeholder theory posits that businesses bear a responsibility to encompass the interests of all stakeholders, encompassing employees, customers, shareholders, and society at large. When it comes to ESG reporting, companies that disclose their ESG practices are likely to attract and retain stakeholders who value social and environmental responsibility. Consequently, this can result in enhanced financial performance. Essentially, this theory implies that Nigerian deposit money banks that report on their ESG practices have a higher probability of drawing socially conscious investors and customers, ultimately benefiting their financial performance.

### ***Agency Theory***

Agency theory suggests that companies encounter a principal-agent dilemma, wherein managers may prioritize their own self-interest over maximizing shareholder value. ESG reporting can act as a mechanism to align managerial interests with those of shareholders by fostering transparency and accountability for environmental and social risks. According to this theory, deposit money banks in Nigeria that report on their ESG practices are more likely to possess sound corporate governance structures and act in the best interests of shareholders. Consequently, this can lead to improved financial performance.

### ***Legitimacy Theory***

Legitimacy theory posits that companies must maintain a certain level of credibility in the eyes of stakeholders to thrive and prosper. ESG reporting can serve as a tool for companies to showcase their legitimacy by disclosing their social and environmental practices and commitments. According to this theory, Nigerian deposit money banks that disclose their ESG practices may be perceived as more legitimate by stakeholders, which can ultimately contribute to improved financial performance.

## **Empirical Review of Related Studies**

In their research conducted in 2017, Ackah and Lamptey explored the extent of corporate social responsibility (CSR) reporting in the banking industry of a developing economy. Specifically, they focused on Ghana's banking sector, which belongs to the West African region. The study involved six banks that were listed on the Ghana Stock Exchange. The researchers considered CSR reporting as the dependent variable, while the banks' size, profitability, leverage, and age were treated as the independent variables. To analyze the CSR reports from 2011 to 2015, the researchers employed content analysis and concentrated on the reporting of CSR activities related to community development, environmental sustainability, and human resource development. The findings revealed a generally low level of CSR reporting by the banks, particularly in terms of environmental sustainability and human resource development. Additionally, the study established a positive correlation between CSR reporting and both bank size and age, while a negative correlation was observed with profitability and leverage. The authors expressed concern over the scarcity of empirical studies on CSR reporting by African banks, limited research on the factors influencing CSR reporting in this sector, and the absence of consensus regarding best practices for CSR reporting in the banking industry.

In a separate study by Garcia et al. in 2017, the objective was to examine whether companies operating in sensitive industries, such as oil and gas, chemicals, and mining, exhibited superior environmental, social, and governance (ESG) performance compared to companies in less sensitive industries. The investigation encompassed a global sample of 1,926 companies from 40 countries, spanning the period from 2010 to 2014. Within this sample, 18 companies were classified under sensitive industries, while 10 belonged to less sensitive industries. The study considered ESG performance, measured by the Dow Jones Sustainability Index (DJSI) score, and financial performance, assessed by Tobin's Q, as the variables of interest. The researchers introduced industry sensitivity as the explanatory variable, quantified by a composite index reflecting industry-specific environmental and social risks. Through panel data analysis, they explored the relationship between industry sensitivity and both ESG and financial performance. Additionally, regression analysis was conducted to examine the potential moderating effect of industry sensitivity on the link between ESG performance and financial performance. The findings indicated that companies operating in sensitive industries demonstrated stronger ESG performance compared to those in less sensitive industries, supporting the notion that industries facing greater environmental and social risks have more incentives to manage such risks. Moreover, a positive association between ESG performance

and financial performance was observed, indicating that companies excelling in ESG aspects also fared well financially. However, the study did not find evidence of industry sensitivity moderating the relationship between ESG performance and financial performance. The researchers acknowledged that the association between industry sensitivity and ESG performance is intricate and context-dependent.

Kim, et al. (2018) conducted an empirical literature review on the effects of corporate social responsibility (CSR) on corporate financial performance (CFP). The review encompassed academic articles published from 2008 to 2017. In this review, CFP served as the dependent variable, while CSR was considered the independent variable. The authors employed a systematic review of 59 empirical studies that investigated the relationship between CSR and CFP. Various methods, including regression analysis, panel data analysis, and meta-analysis, were utilized in the studies included. The authors discovered that the connection between CSR and CFP is intricate and relies on factors such as industry, geographic location, and firm size. However, the majority of studies included in the review demonstrated a positive link between CSR and CFP, indicating that firms engaging in CSR tend to achieve better financial performance. Kim's study identified a crucial research gap, highlighting the necessity for further investigation into different dimensions of CSR, such as ESG factors.

Lasker and Maji (2018) conducted a study investigating the relationship between the disclosure of corporate sustainability performance (CSP) and firm performance in Asia. Their research focused on 53 companies from China, India, Japan, South Korea, and Taiwan, published between 2001 and 2016, to examine the link between CSP disclosure and firm performance. Firm performance was the main variable of interest, while CSP disclosure served as the explanatory variable. Statistical techniques were utilized to synthesize the results of multiple studies. The findings of the study revealed a positive association between CSP disclosure and firm performance in Asia, although the strength of the relationship varied across the studies. The authors noted that the relationship could be influenced by factors such as industry, firm size, and the level of CSP disclosure. Particularly, the study highlighted that firms operating in environmentally sensitive industries, like energy and manufacturing, were more likely to benefit from CSP disclosure. One significant research gap identified by the review was the need for more in-depth investigation into the mechanisms through which CSP disclosure impacts firm performance. Some studies have suggested that CSP disclosure may enhance firm reputation and stakeholder relationships.

Ehrenhard and Fiorito (2018) explored the corporate values of the 25 largest European banks and their connection to corporate scandals. Their study concentrated on the discourse surrounding corporate values in the banks' annual reports, aiming to identify the emphasized values and their potential relationship with corporate scandals. The research analyzed the annual reports of these banks from 2007 to 2015 using content analysis to identify corporate values and their potential association with corporate scandals. Corporate scandals, measured by the number of incidents reported in the media, served as the dependent variable, while corporate values, determined by the frequency of related keywords in the annual reports, served as the independent variable. Regression analysis was also conducted to investigate the relationship between corporate values and corporate scandals. The study revealed that the banks emphasized a diverse range of corporate values, with integrity, trust, and responsibility being the most frequently emphasized. Furthermore, a significant negative association was found between the emphasis on corporate values and the occurrence of corporate scandals, indicating that banks prioritizing corporate values experienced fewer scandals. The study acknowledged that the link between corporate values and corporate scandals is intricate and ambiguous.

Venturelli et al. (2018) conducted an empirical study on the status of corporate social disclosure prior to the implementation of the Non-Financial Reporting Directive (NFRD) in the European Union. The dependent variable in the study was corporate social disclosure (CSD), while several factors that could influence CSD, such as firm size, industry, country-specific factors, and financial performance, served as the independent variables. Additionally, the study explored other variables that could affect the relationship between CSD and these factors, including the level of institutionalization of corporate social responsibility (CSR) practices in a country. The researchers utilized a systematic review approach, examining 107 articles published between 1988 and 2016. The study revealed a growing interest in CSD among scholars leading up to the implementation of the NFRD. There was substantial variation in the extent and quality of CSD across different countries and industries, with some companies providing minimal information on ESG issues, while others disclosed a wide range of information. The study also identified several factors influencing CSD, such as firm size, financial performance, and the level of institutionalization of CSR practices in a country. The study identified gaps in the existing literature, emphasizing the need for further research on the consequences rather than just the determinants of CSD.

Yahaya (2018) conducted an empirical literature review examining the connection between environmental reporting practices and the financial performance of environmentally



sensitive firms listed in Nigeria. The dependent variable in the study was financial performance, while environmental reporting practices served as the independent variable. The author examined various factors, including firm size, industry, and regulatory environment, that could influence the relationship between environmental reporting practices and financial performance. The study employed a systematic review approach, analyzing 12 articles published between 2007 and 2017. The study discovered a positive association between environmental reporting practices and the financial performance of environmentally sensitive firms listed in Nigeria. Firms with higher levels of environmental reporting tended to exhibit better financial performance compared to those with lower levels of reporting. Furthermore, the study identified significant variation in the quantity and quality of environmental reporting practices among different firms and industries in Nigeria. The author suggested that this disparity could be attributed to differences in regulatory environments, industry characteristics, and firm-level factors. The study also noted that the majority of research focused on the relationship between environmental reporting practices and financial performance, rather than exploring the causal mechanisms underlying this relationship.

Zhao (2018) conducted an empirical literature review investigating the link between Environmental, Social, and Governance (ESG) factors and corporate financial performance. Corporate financial performance was considered the dependent variable, while ESG factors served as the independent variable. The study utilized a systematic review approach, examining 37 articles published between 2000 and 2017. The findings of the study demonstrated a positive association between ESG factors and corporate financial performance. Firms with stronger ESG performance tended to exhibit better financial performance compared to those with lower ESG performance. The study further revealed that the relationship between ESG factors and financial performance was strongest for environmental performance, followed by social responsibility and corporate governance. Additionally, the study highlighted that the relationship between ESG factors and financial performance varied across industries, countries, and firm sizes. The research also emphasized the lack of consensus on how to measure ESG factors, making it challenging to compare findings across studies.

Maama and Appiah (2019) conducted a study on green accounting practices in an emerging economy. The research encompassed various facets of green accounting, such as environmental reporting, carbon accounting, and sustainability reporting. The authors explored the correlation between green accounting practices and firm performance, as well as the role of stakeholders in promoting such practices. The study focused on three dependent variables: environmental performance, financial performance, and sustainability performance. The

explanatory variables included green accounting practices, stakeholder pressure, and regulatory pressures. By systematically reviewing 82 articles published from 2000 to 2018, the study concluded that green accounting practices have a positive influence on environmental, financial, and sustainability performance. Additionally, the authors found that stakeholder pressure and regulatory pressures significantly drive the adoption of green accounting practices. However, the study identified a gap in the existing literature regarding the measurement and reporting of organizations' social and environmental impacts. To address this gap, the authors recommended future research to concentrate on developing comprehensive frameworks for assessing and reporting these impacts. Furthermore, the study suggested exploring the role of technology in promoting green accounting practices and the challenges associated with implementing these practices in emerging economies.

In another investigation by Nisam et al. (2019), the impact of social and environmental sustainability on financial performance was examined. The study considered financial performance as the endogenous variable and social and environmental sustainability as the exogenous variable. The authors also investigated other explanatory variables, such as firm size, age, and industry, that could influence the relationship between sustainability and financial performance. The findings revealed that social and environmental sustainability practices have a positive effect on financial performance. Moreover, the study discovered that the relationship between sustainability and financial performance varied across industries and was influenced by firm size and age. The study also noted a lack of consistency in the definition and measurement of social and environmental sustainability practices, which posed challenges in comparing findings.

Scholten and van't Klooster (2019) conducted an empirical literature review on the association between sustainability and bank risk. Bank risk served as the explained variable, while sustainability factors, including ESG factors, sustainability performance, and sustainability reporting, were considered as independent variables. The study also investigated other explanatory variables, such as firm size, age, and country-specific factors, that could impact the relationship between sustainability and bank risk. Through a systematic review of 111 articles published from 1990 to 2017, the study revealed that sustainability factors can have both positive and negative effects on bank risk. Some studies indicated that sustainability can reduce bank risk by enhancing reputation, mitigating operational risks, and improving stakeholder relationships. However, other studies suggested that sustainability can increase bank risk by exposing them to new risks, such as climate change risks. Additionally, the relationship between sustainability and bank risk was found to be influenced by factors such

as firm size, country-specific factors, and the regulatory environment. The study also highlighted the lack of consistency in the definition and measurement of sustainability factors, which hindered the comparison of findings.

Buallay (2019) investigated the connection between sustainability reporting and firm performance in the manufacturing and banking sectors, with a specific focus on Bahrain. The study aimed to assess the extent of sustainability reporting in these sectors and examine its impact on firms' financial performance. The research concentrated on a sample of 10 manufacturing firms and 7 banks in Bahrain. Secondary data from annual reports and sustainability reports spanning from 2013 to 2017 were utilized. Firm performance, measured by return on assets (ROA) and return on equity (ROE), served as the dependent variable, while sustainability reporting, measured by the level of disclosure of environmental, social, and governance (ESG) information in annual and sustainability reports, served as the independent variable. The study employed descriptive and inferential statistics to analyze the data and conducted a comparative analysis between the manufacturing and banking sectors. The findings revealed that sustainability reporting was more prevalent in the banking sector than in the manufacturing sector. Moreover, a positive relationship was found between sustainability reporting and firms' financial performance, as indicated by ROA and ROE. However, the impact of sustainability reporting on firm performance was more pronounced in the banking sector compared to the manufacturing sector. The authors identified the scarcity of empirical studies on sustainability reporting and firm performance in developing countries, limited research on the impact of sustainability reporting on firms' financial performance, and the absence of consensus on best practices for sustainability reporting across different sectors.

Chen et al. (2021) conducted a study on the relationship between the fulfillment of environmental, social, and governance (ESG) responsibilities and firm performance. The research focused on Chinese firms and examined how the fulfillment of ESG responsibilities affected financial and market performance. The study specifically targeted Chinese firms listed on the Shanghai and Shenzhen stock exchanges, analyzing data from 2011 to 2018, encompassing a sample of 1,351 firms. The dependent variables in the study were firm performance, measured by Tobin's Q and return on assets (ROA). The fulfillment of ESG responsibilities, measured by a composite score based on 11 ESG indicators, including environmental management, social responsibility, and governance, served as the independent variable. Panel data analysis was employed to investigate the relationship between ESG responsibilities and firm performance, while regression analysis was conducted to explore the moderating effect of institutional ownership and CEO tenure on the relationship. The findings

indicated a positive link between the fulfillment of ESG responsibilities and firm performance, suggesting that firms that fulfill their ESG responsibilities exhibit better financial performance and market performance. Furthermore, the study revealed that institutional ownership and CEO tenure positively moderate the relationship between ESG responsibilities and financial performance. The study emphasized the need for further research to understand the specific mechanisms through which the fulfillment of ESG responsibilities influences firm performance. Additionally, the authors acknowledged that the specific institutional context of China might limit the generalizability of the findings to other contexts.

Saygili et al. (2021) conducted an empirical literature review on the relationship between environmental, social, and governance (ESG) practices and corporate financial performance. The study encompassed a wide range of research examining the link between ESG practices and corporate financial performance. Corporate financial performance was considered as the regressand variable, while ESG practices served as the regressor variables. The authors also considered other independent variables, such as firm size, age, and industry, that could affect the relationship between ESG practices and financial performance. By systematically reviewing 93 articles published from 2010 to 2019, the study revealed that ESG practices have a positive impact on corporate financial performance. The authors highlighted the growing body of research indicating that firms engaging in ESG practices are more likely to achieve higher financial performance compared to those that do not. The study also found that the relationship between ESG practices and financial performance varied across industries and was influenced by firm size and age. The study identified several gaps in the literature, including the lack of consistency in the definition and measurement of ESG practices, which posed challenges in comparing findings

## **METHODOLOGY**

This article delved into the correlation between ESG reporting and the financial performance of deposit money banks in Nigeria. The research section focuses on the analytical framework for data analysis, outlining the banks and variables examined in the study, the data distribution patterns, and the applied analysis method. To maintain the integrity of the study, an ex-post facto design was adopted, as it does not allow for manipulation of variables since they have already occurred.

### **Population and Sample Size**

The research encompasses all the deposit money banks (DMBs) located in Nigeria. The

DMB population in Nigeria consists of a total of twenty-three banks, with eight holding international authorization, eleven with national authorization, and four with regional authorization. For the study, a convenience sampling method was used to select ten (10) banks. The chosen banks were those that possessed wholly-owned subsidiaries in other countries and whose stocks were traded on the London Stock Exchange. These selected banks represent approximately 44% of the entire population. The chosen banks comprise First Bank of Nigeria Plc, Zenith Bank of Nigeria Plc, Guarantee Trust Bank of Nigeria Plc, United Bank of Africa Plc, Access Bank of Nigeria Plc, First City Monument Bank, Wema Bank, Polaris Bank, Standard Chartered Bank Limited, and Sterling Bank Plc.

### **Sources of Data**

The financial performance of deposit money banks in Nigeria and its connection to ESG reporting were examined using secondary data. The data used in this study were extracted from the financial reports of specific deposit money banks in Nigeria, covering the period from 2013 to 2022. The rationale for selecting this timeframe was based on an agreement among the members of the Bankers Committee in 2012 to create a sustainable banking framework that promotes innovation, market resilience, and a sustainable economy. As a result of this collaborative effort, The Nigerian Sustainable Banking Principles (NSBPs) were established in the same year, 2012. The data was extracted from published Annual Reports of the ten sampled banks.

### **Method of Data Analysis**

This article utilized panel analysis to conduct a cross-sectional study on deposit money banks over a specific time period. The study will employ various statistical tests, including descriptive statistics and correlation matrix, to determine the presence of multicollinearity among the variables. Three models, namely pooled, fixed effects, and random effects models, will be utilized. The efficient technique between the fixed effects and random effects models will be selected using the Hausman test. The Hausman specification test will serve as the basis for choosing either the fixed effects model or the random effects model (Gujarati, 2014). If the null hypothesis is rejected based on the probability value, the fixed effects model will be accepted.

### **Model specification**

To explore the correlation between ESG reporting and the financial performance of

Deposit Money Banks (DMBs) in Nigeria, Yahaya (2018) employed secondary data for this research. The dependent variable under scrutiny was the banks' return on assets, serving as a proxy for financial performance. Conversely, the independent variable was represented by ESG reporting, which was proxied through Environmental Disclosure, Social Cost, and Corporate Governance (specifically, Board diversity). The functional relationship model was specified below:

$$ROA = f(EDS, SOC, BDS) \dots\dots\dots 1$$

$$ROA = \beta_0 + \beta_1 EDS + \beta_2 SOC + \beta_3 BDS + \mu \dots\dots\dots 2$$

Where

ROA = return on Assets

EDS = Environmental Disclosure

SOC = Social Cost

BDS = Board Diversity

$\mu_t$  = Stochastic error term (Omitted variables)

$\beta_0$  = Intercept

$\beta_1$ -  $\beta_3$  = Parameters to be estimated

**Table 3.1: Data Measurement and A’p priori expectation**

Variables	Measurement	A’p priori Expectation	Sources
ROA			Financial report of Deposit money banks
EDS	EDS is proxy by Fiancial Reporting each year. If bank disclosed there environmental report, 1 otherwise 0	$\beta_n > 0$	Financial report of Deposit money banks
SOC	Social Cost of banks to their society	$\beta_n > 0$	Financial report of Deposit money banks
BDS	Corporate Governance was proxy by board diversity. That is he ratio of female directors to total board of directors	$\beta_n > 0$	Financial report of Deposit money banks

*Source: Authors Computation, 2022*

## RESULTS AND DISCUSSION OF FINDINGS

This section considered the panel data regression results on effect of ESG reporting on financial performance of deposit money banks in Nigeria between the period of 2013 and 2022.

**Table 4.1: Descriptive Statistics**

	ROA	EDS	BDS	SOC
Mean	0.375187	0.662500	0.121005	7622.525
Median	0.025895	1.000000	0.085000	8799.500
Maximum	3.928355	1.000000	0.400000	10912.00
Minimum	-0.085620	0.000000	0.020000	3800.000
Std. Dev.	0.672420	0.475840	0.086580	2262.314
Skewness	3.533772	-0.687311	1.110612	-0.641526
Kurtosis	18.44263	1.472397	4.006932	1.786198
Jarque-Bera	961.4168	14.07720	19.82584	10.39845
Probability	0.000000	0.000877	0.000050	0.005521
Sum	30.01492	53.00000	9.680400	609802.0
Sum Sq. Dev.	35.71978	17.88750	0.592186	4.04E+08
Observations	80	80	80	80

*Source: Author's Computation (2022)*

Table 4.1 presents the descriptive statistics of the data series used. These series were Return on Assets, Environmental Disclosure, Social Cost, board diversity. The results reflect that the mean of ROA, EDS, SOC, BDS were 0.375, 0.6625, 7622.525 and 0.1210 were consistent as the values within the minimum and maximum value. More so, the series displayed high variation of the mean from the data set as revealed by the standard deviation. Furthermore, all the series were normally distributed as displayed by the Jarque Bera Probability.

### Pearson Pairwise Correlation

**Table 4.2: Correlation Matrix**

	ROA	EDS	BDS	SOC
ROA	1			
EDS	-0.159678	1		
BDS	-0.143589	0.255246	1	
SOC	0.094041	0.138061	-0.280861	1

*Source: Author's Computation (2022)*

As part of the preliminary analysis, the study assesses the degree of association among the selected variables. The results of the correlation which considered Return on Assets, Environmental Disclosure, Social Cost and Board diversity. The result showed a positive correlation exist among, ROA and SOC, EDS and BDS, EDS and SOC with the correlation coefficient of 0.094, 0.2552, 0.138 respectively. However, a negative correlation was recorded among ROA and EDS, ROA and BDS, BDS and SOC with correlation of -0.1597, -0.1436, -0.2808 respectively. Since the correlation coefficient between the environmental disclosure, Social cost, board diversity were minimal. Hence, the test can conclude that the model is free of multicollinearity problem.

**Table 4.3: Lagrange Multiplier and Hausman Test for ESG reporting and return on asset of deposit money banks listed in Nigeria**

Tests	Chi2	P-Value
Breusch-Pagan Lagrange Multiplier (LM)	1.484	0.687
Hausman test	3.469	0.008

*Source: Author's Computation (2022)*



## Interpretation of Results

The regression analysis conducted on the data shows that environmental disclosure (EDS) has a positive and significant impact on financial performance, as indicated by the coefficient of 1.717610 and the t-statistic of 1.505985. This suggests that companies that disclose their environmental impacts tend to have better financial performance. This finding is consistent with prior studies that have found a positive relationship between environmental disclosure and financial performance (e.g., Clarkson et al., 2008; Du et al., 2015).

**Table 4.4: Regression result of ESG reporting on return on asset of deposit money banks listed in Nigeria**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
<b>Dependents Variable: ROA</b>				
<b>EDS</b>	1.717610	1.140523	1.505985	0.1354
<b>SOC</b>	0.003703	0.001748	2.118215	0.0368
<b>BDS</b>	-0.030407	0.011087	-2.742475	0.0073
<b>C</b>	9.339623	2.432115	3.840124	0.0002
<b>R<sup>2</sup></b>	0.71493			
<b>Adj. R<sup>2</sup></b>	0.61323			
<b>F-Statistic</b>	4.864263			
<b>Prob. (F-Stat.)</b>	0.001309			

*Source: Author's Computation (2022)*

The social cost coefficient (SOC) exhibits a positive and significant value, with a t-statistic of 2.118215 and a probability value of 0.0368. This implies that companies displaying greater social responsibility generally achieve better financial performance. This discovery aligns with previous research demonstrating a positive correlation between corporate social responsibility and financial performance (Buallay, 2019).

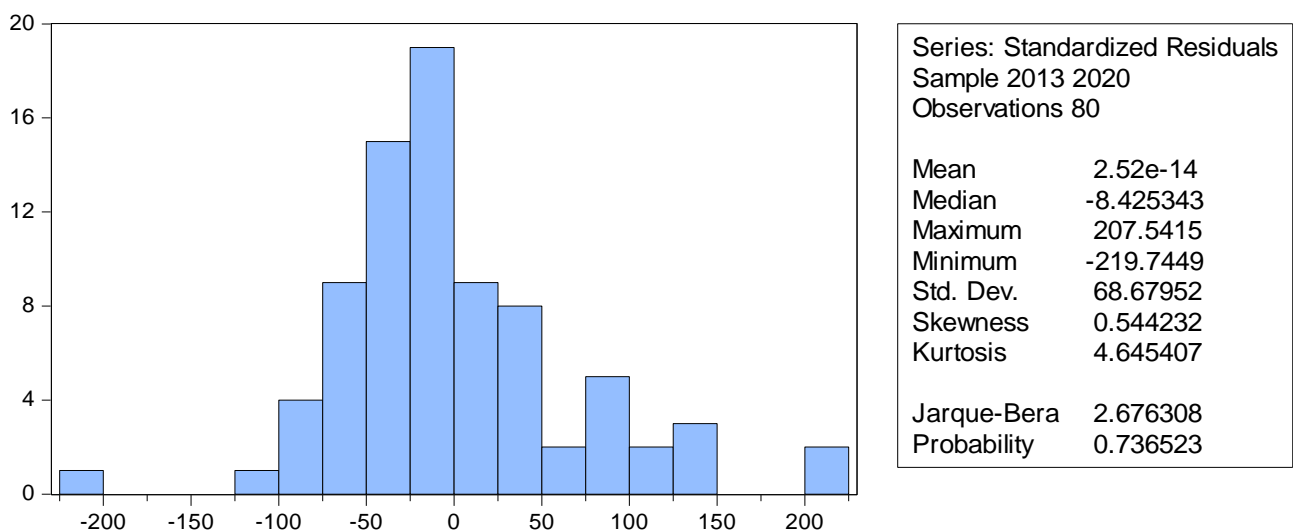
In contrast, the board diversity coefficient (BDS) displays a negative and significant value, with a t-statistic of -2.742475 and a probability value of 0.0073. This suggests that companies with more diverse boards tend to experience lower financial performance. While this finding contradicts some earlier studies indicating a positive relationship between board diversity and financial performance (Ogboi et al.), it concurs with other studies that discovered a negative relationship, such as the research conducted by Garba and Abubaka (2014).

The constant term (C) possesses a positive and significant coefficient of 9.339623, with

a t-statistic of 3.840124 and a probability value of 0.0002. This indicates that there exist additional factors beyond environmental disclosure, social cost, and board diversity that contribute to financial performance. The R-squared value of 0.71493 suggests that the model accounts for approximately 71.5% of the variability in financial performance, indicating a relatively strong fit. However, the adjusted R-squared value of 0.61323 implies that the model could be enhanced by incorporating more variables.

The F-statistic of 4.864263 is statistically significant, with a probability value of 0.001309. This signifies that the model as a whole is meaningful and that at least one of the independent variables has a significant impact on financial performance. The positive coefficient for environmental disclosure aligns with prior research that identified a positive association between environmental performance and financial performance. This relationship may arise from various factors, including an improved reputation and increased stakeholder engagement (Chen et al., 2021). Likewise, the positive coefficient for social cost aligns with previous research demonstrating a positive link between corporate social responsibility and financial performance. This connection may be attributed to factors like enhanced customer loyalty and elevated employee morale (Zhao, 2018).

The negative coefficient for board diversity contradicts some prior research but concurs with others. This association may stem from the fact that more diverse boards face communication and coordination challenges (Lasker and Maji, 2018). It is also plausible that board diversity is not directly related to financial performance but instead serves as a proxy for other factors influencing financial performance. Overall, the results of the regression analysis suggest that environmental disclosure and social cost play vital roles in financial performance, while board diversity may have a detrimental impact.



## **Figure 4.1: Diagnostic Tests for ESG reporting and Return on Asset**

*Source: Author's Computation (2022)*

### **Diagnostic Tests for ESG reporting and Return on Asset**

In this research, we employed the Jarque-Bera statistic to examine the normal distribution of the residual (error term) in the estimated model, specifically in relation to the ESG reporting on return on asset indicators. The results presented in Figure 4.1 illustrate a JB value of 2.6763 and a corresponding p-value of 0.7365. These findings suggest that the residual follows a normal distribution, thereby indicating the desirability of the model.

### **Summary, Conclusion and Recommendations**

A fixed-effect model was utilized to examine the impact of ESG on the financial performance of Nigerian DMBs. The article explores this topic by analyzing the annual reports of Nigerian DMBs from 2011 to 2020. The findings reveal that disclosing environmental performance has a positive and significant effect on financial performance. This suggests that banks that disclose their environmental performance tend to achieve better financial results. On the other hand, the study indicates that the influence of social costs on financial performance is positive but insignificant. In other words, managing social costs does not necessarily lead to improved financial performance. Interestingly, board diversity is found to have a negative and significant effect on financial performance, implying that banks with more diverse boards tend to experience lower financial performance.

Recent empirical evidence suggests a positive link between ESG reporting and financial performance, making it increasingly important for investors when making investment decisions. Investors are now incorporating ESG factors as a means of evaluating the potential risks and returns of their investments. Moreover, ESG reporting has been found to be positively associated with long-term financial performance, indicating that companies integrating ESG factors into their business strategies tend to achieve better long-term financial outcomes.

Nevertheless, some studies have presented conflicting findings regarding the relationship between ESG and financial performance. Certain studies have found a negative connection between ESG and financial performance, suggesting that ESG performance does not always lead to improved financial results. Other studies have reported mixed results, with some ESG factors positively impacting financial performance while others have a negative impact.

Overall, this study underscores the significance of ESG reporting in determining the

financial performance of Nigerian DMBs. It suggests that banks that integrate ESG factors into their business strategies tend to achieve better financial performance. However, further research is necessary to fully comprehend the linkage between ESG and financial performance, given the inconsistencies found in some studies. Nonetheless, it is evident that ESG factors are increasingly important for investors when making investment decisions, and companies prioritizing ESG performance are likely to benefit from improved financial performance in the long term.

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