

Corporate Sustainability Practices and the Financial Performance of Listed Financial Companies in Nigeria



DONATUS Lovina Bako¹, OLUWAGBADE Isaiah Oluyinka², IGBEKOYI Olushola Esther³,
IGWE Chimezie⁴, ABDULLAHI Aishatu⁵, EVINEMI Elijah Adeiza⁶,
CHINSHAKA Ayuba Sitdang, (Ph.D)⁷

¹ Department of Accounting, Afe Babalola University, Ado-Ekiti, Ekiti State, Nigeria

² Department of Accounting, Afe Babalola University, Ado-Ekiti, Ekiti State, Nigeria

³ Department of Accounting, Adekunle Ajasin University, Akungba Akoko, Ondo State, Nigeria

⁴ Department of Information and Technology, National Open University of Nigeria, Abuja, Nigeria

⁵ Department of Statistics, Central Bank of Nigeria, Nigeria, Nigeria

⁶ Department of Accounting, University of Nigeria Nsukka, Nigeria

⁷ Department of Economics, Plateau State University Bokkos, Nigeria

ABSTRACT: The study examined the effect of sustainability disclosure on the financial performance of listed companies in Nigeria. The study specifically examined the effect of social, environmental, governance and ESG disclosure indexes (proxies of sustainability disclosure) on ROA, ROE, EVA and Tobin's Q (proxies of financial performance). Ex-post facto and longitudinal research designs were used. The population consists of 49 financial companies listed on the Nigerian Exchange Group database as of May 29, 2022, with a sample size of 36 selected using purposive sampling technique. Data were collected from annual reports, websites of sampled companies, and NGX database based on GRI and ESG sustainability disclosures guidelines. Data were analysed using descriptive and inferential statistics (pooled OLS regression, fixed and random effects model). The study revealed that sustainability disclosure has significant effect on return on asset, economic value added, return on equity and Tobin's Q of listed companies in Nigeria. The study therefore recommends that all listed financial companies in Nigeria should be mandated to comply with the sustainability reporting guidelines in order to enhance financial performance, environmental, social and governance wellbeing of stakeholders.

KEYWORDS: ESG disclosure, environmental sustainability, social sustainability, governance sustainability, financial performance.

1 INTRODUCTION

Corporate sustainability practice involves purposeful and strategic actions taken by companies to operate in a manner that is socially responsible, environmentally aware, and economically sustainable. It entails incorporating sustainable values and practices into all facets of a company's activities, encompassing areas such as governance, supply chain management, environmental impact reduction, social responsibility, and engagement with stakeholders. Embracing a new era of conscientious business practices, corporate sustainability has emerged as a captivating force, challenging the conventional norms of profit-driven enterprises. In a world grappling with environmental crises and social inequality, companies have recognized the urgency to take responsibility for their actions. Corporate sustainability ensures that businesses strive not only for economic success but also for a harmonious coexistence with the planet and its inhabitants (Adobe Inc., 2023).

The problem, therefore, is that businesses in Nigeria are experiencing collapse due to declining profitability (Abdulkareem *et al.*, 2021) and the activities of businesses are contributing to the environmental degradation, resource depletion, economic, and social problems (Emmanuel & Erinoso, 2022); hence, the need to assess the effect of sustainable activities on the financial performance of listed financial companies in Nigeria. To illustrate, the operations carried out by oil and gas sectors lead to incidents like oil spills, the burning of gas, and the discharge of hazardous substances and contaminants into the atmosphere and water bodies. Similarly, manufacturing firms contribute to pollution through activities like manufacturing chemicals, producing cement, and processing food. All these activities have detrimental effects on the environment, economy, and society as a whole (Gold & Taib, 2020), thereby affecting the ability of firms in Nigeria to maximize profit.

Corporate Sustainability Practices and the Financial Performance of Listed Financial Companies in Nigeria

The broad objective of the study was to assess the effect of corporate sustainability practice on the financial performance of listed financial companies in Nigeria. Specifically, the study examined the effect of sustainability disclosure on return on equity, EVA, return on asset and Tobin's Q of listed financial companies in Nigeria. The study is limited to these objectives because it revealed the effect of firms' participation and disclosure of environmental, social and governance issues on the financial performance of listed financial companies in Nigeria. The study statistically evaluated the following hypotheses at 5% level of significance.

2. LITERATURE REVIEW

The concepts, underpinning theory, empirical review, gaps identified, and conceptual framework are discussed in this section.

Corporate Sustainability Practices

The phrase "sustainable development," popularised at the 1992 Rio Earth Summit, inspired the term "sustainability." The Brundtland Report for the World Commission on Environment and Development (1992) defined sustainable development as satisfying current generation requirements without jeopardising future generations' ability to meet their own (SEC, 2018). Corporate sustainability practise refers to a company's reporting of environmental, social, and governance (ESG) metrics and information to stakeholders such as investors, customers, employees, and communities about its sustainable strategies (social, environmental, and economic), policies, and goals. According to Ikram *et al.* (2020), corporate sustainability is seen as a critical paradigm and solution in constructing a prosperous future for firms.

Corporate Sustainability Disclosure

The act of making public and stakeholders aware of a company's operations that contribute to the social, economic, and environmental well-being of citizens is known as sustainability disclosure. Sustainability disclosure, according to Nobanee *et al.* (2016), is the public reports that organisations publish to provide internal and external stakeholders with knowledge of their positions and operations on economic, environmental, and social dimensions. Global Reporting Initiative (GRI), Carbon Disclosure Project (CDP), ESG Sustainability Guidelines, International Integrated Reporting Council (IIRC), Dow Jones Sustainability Index (DJSI), Global Initiative for Sustainability Ratings (GISR), and Sustainability Accounting Standards Board (SASB), among others, have developed frameworks and standards for sustainability disclosure (Ching *et al.*, 2017; Gold *et al.*, 2020). However, in Nigeria, following a stakeholder engagement meeting to discuss the benefits of sustainability practise to businesses, its performance on environmental, social, and governance (ESG) issues, and enhancing corporate transparency, the Nigerian Securities and Exchange Commission (SEC) approved the sustainability reporting guidelines in November 2018, which are expected to provide information on five key social and environmental sustainability areas: the community, the environment, the workplace, governance and employees (SEC, 2018).

Financial Performance

The financial performance indicators analysed in this study are explained here. Return on asset gauges a company's capacity to create profit from its assets. The ratio of an organization's profits to its total resources (assets) is denoted by ROA. The statement of comprehensive income includes net income, also known as profit after taxes (PAT). A high ROA implies that a company generates a considerable amount of profit for each asset it possesses, whereas a low ROA suggests that the organisation is inefficient in creating profit from its assets. Return on equity is a key indicator used by investors to assess a company's success by dividing net income by total equity. According to Jankalova *et al.* (2019), EVA is a measure for analysing a company's potential to sustain economic growth. The EVA technique is effective for assessing financial performance because it may describe a firm's genuine worth (Ende, 2017). A positive EVA indicates that a company has successfully created value for its shareholders by delivering returns that exceed the capital invested. A negative EVA, on the other hand, indicates that the company has not added value to its shareholders' capital. Tobin's Q is a market value financial measure determined by dividing market capitalization by total asset (Felix, 2021; Haidar *et al.*, 2021). If Tobin's Q is less than one, the company is undervalued. If Tobin's Q is more than one, the company is overvalued. A Tobin's Q of 1 implies that break even has occurred.

Theoretical Framework

The legitimacy theory, initially developed by John Dowling and Jeffrey Pfeffer in 1975 according to Guthrie *et al.* (2006), suggests that organizations operate based on an implicit contract with society. This theory posits that businesses should strive to comply with the laws and societal standards of their operating environment. The legitimacy of a business entity to conduct its activities in society is contingent upon this implicit contract, as explained by Gray *et al.* (1995). Violating societal norms and expectations can result in businesses losing their social acceptance and permission to operate, as highlighted by Faisal *et al.* (2012). Gold *et al.* (2020) emphasize that the legitimacy theory rests on the assumption that organizations must uphold social values, norms, and

Corporate Sustainability Practices and the Financial Performance of Listed Financial Companies in Nigeria

expectations in order to sustain their existence and growth in the long term. Disclosing economic, environmental, and social practices by businesses demonstrates that they have fulfilled their part of the implicit contract and adhered to societal values, as mentioned by Nobanee et al. (2016). This study recognizes the significance of the legitimacy theory in enabling corporate organizations to create a supportive business environment through sustainable practices and other strategic approaches. This theory has been adopted by researchers such as Faisal et al. (2012), Guthrie et al. (2006), Khan (2019), and Umeanozie et al. (2022).

Empirical Review

Buallay *et al.* (2021) investigated sustainability reporting and bank performance after financial crisis: evidence from developed and developing countries. The objective was to analyse the correlation between sustainability reporting and bank performance in both developed and developing countries following the financial crisis. The sample size was made up of 882 banks from developed and developing countries for a period of 11 years after the 2008 financial crisis. The study utilized environmental, social, and governance (ESG) scores as independent variables, while return on equity, return on asset, and Tobin's Q were considered as dependent variables. The analysis incorporated bank-specific and country-specific control variables to assess the connection between sustainability reporting and bank performance. The findings indicate that ESG factors have a greater impact on the accounting and market-based performance of banks in developed countries. These results align with the findings of Abughneim *et al.* (2019). However, the period is considered obsolete, and EVA was not measured as a financial indicator metric. This study closed this gap by analysing 2012-2021 and including EVA.

Sulbahri *et al.* (2021) examined the effect of sustainable report (CSR) on return on asset, return on equity and good corporate governance. The aim was to examine how sustainability report affects financial performance of banking companies in Indonesia. The financial performance indicators used to analyse the effect of sustainability report on banking companies are ROA and ROE. The method used in the research is quantitative research and descriptive analysis research. The study collected data through secondary sources from the annual financial statements of all banking companies published and listed on the Indonesian Stock Exchange (IDX) from 2016-2019. Sample size was determined through the following criterion: banking companies that published sustainability reports for 2016-2019, published financial reports for 4 consecutive years 2016-2019, and having complete information and data on good corporate governance. Panel regression model was used to analyse the data retrieved. The results of the study indicated that the sustainable report affects return on equity and the return on asset of the sustainable report variable. The result of the analysis is consistent with the findings of Umar *et al.* (2021). Despite the outcome of the study, only banking companies, ROA and ROE were examined, and the period 2016-2019 is considered insufficient; therefore, this study bridged this gap by analysing all listed financial companies, extending the period to 10 years from 2012-2021 and including EVA and Tobin's Q.

Yahaya *et al.* (2021) conducted a study focusing on the sustainability and profitability of insurance companies listed in Nigeria. The objective was to explore the relationship between sustainability performance and the profitability of these companies. The research utilized a correlational research design and included a population of 26 insurance companies. Due to the small population size, census sampling technique was employed, making use of all the companies as the sample. The study covered a period of 10 years, from 2010 to 2019. Data was collected from secondary sources, specifically the annual reports of the quoted insurance firms in Nigeria. Descriptive and inferential statistics were employed for data analysis. The analysis included diagnostic checks such as normal distribution, multicollinearity, heteroscedasticity, panel effect, and Hausman specification checks at a significance level of 0.05. The findings revealed that social sustainability had a positive and significant impact on return on equity (ROE) and return on assets (ROA), while environmental sustainability had a negative and significant effect on ROE and ROA. Economic sustainability, however, did not show any significant impact on ROE and ROA. These findings align with the results obtained by Tri *et al.* (2018); Gunarsih & Ismawati (2018). It is important to note that the study focused solely on listed insurance companies and the empirical analysis concluded in 2019. In contrast, this present study covers all listed financial companies from 2012 to 2021.

Ibrahim (2021) conducted a study examining the relationship between sustainability reporting and business growth in selected listed deposit money banks in Nigeria. The research utilized a quantitative approach and employed an ex-post facto research design. Secondary data from audited annual reports of the chosen listed deposit money institutions in Nigeria were collected for the period from 2014 to 2018. Content analysis was used to analyse the collected data, and a straightforward regression model was employed for data analysis. The results of the study indicate that sustainability reporting has a significant impact on the profitability of listed deposit money banks in Nigeria. Additionally, the study found an inverse relationship between sustainability reporting and asset growth in these banks, which aligns with the findings of Uwuigbe *et al.* (2018). It is worth

Corporate Sustainability Practices and the Financial Performance of Listed Financial Companies in Nigeria

noting that the study's time frame is limited to the years 2014-2018 and may not provide the most up-to-date information on the subject.

Buallay *et al.* (2019) conducted a comparative study to analyse the relationship between sustainability reporting and firm performance in the manufacturing and banking sectors. The study aimed to compare operational performance (ROA), financial performance (ROE), and market performance (Tobin's Q) by considering macroeconomic control variables. The research utilized a sample of 932 manufacturers and 530 banks across 80 countries, examining a period of 10 years from 2008 to 2017. Data was collected from secondary sources, specifically the Bloomberg database. Pooled data regression under the general linear model was employed to examine the relationship between sustainability reporting and firm performance. The overall analysis of environmental, social and governance (ESG) factors revealed a significant positive influence on performance. However, when examining the individual indicators, diverse outcomes were observed. Environmental disclosure demonstrated a positive impact on ROE and Tobin's Q, while social disclosure had a negative impact across all three performance models. Corporate governance disclosure was found to have a negative effect on financial and operational performance, as measured by ROA and ROE. These findings align with the conclusions drawn by Omaliko *et al.* (2020). It is important to note that the study did not assess EVA as a financial performance indicator, and the time frame of 2008-2017 may be considered out-dated. However, this present study addresses these gaps by including EVA as an indicator and extending the time frame to 2021.

Khan (2019) conducted a study to explore the impact of Corporate Sustainability Practices (CSP) on the financial performance of the top publicly listed commercial banks in Pakistan. The research focused on the annual reports of the top 10 commercial banks, considering their market capitalization. Data was collected through content analysis of the annual reports spanning a period of five years, from 2012 to 2016. The study utilized Random Effect (RE) and Fixed Effect (FE) models for analysis. The findings revealed that corporate sustainability practices have a positive and significant influence on a company's financial performance. Firm size and age were found to have no significant impact on financial performance, while leverage had a negative effect on return on assets (ROA), which aligns with the findings of Johari *et al.* (2019). It is important to note that this study focused solely on listed commercial banks, and the data analysis covered the years 2012 to 2016, which may be considered out-dated. However, the present study addresses these limitations by examining all listed financial companies from 2012 to 2021.

Uwuigbe *et al.* (2018) conducted a study titled sustainability reporting and firm performance: a bi-directional approach. The research focused on deposit money institutions listed on the Nigerian Stock Exchange, encompassing the entire population. A sample of 10 banks was selected using judgmental sampling. Data from the annual reports and sustainability reports of these institutions for the period of 2014-2016 were analysed through content analysis, resulting in the creation of a sustainability disclosure index. Panel regression was employed to analyse the data. The empirical findings revealed a reciprocal relationship between sustainability reporting and the corporate performance of the listed Deposit Money Banks (DMBs) in Nigeria. The study demonstrated that sustainability reporting had a significant positive impact on the income generation of the sampled companies, which aligns with the findings of Khan (2019). It is important to note that only deposit money banks were included as samples within the period of 2014-2016, which is considered limited. In contrast, the present study utilized a sample of 36 financial companies from 2012 to 2021, aiming to provide a more comprehensive analysis.

Buallay (2018) conducted a study to examine the association between sustainability reporting (ESG) and performance in the European banking sector. The objective was to investigate the correlation between ESG disclosure and market performance (Tobin's Q), financial performance (Return on Equity), and operational performance (Return on Assets) measures of banks. The study covered a period from 2007 to 2016 and included 235 banks listed on the stock exchanges of European Union countries. ESG disclosure was treated as the independent variable, while performance indicators (Tobin's Q, return on equity, and return on assets) were considered as dependent variables. The study incorporated two categories of control variables: bank-specific variables and macroeconomic variables. Secondary data was collected from the Bloomberg database. A linear regression model was used to evaluate the relationship between sustainability reporting and performance. The empirical findings revealed a significant positive effect of ESG on performance, which is consistent with the results of Omaliko *et al.* (2020). It is important to note that the study did not assess EVA as a financial performance indicator, and the time frame of 2007-2016 may be considered out-dated. However, the present study addresses these limitations by including EVA as an indicator and extending the time frame to 2021.

The study identified two gaps in prior research and literature. The first gap relates to the population under investigation. Upon reviewing earlier studies, it became evident that there is a lack of research focusing on listed financial companies in Nigeria in the context of sustainability disclosure. The selection of financial firms as the target population is justified by their role in providing funds to other industries. Most studies were limited to specific sectors – deposit money banks (Ogungbade, 2021; Uwuigbe *et al.*, 2018), industrial/consumer goods firms (Felix, 2021; Umar *et al.*, 2021), insurance firms (Yahaya *et al.*, 2021),

Corporate Sustainability Practices and the Financial Performance of Listed Financial Companies in Nigeria

manufacturing firms (Abba *et al.*, 2017), oil and gas companies (Emmanuel *et al.*, 2022); but very few research has been conducted on all financial firms listed in Nigerian.

Furthermore, a gap in knowledge has been identified through an examination of the existing literature. Specifically, there is a need to explore the impact of sustainability disclosure on the economic value added (EVA) of listed companies, particularly in relation to financial performance. It is hypothesized that when companies generate higher profits, additional wealth is created for investors, and projects yield returns that exceed the cost of capital. Previous empirical studies have predominantly focused on indicators such as Tobin's Q (Gunarsih *et al.*, 2018; Iredele *et al.*, 2018; Memed *et al.*, 2021; Oyedokun *et al.*, 2019; Swarnapali *et al.*, 2018), return on equity (Asuquo *et al.*, 2018; Gunarsih *et al.*, 2018; Hamid *et al.*, 2020; Khan, 2019; Sanusi *et al.*, 2019; Umar *et al.*, 2021; Yahaya *et al.*, 2021), and return on assets (Johari *et al.*, 2019; Nnamani *et al.*, 2017; Polycarp, 2019; Umar *et al.*, 2021; Yahaya *et al.*, 2021). Little research has been done on Economic Value Added (EVA).

3 DATA AND METHODS

This study employed an ex-post facto and longitudinal research design as it involved extracting raw data from annual reports, including financial statements and sustainability reports, without making any alterations. Multiple firms were examined over a period of 10 years. The data for the study were obtained from secondary sources. Alongside the annual reports and sustainability reports of the listed companies, data were retrieved from the Nigerian Exchange Group database. The annual reports and sustainability reports were collected from the official websites of the companies, covering the period from 2012 to 2021. The measurement of sustainability practices adhered to the guidelines provided by the Global Reporting Initiative (GRI) and ESG disclosure guidelines, which can be accessed at www.globalreporting.org, the official GRI website. The population of the study comprised all 49 financial companies (including banks, insurance, microfinance, and mortgage firms) listed on the Nigerian Exchange Group (NGX) as of May 29, 2023. Purposive sampling technique was employed to select a sample of 36 financial firms. The study utilized panel regression analysis, specifically pooled OLS, fixed effects model, and random effects model.

Model Specification

The models for ROA, ROE, EVA, and Tobin's Q were adapted from the research of Khan (2019), Subedi & Farazmand (2020) and Gunarsih *et al.* (2018) because of the similarities and recency. The adaptation was achieved by removal and inclusion of some variables; therefore, the models for this study are stated mathematically as follows:

$$ROA_{it} = \beta_0 + \beta_1 ESDI_{it} + \beta_2 SDI_{it} + \beta_3 EDI_{it} + \beta_4 GDI_{it} + \epsilon_{it}$$

$$ROE_{it} = \beta_0 + \beta_1 ESDI_{it} + \beta_2 SDI_{it} + \beta_3 EDI_{it} + \beta_4 GDI_{it} + \epsilon_{it}$$

$$EVA_{it} = \beta_0 + \beta_1 ESDI_{it} + \beta_2 SDI_{it} + \beta_3 EDI_{it} + \beta_4 GDI_{it} + \epsilon_{it}$$

$$TQ_{it} = \beta_0 + \beta_1 ESDI_{it} + \beta_2 SDI_{it} + \beta_3 EDI_{it} + \beta_4 GDI_{it} + \epsilon_{it}$$

Where:

ESDI = ESG sustainability disclosure index

SDI = Social sustainability disclosure index

EDI = Environmental sustainability disclosure index

GDI = Governance sustainability disclosure index

$\beta_1 - \beta_4$ = Independent variables coefficient

i = firm (1-36)

t = period (2012-2021)

μ = error term

A-priori expectation = $\beta_1 - \beta_4 > 0$

4 DATA ANALYSIS AND INTERPRETATION OF RESULT

Descriptive Statistics

Table 2, as shown in the appendix, the basic features of the data used for the analysis. The total number of observations is 360. From the table, the overall average of returns on asset (ROA) of financial companies is 1.420778 with minimum of -54.99 and maximum ROA of 20.76. The standard deviation of 6.164119 indicates that small spread around the average ROA value. The overall average on returns on equity of financial companies is 9.865361 with minimum ROE of -394.32 and maximum ROE of 1222.87. The value of the standard deviation of 71.71418 further shows wide variation around the average ROE value. Also, the overall average economic value added (EVA) of financial companies (0.0000833) indicates that financial companies have very little economic value with minimum of -0.96 and maximum of 0.16. The standard deviation of 0.0851134 shows small variation around the average value. Furthermore, overall average Tobin Q ratio (TQ) ratio of 0.6585556 indicates that it will cost financial

Corporate Sustainability Practices and the Financial Performance of Listed Financial Companies in Nigeria

companies more to replace their assets than what they are worth with minimum and maximum of 0 and 2.61 respectively. The standard deviation of 0.3974215 shows small spread around the average TQ ratio. The overall average ESG sustainability disclosure index (ESDI) is 55.17225 with minimum and maximum liquidity of 0 and 85.94 respectively. A standard deviation of 21.34723 indicates medium spread around the average value. Also, the overall average of social sustainability disclosure index (SDI) is 63.88769 with minimum and maximum SDI of 0 and 100 respectively. A standard deviation of 25.68661 indicates medium spread around the average value. Furthermore, the overall average value of environmental sustainability disclosure index (EDI) is 37.39583 with minimum EDI of 0 and maximum EDI of 87.5. The standard deviation of 20.83075 further shows a medium spread from the average value. Lastly, the overall average of governance sustainability disclosure index (GDI) is 64.23245 with minimum and maximum cost of 0 and 100 respectively. The standard deviation of 24.26567 indicates a medium spread around the average value.

The effect of sustainability disclosure on return on asset of listed financial companies in Nigeria

The within r-square of this model is 0.0135, with between r-square of 0.0489 and overall r-square of this model is 0.0277. The result of the Wald chi2 (6.09) shows that the model is significant with a probability value of 0.0023. Also, the values of the z-score shows that ESGI is negative and lies below the mean, while SDI, EDI, and GDI are positive and lie above the mean. The regression result shows that ESGI, SDI and EDI are positive and significant while GDI is positive and insignificant. Therefore, an increase in ESG sustainability disclosure index (ESGI) increases the returns of asset (ROA) of listed financial companies by 98.812units. Similarly, an increase in social sustainability disclosure index (SDI) increases the returns on asset of listed financial companies by 32.043 units. Lastly, an increase in environmental sustainability disclosure index (EDI) increases the returns on asset of listed financial companies by 32.937 units. In conclusion, components of corporate sustainability practices such as ESGI, SDI, and EDI have significant effect on returns on asset of listed financial companies in Nigeria.

Table 1: Effect of sustainability disclosure on return on asset of listed financial companies in Nigeria

ROA	Coefficient	Standard Error	Z	P> z
ESGI	98.81195	-1.01	-1.01	0.014
SDI	32.94338	1.01	1.01	0.013
EDI	32.93694	1.01	1.01	0.014
GDI	32.93153	1.01	1.01	0.314
_CONS	1.506254	-0.4	-0.4	0.091
R-SQUARE	Within 0.0135 Between 0.0489 Overall 0.0277			
WALD CHI ²	6.09	0.0023)		

Source: Computed by the Author (STATA, 16)

Evaluate the effect of sustainability disclosure on return on equity of listed financial companies in Nigeria

The within r-square of this model is 0.0077, with between r-square of 0.0583 and overall r-square of this model is 0.0117. The result of the Wald chi2 (4.21) shows that the model is significant with a probability value of 0.0378. Also, the values of the z-score shows that ESGI is negative and lies below the mean, while SDI, EDI, and GDI are positive and lie above the mean. The regression result shows that GDI, SDI and EDI are positive significant while ESGI is negative insignificant. Therefore, an increase in social sustainability disclosure index (SDI) increases the returns on equity of listed financial companies by 248.68 units. Similarly, an increase in environmental sustainability disclosure index (EDI) increases the returns on equity of listed financial companies by 247.89 units. Finally, an increase in governance sustainability disclosure index (GDI) increases the returns of equity of listed financial companies by 248.35 units. In conclusion, components of corporate sustainability practices such as SDI, EDI, and GDI have significant effect on returns on equity of listed financial companies in Nigeria.

Table 2: Effect of sustainability disclosure on return on equity of listed financial companies in Nigeria

ROE	Coefficient	Standard Error	Z	P> z
ESGI	-744.965	1222.247	-0.61	0.524
SDI	248.6763	407.5166	0.61	0.042
EDI	247.8909	407.4055	0.61	0.043

Corporate Sustainability Practices and the Financial Performance of Listed Financial Companies in Nigeria

GDI	248.3508	407.3321	0.61	0.042
_CONS	1.629026	10.87793	0.15	0.001
R-SQUARE	Within 0.0077			
	Between 0.0583			
	Overall 0.0117			
WALD CHI ²	4.21	0.0378)		

Source: Computed by the Author (STATA, 16)

Investigate the effect of sustainability disclosure on Tobin's Q of listed financial companies in Nigeria

The within r-square of this model is 0.0527, with between r-square of 0.3413 and overall r-square of this model is 0.2451. The result of the Wald chi2 (30.58) shows that the model is significant with a probability value of 0.0000. Also, the values of the z-score shows that ESGI is positive and lies above the mean, while SDI, EDI, and GDI are negative and lie below the mean. The regression result shows that GDI, SDI and EDI are negative significant while ESGI is positive significant. Therefore, an increase in ESG sustainability disclosure index (ESGI) increases Tobin's Q of listed financial companies by 3.207 units. Also, an increase in social sustainability disclosure index (SDI) decreases Tobin's Q of listed financial companies by 1.071 units. Similarly, an increase in environmental sustainability disclosure index (EDI) decreases Tobin's Q of listed financial companies by 1.069 units. Finally, an increase in governance sustainability disclosure index (GDI) decreases Tobin's Q of listed financial companies by 1.062 units. In conclusion, corporate sustainability practices have significant effect on Tobin's Q of listed financial companies in Nigeria.

Table 3: Effect of sustainability disclosure on Tobin's Q of listed financial companies in Nigeria

TQ	Coefficient	Standard Error	Z	P> z
ESGI	3.207083	4.298961	0.75	0.046
SDI	-1.07103	1.433217	-0.75	0.015
EDI	-1.06936	1.432974	-0.75	0.006
GDI	-1.06238	1.43274	-0.74	0.038
_CONS	0.371074	0.083834	4.43	0.000
R-SQUARE	Within 0.0527			
	Between 0.3413			
	Overall 0.2451			
WALD CHI ²	30.58	(0.0000)		

Source: Computed by the Author (STATA, 16)

Assess the effect of sustainability disclosure on economic value added of listed financial companies in Nigeria

The within r-square of this model is 0.0037, with between r-square of 0.0383 and overall r-square of this model is 0.0149. The result of the Wald chi2 (2.07) shows that the model is significant with a probability value of 0.0227. Also, the values of the z-score shows that ESGI is negative and lies below the mean, while SDI, EDI, and GDI are positive and lie above the mean. The regression result shows that GDI, SDI and EDI are positive significant while ESGI is negative significant. Therefore, an increase in ESG sustainability disclosure index (ESGI) decreases the economic value added of listed financial companies by 1.019 units. Also, an increase in social sustainability disclosure index (SDI) increases the economic value added of listed financial companies by 0.340 units. Similarly, an increase in environmental sustainability disclosure index (EDI) increases the economic value added of listed financial companies by 0.340 units. Lastly, an increase in governance sustainability disclosure index (GDI) increases the economic value added of listed financial companies by 0.340 units. In conclusion, corporate sustainability practices have significant effect on the economic value added of listed financial companies in Nigeria.

Table 4: Effect of sustainability disclosure on economic value added of listed financial companies in Nigeria

EVA	Coefficient	Standard Error	Z	P> z
ESGI	-1.01948	1.363576	-0.75	0.045
SDI	0.340327	0.454608	0.75	0.014
EDI	0.339625	0.45452	0.75	0.005
GDI	0.339472	0.454446	0.75	0.015
_CONS	-0.00144	0.021034	-0.07	0.045

Corporate Sustainability Practices and the Financial Performance of Listed Financial Companies in Nigeria

R-SQUARE	Within 0.0037 Between 0.0383 Overall 0.0149
WALD CHI ²	2.07 (0.0227)

Source: Computed by the Author (STATA, 16)

Discussion of Findings

The analysis revealed that governance, social and environmental disclosure indexes have positive and significant while ESG disclosure index is negative and insignificant on return on asset of the listed financial companies in Nigeria. Based on the result of the finding, it is therefore concluded that sustainability disclosure has a significant effect on the return on assets of companies listed in Nigeria. Hence, the null hypothesis which states that sustainability disclosure has no significant effect on the return on asset of companies listed in Nigeria is rejected. This result is consistent with the findings of Buallay (2018), Buallay *et al.* (2021), Khan (2019), Sulbahri *et al.* (2021), Yahaya *et al.* (2021).

The analysis also showed that the effect of ESG disclosure index on return on equity is negative and insignificant while social, environmental, and governance has positive and significant effect on return on equity. Hence, the null hypothesis which states that sustainability disclosure has no significant effect on the return on asset of companies listed in Nigeria is rejected. The outcome is consistent with those of Buallay (2018), Buallay *et al.* (2021), Sulbahri *et al.* (2021), Yahaya *et al.* (2021).

The analysis revealed that ESG disclosure has positive and significant effect on Tobin's Q while social, environmental, and governance disclosures have negative and significant effects on Tobin's Q of listed financial companies in Nigeria. Hence, the null hypothesis which states that sustainability disclosure has no significant effect on the Tobin's Q of listed financial companies in Nigeria is rejected. The findings from this research align with those of Buallay *et al.* (2021).

The analysis disclosed that ESG disclosure has negative and significant effect on economic value added of listed financial companies in Nigeria while governance, social and environmental disclosures have positive and significant effect on economic value added of listed financial companies in Nigeria. Hence, the null hypothesis which states that sustainability disclosure has no significant effect on the economic value added of listed financial companies in Nigeria is rejected. The results of this research are consistent with those of Ndubuisi *et al.* (2018); Okoye *et al.* (2020). On the contrary, the result of Tanjung *et al.* (2019); Umeanozie *et al.* (2022) contradicts the result of the findings.

5 CONCLUSION AND RECOMMENDATIONS

The study investigated the effect of sustainability disclosure on the financial performance of listed financial companies in Nigeria. The focus of the study was sustainability disclosure indexes (ESG disclosure index, social disclosure index, environmental disclosure index and governance disclosure index) and financial performance indicators (return on equity, return on asset, Tobin's Q, and economic value added) for a period of 10 years (2012-2021). The result of the analysis indicate that sustainability disclosure has a significant impact on the return on assets (ROA), economic value added (EVA), return on equity (ROE), and Tobin's Q of listed financial companies in Nigeria.

The study therefore recommends that all listed financial companies in Nigeria should be mandated to comply with the sustainability reporting guidelines in order to enhance financial performance, environmental, social and governance wellbeing of stakeholders.

REFERENCES

- 1) Abughneim, M. S., Al-Aishat, M. H., & Hamdan, A. M. (2019). Corporate Sustainability as an Antecedent to the Financial Performance: An Empirical Study. *Polish Journal of Management Studies*, 20(2), 35-44.
- 2) Adobe Inc. (2023, May 4). *Why Sustainability in Business is Important*. <https://www.adobe.com/acrobat/hub/resources/why-sustainability-in-business-important.html>
- 3) Asuquo, A. I., Dada, E. T., & Onyeogaziri, U. R. (2018). The Effect of Sustainability Reporting on Corporate Performance of Selected Quoted Brewery Firms in Nigeria. *International Journal of Business and Law Research*, 6(3), 1-10.
- 4) Bella, N. R., & Tarsisus, R. S. (2018). The Competitive Advantage between Intellectual Capital and Financial Performance of Banking Sector in ASEAN. *Jurnal Keuangan dan Perbankan*, 22(2), 321-334.
- 5) Buallay, A. (2018). Is sustainability reporting (ESG) associated with performance? Evidence from the European banking sector. *Management of Environmental Quality: An International Journal*, 30(1), 98-115.
- 6) Buallay, A., Hamdan, A., & Barone, E. (2019). Sustainability Reporting and Firm's Performance: Comparative Study between Manufacturing and Banking Sectors. *International Journal of Productivity and Performance Management*, 3(5), 1-16.

Corporate Sustainability Practices and the Financial Performance of Listed Financial Companies in Nigeria

- 7) Buallay, A., Fadel, S.M., Alajmi, J., & Saudagaran, S. (2021). Sustainability reporting and bank performance after financial crisis: Evidence from developed and developing countries. *Competitiveness Review*, 31(4), 747-770.
- 8) Ching, H. Y., Gerab, F., & Toste, T. H. (2017). The Quality of Sustainability Reports and Corporate Financial Performance: Evidence from Brazilian Listed Companies. *Sage Open*, 1-9.
- 9) Emmanuel, O. G., & Erinoso, O. M. (2022). Environmental Conservation, Sustainability, and Financial Performance of Listed Oil and Gas Companies in Nigeria. *International Journal of Research and Innovation in Social Science*, VI(VIII), 582-590.
- 10) Ende, E. (2017). Financial Performance using Economic Value Added (EVA). *IOP Conference Series: Materials Science and Engineering*, 180(9), 1-9. <https://10.1088/1757-899X/180/1/012250>.
- 11) Faisal, F., Tower, G., & Rusmin, R. (2012). Legitimizing Corporate Sustainability Reporting throughout the World. *Australasian Accounting Business and Finance Journal*, 6(2), 19-34.
- 12) Felix, I. E. (2021). Corporate Sustainability Disclosure and the Nigerian Industrial/Consumer Goods Sector's Performance: A Panel Data Approach. *International Journal of Research and Innovation in Social Science*, V(III), 622-627.
- 13) Gold, N. O., & Taib, F. M. (2020). Impact of Corporate Sustainability Reporting Practice on Corporate Performance: A Review of Literature. *International Journal of Industrial Management*, 8(1), 19-34.
- 14) Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate Social and Environmental Reporting: A Review and a Longitudinal Study of UK Disclosure. *Accounting, Auditing & Accountability Journal*, 8(4), 47-77.
- 15) Gunarsih, T., & Ismawati, Y. (2018). Sustainability Report and Firm Performance: Study in Mining and Metal and Food Processing Industry Indonesia Stock Exchange 2014-2017. *Journal of Governance and Integrity*, 2(1), 9-26.
- 16) Guthrie, J., Cuganesan, S., & Ward, L. (2006). Legitimacy Theory: A Story of Reporting Social and Environmental Matters within the Australian Food and Beverage Industry. *Social Science Research Network*, 1-35. <http://ssrn.com/abstract=1360518>.
- 17) Haidar, M. H., & Sohail, R. M. (2021). Sustainability Reporting (SR) Disclosure and Value Relevance on Listed Saudi Firms. *Open Journal of Business and Management*, 9(4), 1782-1804. <https://doi.org/10.4236/ojbm.2021.94097>.
- 18) Hamid, K. T., & Ibrahim, M. (2020). The moderating effect of corporate governance on the relationship between corporate social responsibility and financial performance of listed non-financial services companies in Nigeria. *International Journal of Accounting and Finance (IJAF)*, 9(1), 69-89.
- 19) Ibrahim, A. U., & Mustapha, A. M. (2019). Impact of financial control mechanisms on profitability performance: A case of manufacturing firms in Nigeria. *International Journal of Managerial Studies and Research*, 7(3), 1-10. <https://doi.org/10.20431/2349-0349.0703001>.
- 20) Ikram, M., Zhang, Q., Sroufe, R., & Ferasso, M. (2020). The Social Dimensions of Corporate Sustainability: An Integrative Framework Including COVID-19 Insights. *Sustainability*, 12(8747), 1-29. <http://dx.doi.org/10.3390/su12208747>.
- 21) Iredele, O. O., & Okpala, O. P. (2018). Corporate social and environmental disclosures and market value of listed firms in Nigeria. *Copernican Journal of Finance & Accounting*, 7(3), 9-28.
- 22) Jankalova, M., & Kurotova, J. (2019). Sustainability Assessment using Economic Value Added. *Sustainability*, 12(318), 1-19.
- 23) Johari, J., & Komathy, I. (2019). Sustainability Reporting and Firm Performance: Evidence in Malaysia. *International Journal of Accounting, Finance and Business*, 4(17), 1-7.
- 24) Khan, M. (2019). Corporate Sustainability Practices Impact on Firm Financial Performance: Evidence from the Banking Sector of Pakistan. *City University Research Journal*, 9(2), 427-438.
- 25) Memed, S., & Amir, M. (2020). The Effect of Sustainability Reporting on Company Financial Performance of Mining Sector Company in Indonesia. *International Journal of Advanced Science and Technology*, 29(8), 546-555.
- 26) Ndubuisi, A. N., Vincent, O. P., & Chinyere, O. J. (2018). Effect of Sustainability Reporting on Economic Value Added of Quoted Brewery Firms in Nigeria. *Social Science Research Network*, 61-78. <https://ssrn.com/abstract=3704483>.
- 27) Nnamani, J. N., Onyekwelu, U. I., & Ugwu, O. K. (2017). Effect of Sustainability Reporting on Corporate Performance of Firms in the Nigerian Brewery Sector. *European Journal of Business and Innovation Research*, 5(1), 1-15.
- 28) Nobanee, H., & Ellili, N. O. (2016). Corporate Sustainability Disclosure in Annual Reports: Evidence from UAE Banks: Islamic versus Conventional. *Renewable & Sustainable Energy Reviews*, 55(2), 1336-1341.
- 29) Omaliko, E., Nweze, A., & Nwadiakor, E. (2020). Effect of Social and Environmental Disclosures on Performance of Non-Financial Firms in Nigeria. *Journal of Accounting and Management*, 2(2), 23-30.
- 30) Oyedokun, G. E., Egberi, O. E., Tonade, M. A. (2019). Environmental accounting disclosure and firm value of industrial goods companies in Nigeria. *IOSR Journal of Economics and Finance (IOSR-JEF)*, 10(1), 7-27.

Corporate Sustainability Practices and the Financial Performance of Listed Financial Companies in Nigeria

- 31) Polycarp, S. U. (2019). Environmental Accounting and Financial Performance of Oil and Gas Companies in Nigeria. *Research Journal of Finance and Accounting*, 10(10), 192-202.
- 32) Sanusi, K. A., & Sanusi, O. O. (2019). Environmental Sustainability Reporting Practices in Nigeria: Are Clouds Darker or Fairer in the Manufacturing Industry? *International Journal of Social Sciences and Humanity Studies*, 11(2), 39-60.
- 33) Securities and Exchange Commission. (2018). Sustainability reporting guidelines. [1530_Nigeria_Sustainability_Disclosure_Guidelines_2019_NSE.pdf \(sbfnetwork.org\)](#)
- 34) Subedi, M., & Farazmand, A. (2020). Economic Value Added (EVA) for Performance Evaluation of Public Organizations. *Public Organization Review*, 20(5), 613-630. <https://doi.org/10.1007/s11115-020-00493-2>.
- 35) Swarnapali, R. M., & Le, I. (2018). Corporate Sustainability Reporting and Firm Value: Evidence from a Developing Country. *The International Journal of Organizational Innovation*, 10(4), 69-78.
- 36) Tanjung, P. R., & Wahyudi, S. M. (2019). Analysis of the Effect Disclosure of Sustainability Report, Economic Value Added and other Fundamental Factors of Companies on Company Value. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 9(2), 237-249. <http://dx.doi.org/10.6007/IJARAFMS/v9-i2/6171>.
- 37) Umar, M. M, Mustapha, L. O., & Yahaya, O. A. (2021). Sustainability Reporting and Financial Performance of Listed Consumer Goods Firms in Nigeria. *Journal of Advance Research in Business Management and Accounting*, 7(3), 21-32.
- 38) Umeanozie, O., & Ofoegbu, G. (2022). Disclosure of Sustainability Reporting and Their Effect on Shareholders Wealth Maximization of Listed Nigerian Companies. *Academy of Accounting and Financial Studies Journal*, 26(5), 1-12.
- 39) Uwuigbe, U., Teddy, O., Uwuigbe, O., Emmanuel, O., Asiriuwa, O., Eyitomi, G. A., & Taiwo, O. S. (2018). Sustainability Reporting and Firm Performance: A Bi-Directional Approach. *Academy of Strategic Management Journal*, 17(3), 2018.
- 40) Yahaya, O. A., & Akasim, A. (2021). Sustainability and Profitability of Listed Insurance Companies. *International Journal of Innovative Research in Accounting and Sustainability*, 6(1), 17-28.

APPENDIX

Measurement of Variables

Table 1: Variables and Measurement

S/N	Variable	Role	Measurement	Source
1	Financial Performance	– Dependent		
1a	Return on asset	Dependent	Measured as net income divided by total asset (%)	Bella <i>et al.</i> (2018);
1b	Return on equity	Dependent	Measured as net income divided by total equity (%)	Khan (2019)
1c	Economic value added	Dependent	Measured as net operating profit after tax minus (weighted average cost of capital*capital employed) scaled by total asset (x)	Subedi <i>et al.</i> (2020)
1d	Tobin's Q	Dependent	Measured as market capitalization divided by total asset	Gunarsih <i>et al.</i> (2018)
2	Sustainability Disclosure	– Independent		
2a	ESG sustainability disclosure index	Independent	Measured as the average of the social, environmental and governance sustainability indexes (%) in line with ESG sustainability guidelines	Annual report
2b	Social sustainability disclosure index	Independent	Measured as the average of all the social disclosure items in line with GRI sustainability guidelines (%)	Annual report
2c	Environmental sustainability disclosure index	Independent	Measured as the average of all the environmental disclosure items (%) in line with GRI sustainability guidelines (%)	Annual report
2d	Governance	Independent	Measured as the average of all the	Annual report

Corporate Sustainability Practices and the Financial Performance of Listed Financial Companies in Nigeria

sustainability disclosure index

corporate governance disclosure items (%) in line with GRI sustainability guidelines (%)

Source: Author's Computation 2023

Table 2: Summary Statistics

Variable		Mean	Std. Dev.	Min	Max	Observations
ROA	Overall	1.420778	6.164119	-54.99	20.76	N = 360
	between		3.970205	-16.361	10.304	n = 36
	Within		4.756994	-37.20822	20.93178	T = 10
ROE	Overall	9.865361	71.71418	-394.32	1222.87	N = 360
	between		20.95331	-33.372	112.656	n = 36
	Within		68.66505	-351.0826	1120.079	T = 10
EVA	Overall	0.0000833	0.0851134	-0.96	0.16	N = 360
	between		0.0553969	-0.3	0.067	n = 36
	Within		0.0652104	-0.6599166	0.3300833	T = 10
TQ	Overall	0.6585556	0.3974215	0	2.61	N = 360
	between		0.3453317	0.013	1.745	n = 36
	Within		0.2041557	-0.1964444	1.850556	T = 10
ESGI	Overall	55.17225	21.34723	0	85.94	N = 360
	between		20.05719	0	75.155	n = 36
	Within		7.968599	7.572251	85.70425	T = 10
SDI	Overall	63.88769	25.68661	0	100	N = 360
	between		24.01262	0	95.714	n = 36
	Within		9.881861	12.46169	96.74569	T = 10
EDI	Overall	37.39583	20.83075	0	87.5	N = 360
	between		17.92438	0	72.5	n = 36
	Within		10.98595	-7.604167	79.89583	T = 10
GDI	Overall	64.23245	24.26567	0	100	N = 360
	between		22.32665	0	83.08	n = 36
	Within		10.141	5.001445	108.8124	T = 10



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0) (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.