

Sustainability Reporting and Corporate Financial Performance of Quoted Telecommunication Companies in Nigeria

¹Korolo, Emmnuel Omolaye (Ph.D.) & ²Korolo Akuboere Salome (Ph.D.)

^{1,2}Department of Accounting, Federal University Otueke, Bayelsa State, Nigeria

Corresponding Email: koroloeco@fuotuoke.edu.ng, koroloas@fuotuoke.edu.ng

Abstract

This study examines the link between sustainability reporting and telecommunication companies' corporate performance on the Nigerian Stock Exchange. The specific objectives of the study were to determine whether sustainability reporting - economic, social, and environmental disclosures - has an impact on the corporate performance of telecom companies listed on the Nigerian Stock Exchange, using profit margin (PM) as a measure of corporate financial performance. Since the sector has just three companies, the study considered the entire population. An ex post facto research design was used and the study used secondary data from the companies' annual reports for the relevant years considered (2012-2021). Panel regression techniques were used to examine the relationship between variables. This study found that economic performance disclosure and social performance disclosure has a significant positive effect on net profit margin, while environmental performance disclosure has no significant impact on the net profit margin of companies listed on the Nigerian Stock Exchange. In general, this study concludes that there is a significant correlation between sustainability reporting and the corporate performance of telecom companies listed on the Nigerian Stock Exchange. The study, therefore, recommends, among other things, that companies should strive not only to improve these disclosures, but also to improve the quality of these disclosures.

Keywords: sustainability, corporate, reporting, disclosures and performance

1.0. Introduction

All enterprises aim for steady growth, long-term viability, and maximization of shareholder value. Due to the fact that companies do not function in a vacuum, the effects of their operations frequently extend to the environment and society as a whole. The majority of the time, these businesses' operations have negative effects on both the local community where they are located and the environment as a whole. This indicates that in order for these organizations to effectively and efficiently accomplish their objectives, they must make the necessary adjustments to the immediate environment in which they function. Environmental developments including global warming, health care, and poverty have presented the world with significant difficulties in recent decades. Welford (1997) refers to these as concrete

environmental crises (severe global water shortages, declining fish catches, and global food insecurity).

According to Viek and Steg (2019) and Ezeabasili (2009), the quality and quantity of environmental resources are steadily declining as a result of rising material use, expanding manufacturing technologies, and an expanding population. So, it follows from the foregoing that numerous businesses are making an effort to contribute to the answers to these environmental problems. Welford (1997) contends that companies appear satisfied to watch while the natural system of the globe deteriorates, individuals go hungry, and social systems break down. As business is the root of the issue, it must also be the root of the solution. Sustainability has recently raised significant concerns across the globe.

All companies must immediately increase their transparency regarding how they manage corporate governance issues, how they treat their employees, and how they interact with communities. According to Unerman et al. (2007), large multinational corporations in particular are increasingly making efforts to take environmental, social, and economic performance into account. More generally, the idea of sustainable development has emerged as a key organizational concern in contemporary society, which is a remarkable accomplishment for an idea that is typically believed to have burst onto the political scene with the release of the Brundtland Report in 1987. "This follows the creation of the World Commission on Environment and Development in 1983 by the Secretary-General of the United Nations to study the magnitude of the problem of mounting evidence of global environmental damage caused by human activities.

The commission investigated global environmental and economic issues and discovered a close relationship between ecology and economics on a global scale. The destruction of the environment and its effects on people's lives have drawn a lot of attention from people all around the world. Sustainable development is crucial for the future wealth of nations and individuals, according to the Brundtland Report (White, 2009; Edwards, 2005). Concerns about sustainable development typically center on how human activities can be planned and directed to meet physical and emotional demands, while not jeopardizing the social, economic, or environmental underpinnings that allow those needs to be met (Unerman et al., 2007). According to Hart (2007), corporations are the only organizations with resources, technology, global reach, and ultimately the motivation to achieve sustainability.

Several businesses state that they acknowledge their social and environmental duties in addition to their economic responsibilities and that they aim to manage and account for these activities in accordance with their sustainable development policies and procedures. The majority of businesses are now embracing this expanding corporate reporting system because corporate sustainability reporting has grown to be such a significant concern. This surge in sustainability reporting is reflected in statistics from the Global Reporting Initiative (GRI). The number of companies worldwide writing sustainability reports based on the GRI framework increased from 150 in 2002 to 750 in 2005. From January 1 to December 31, 2010, the number of those registered on the list of GRI reports increased sustainability reports by 22 percent (GRI, 2011). “

The telecommunications industry is an industry that should be socially and environmentally responsible for its environment. This is because they engage in activities that generate electromagnetic radiation that is dangerous to human health as it can lead to life-threatening diseases such as cancer, heart ailments, etc (Dahal, 2013). This study, therefore, focused on sustainability reporting and the corporate financial performance of listed telecom companies on the Nigerian Stock Exchange.

It is common knowledge that numerous businesses all around the world are implementing sustainability reporting methods. Examining the link between sustainability reporting and financial performance from a methodological standpoint raises questions about the direction of this relationship and suggests that it did not perform well in terms of attaining convergence. Majority of studies on financial performance and sustainability reporting have produced results that are either unclear or contradictory, sometimes claiming favorable outcomes. Considering research done in Nigeria, researchers such as Beredugo and Mefor (2012), Akinlo and Iredele (2014), Onyekwelu and Ekwe (2014), Olanyinka and Oluwamayowa (2014), Nze et al., (2016), Nnamani et al., (2017) found that sustainability reporting has a positive and significant impact on the financial performance of publicly traded companies; while others such as Oyewo and Badejo (2014), Shehu (2011), Asuquo et al., (2018), Erhirhie and Ekwueme (2019) found that corporate sustainable development practices are negatively associated with the profitability of public companies (not significant effect). Based on these conflicting empirical results, it seems obvious that the question of whether or not sustainability reporting influences company performance remains an open question and therefore warrants further investigation.

2.0 Literature Review

2.1 Conceptual Clarifications

2.1.1 Sustainability Reporting

Organizations can think about how they affect a range of sustainability concerns by reporting on them. As a result, people are able to be more open about the dangers and chances they confront. The main channel for expressing sustainability performance and impact is sustainability reporting. In its simplest form, a sustainability report is a summary of the environmental and social performance of a business. A sustainability report is a document that a company or organization publishes that details the economic, environmental, and social effects of its regular operations, according to GRI (2011). The organization's principles and governance structure are also presented in a sustainability report, demonstrating the connection between its strategy and its dedication to a sustainable global economy. There are a variety of benefits that a company can derive from reporting on its sustainability activities. These advantages can include enhancing customer loyalty, staff trust, and investor confidence. Market analysts frequently consider a company's sustainability disclosures to judge management effectiveness and quality, and reporting can give businesses better access to finance (Dhaliwal, et al., 2011).

The idea of sustainability reporting is related to other distinct ideas, such as B. Triple Bottom Line Reporting and Corporate Social Responsibility (CSR) Reporting, which explain the disclosure of information on economic, environmental, and social implications. Companies who aim to offer their stakeholders value and information about the effects of their operations and activities on society and the environment voluntarily produce sustainability reports (Garg, 2015). “ According to Epstein (2008) (Dembo, 2017), this additional knowledge will offer the organization a number of advantages, including financial ones like cheaper capital costs and stock exchange premiums; benefits that are tied to customers, such as increased market share and improved reputation; operational advantages include higher resource yield and novel processes; advantages for the organization, including decreased risk and enhanced learning.

2.1.2 Corporate Financial Performance

The outcome of a task is an achievement. The total of all the outcomes of an organization's work activities and processes is its organizational performance (Robbins & Coulter, 2005). Management must supply a tool for tracking and evaluating business performance. Financial reports offer financial data that

managers can use to evaluate their performance in managing the business and that is advantageous to others when they make financial decisions (Viek & Steg, 2019). A company's overall success is determined by how well it does on its key performance indicators, which are often shareholder, market, and financial performance. "The net profit margin is the metric used in this study to assess how well businesses are performing financially. Net profit margin, also known as profit margin or net profit margin, is a financial metric used to calculate the percentage of profit a company makes from its total sales.

2.1.3 Social Performance Disclosure

In corporate social responsibility management, there are two strategies that can improve social performance, like two sides of the same coin. On the one hand, the social performance improvement strategy aims to fulfill legal obligations towards stakeholders. This prompted the company as a state to carry out the management of positive and negative business impacts according to the state regulations, namely CANDY SOE No. 05 / MBU /2007.

On the other hand, the strategy of improving social performance is realized through the principle of stakeholder involvement (stakeholder inclusivity) and community development. In this case, sustainable development practices aim to meet the needs of stakeholders that depend on the capabilities of the company, including respect for the right of the community, knowledge of the community's characteristics of interaction, recognition of the value of work in partnership and investment in social networks to create value for the community. The results of the literature study provide a relevant understanding of the concept of Corporate Social Performance (CSP) emanating from the writing developed by Carroll (1979). Corporate Social Performance (KSP) is a multidimensional construct that includes four components: 1. Responsibility economy towards consumers and investors. 2. The legal responsibilities to the government or the judiciary; 3. The responsibility of ethics to the public (society) and 4. Responsibility policy to the community.

2.1.4 Economic and Environmental Performance Disclosure

The economic dimension of sustainability is concerned with how an organization affects the financial health of its stakeholders and the overall local, national, and international economic system in the framework of the GRI Standards. " The Economic Series (200) standards talk about how money moves between various interest groups and what major economic effects an organization has on society. The topic of economic performance is covered in GRI 201. This encompasses the

financial effects of climate change, the economic value generated and dispersed by an organization (EVG&D), its defined benefit plan commitments, and the financial support it receives from the government. The disclosures in this Standard can provide details on how a business manages its impacts on economic performance.

Environmental disclosure is a form of corporate accountability to stakeholders that relates to environmental disclosure initiatives the business has taken in the past, is currently undertaking, and will likely take in the future. Environmental disclosure initiatives are a result of the business' environmental management decisions. Although environmental disclosure by a corporation is not yet mandatory, any manager working for an agency or serving on its board of directors will make an effort to provide any information provided by the company regarding its environmental management. Hence, an organization's environmental disclosure will result in future value creation for the organization (Ezhilarasi, 2009).

2.2 Empirical Review

Abdulsalam et al. (2020) studied the effect of corporate social costs on the profitability of oil marketing firms in Nigeria. The information was gathered over a fifteen-year period from three sampling organizations audited financial statements and reports (2004 to 2018). Economic, social, environmental, and health expenses were employed as stand-ins for sustainability reporting throughout the panel regression analysis of the data. The research demonstrates that corporate social responsibility positively and significantly impacts the profitability of the organizations under investigation. Based on this discovery, they advised businesses that place a high priority on returns to make significant expenditures on social issues.

Abdulsalam and Babangida (2020) conducted a study with the aim of empirically examining the significant influence of turnover and company size on the sustainability reporting of oil and gas companies in Nigeria. "The newspaper population consists of 24 oil and gas companies that are significant players in the upstream, midstream, and downstream of Nigeria's oil and gas industry. Panel regression techniques were utilized to examine data taken from financial statements and stand-alone reports from the sample companies, which were chosen as the study's sample size across a fifteen-year period (from 2004 to 2018). The findings indicate that firm characteristics such as revenue growth and leverage have a negative significant impact on sustainability reporting and profitability of Nigerian oil and gas companies, whereas company size has a positive significant impact. The

study, therefore, recommended that oil and gas companies consider a mix of common stock, preferred stock, and retained earnings as a form of capital structure, rather than a preference for debt financing.

Okolie and Igaga (2020) examined the use of sustainability reporting for evaluating the financial performance of listed deposit money banks in Nigeria. The study mainly focused on the financial performance of Nigeria's deposit-taking banks from 2012 to 2018 utilizing return on assets, return on equity, and earnings per share as proxies for the economic, environmental, and social elements of sustainability reporting. Only seventeen deposit-taking banks out of the twenty-one banks registered on the Nigerian Stock Exchange were included in the study's sample (as of December 2018). The necessary information was gathered from the selected depository institutions' period sustainability reports and audited annual accounts. For the study, descriptive and least-squares regression analyses were performed to compare the performance proxies chosen with banks' sustainability reporting procedures. The study found that the sustainability reporting practices of banks in Nigeria have a significant impact on the financial performance of deposit-taking banks in Nigeria. The study recommended that appropriate legislation be enacted to mandate enhanced sustainability practices at all deposit-taking banks in Nigeria and allow for meaningful assessment and measurement of revenue, and social and environmental impacts in all aspects of banking operations in Nigeria.

Iheduru and Okoro (2019) examined the impact of sustainable reporting on profitability indicators of listed companies in Nigeria from 2008 to 2017. The information is derived from the firms' annual reports. Out of the total number of listed companies in Nigeria, twenty were chosen. Return on Equity, Earnings Per Share, and Return on Investments were used as stand-ins for profitability, while disclosures in the areas of economic, social, environmental, and corporate governance were used to further qualify sustainability reporting. The Hausman test was used to evaluate the panel data model. The fixed effect was supported by models 1 and 2, while the random effect was supported by model 3. The findings showed that while environmental and corporate governance disclosure had negative and insignificant effects on return on equity for the selected companies, economic and social disclosure had favorable, but insignificant effects. Economic, social, and environmental disclosure had a favorable impact on ROI, while corporate governance disclosure had a negative impact on the ROI of the chosen Nigerian companies. All predictor factors had positive and insignificant effects on the companies' earnings per share. In order to solve environmental concerns and boost profitability, they advised carefully assessing the operational environments of the

companies and developing policies to control elements like economic, social, environmental, and corporate governance disclosures. Companies should make sure that all kinds of sustainability reporting are strictly followed.

2.3 Theoretical Framework

Stakeholder theory is a very fundamental theory of sustainability reporting. Stakeholder theory suggests that the essence of business is first and foremost to build relationships and create value for all of its stakeholders. Although the composition of stakeholders can vary depending on the company's industry and business model, key stakeholders typically include employees, customers, communities, suppliers, and financiers (owners, investors). All of these stakeholders are equally important to the company and any compromise between stakeholders should be avoided. Rather, leaders must find ways to steer these interests in the same direction. Freeman's stakeholder theory states that managers must satisfy a variety of stakeholders (e.g., employees, customers, suppliers, and local community organizations) who can affect the company's outcomes (Korolo & Korolo, 2022). This study is consistent with stakeholder theory as it is a theory of organizational management and business ethics that deals with morality and values in managing and organizing stakeholders and any individual or constituency that contributes to an organization afford. “

3.0 Methodology

This research used an ex post facto research design. The population of the study comprises all three (3) companies in the telecommunications sector listed on the Nigerian Stock Exchange (NSE). The study used all three (3) companies hence there was no need for sample size and sampling techniques. Secondary data were used for this study. The data were extracted from the annual reports of the sampled companies listed on the Nigeria Stock Exchange for the financial years 2012-2021. A regression analysis was performed to test the hypotheses using the Ordinary Least Squares (OLS) method based on the desirable properties it possesses and the relative ease of its application.

3.1. Model Specification

The model specification refers to the description of the process by which the dependent variable is generated by the independent variables (Iheduru & Okoro, 2019). The study adopted the model of Okolie and Igaga (2020). Each model represented a specific hypothesis. Hypothesis one, says that there is no positive and

significant impact of economic performance disclosure on the net profit margin of publicly traded telecom companies in Nigeria.

Is represented as:

$$NPM = f(ECN) \dots \dots \dots (i)$$

Model (I) can be further specified as:

$$NPM = \beta_o + \beta_1 ECN + \mu_t \dots \dots \dots (ii)$$

Hypothesis two states that there is no positive and significant effect of environmental performance disclosure on the Net Profit Margin of listed telecommunication companies in Nigeria. It is represented as:

$$NPM = f(ENV) \dots \dots \dots (iii)$$

Model (iii) can be further specified as:

$$NPM = \beta_o + \beta_2 ENV + \mu_t \dots \dots \dots (iv)$$

Hypothesis three states that there is no positive and significant effect of social performance disclosure on Net the Profit Margin of listed telecommunication companies in Nigeria. It is represented as:

$$NPM = f(SOC) \dots \dots \dots (v)$$

Model (v) can be further specified as:

$$NPM = \beta_o + \beta_3 SOC + \mu_t \dots \dots \dots (vi)$$

The combined model specification

$$NPM = f(ECN + ENV + SOC) \dots \dots \dots (vii)$$

The regression model is;

$$NPM = \beta_o + \beta_1 ECN + \beta_2 ENV + \beta_3 SOC + \mu_t \dots \dots (viii)$$

Taking the log of the model

$$LNPM = \beta_o + \beta_1 LECN + \beta_2 LENV + \beta_3 LSOC + \mu_t \dots \dots \dots (ix)$$

Where:

NPM – Net profit margin

ECN – Economic Performance Disclosure

ENV– Environmental performance disclosure

SOC – Social performance disclosure

μ_t = Error term capturing other explanatory variables not explicitly included in the model.

β_o = Intercept of the regression.

L = Log

β_1 , β_2 , and β_3 = Beta coefficients of the independent variables

4.0. Results and Discussion

Table 4.1: Economic Performance Disclosure and Profit Margin Result

Variable	Aprori sign	Random Effects Estimates	Fixed Effects Estimates	GMM Estimates
C		0.2579* (0.0746) {0.001}	0.4961* (0.0201) {0.000}	
PM (-1)				0.3087* (0.1393) {0.0272}
Log (REV)	+	0.0147* (0.0052) {0.0049}	0.0086* (0.0023) {0.0003}	0.0357 (0.0375) {0.3419}
Log (TASSET)	+	0.0022* (0.0071) {0.7607}	-0.0079* (0.0039) {0.039}	-0.02456 (0.0152) {0.1056}
LEV	+	-0.02551 (0.0196) {0.1925}	-0.0278** (0.0151) {0.0649}	-0.3257* (0.1534) {0.0342}
DPS	+	-0.0409* (0.0229) {0.0742}	-0.0296** (0.0151) {0.0508}	-0.4800* (0.1643) {0.0036}
EPS	+	-0.0253* (0.0367) {0.4917}	-0.0008 (0.0168) {0.9645}	0.7955* (0.0774) {0.000}
Model Parameters				
R ²		0.0112	0.9088	
Adjusted R ²		0.003	0.8947	
F-statistic		1.4426	64.668	
Prob(F-stat)		0.2069	0.00	
Durbin-Watson		1.4	1.6	
J-statistic Prob (J-stat)				18.276 (0.248)
Instrument Rank				21
Model Diagnostics				

χ^2_{Hetero}	(0.621)	χ^2_{Norm}	0.144	
$\chi^2_{\text{Serial/Corr}}$	(0.240)	χ^2_{Hausman}	14.051	
$\chi^2_{\text{Wald-Test}}$	(0.00)		(0.000)	
Ar(1)				0.0337
Ar(2)				0.1321

Source: Researcher's compilation (2022)

Table 4.1 examines the estimation results for the impact of economic disclosure on the margin measure of companies' financial performance. Estimating the fixed effects model based on the Hausman statistic shows that the R^2 and adjusted R^2 were 90.88% and 89.47%, respectively. This is also the model's highest explanatory power compared to those on the profit margin regressed social and environmental data and the likely reason for this has been suggested earlier. The estimation diagnostic shows that the χ^2 Hetero p-value (0.621) implies the homoscedastic behavior of the errors and the χ^2 Serial/Corr value (0.240) also shows the lack of a serial correlation. In addition, the χ^2 Norm p-value (0.144) shows that the series follows a normal distribution. The F-stat of 64.668 (p-value = 0.00), which is significant at 5%, suggests that the hypothesis of a significant linear relationship between the dependent and independent variables cannot be rejected.

Assessing the performance of the independent variable, the estimation results show that the revenue (log (REV)) measured in it has a positive and significant impact on the profit margin of 5% (0.0086, p=0.000). The influence of log (TASSET) on PM is significant (p=0.000) with a negative coefficient (-0.0079). The impact of DPS is negative (-0.0296) and significant at 10% (p=0.0508), while that of EPS is not significant (p=0.000) at 5%.

Table 4.2: Social Performance Disclosure and Profit Margin Result

Variable	Apriori sign	Random Effects Estimates	Fixed Effects Estimates	Dyn-GMM Estimates
C		0.4212* (0.0819) {0.000}	0.4751* (0.0201) {0.000}	
PM (-1)				0.3275* (0.0679) {0.000}
H/S	+	0.19033* (0.1057) {0.000}	0.1988* (0.0962) {0.0392}	1.2709* (0.6256) {0.0428}
GD	+	0.0593** (0.0322) {0.0660}	0.0353* (0.0105) {0.001}	0.0959 (0.0881) {0.2769}
EMP	+	-0.1432 (0.1175) {0.2235}	-0.2008* (0.0905) {0.0269}	-1.0534** (0.6040) {0.0818}
CSR	+	-0.0558* (0.0154) {0.0003}	-0.0283* (0.0099) {0.0046}	-0.1054 (0.0647) {0.1036}
Model Parameters				
R ²		0.0156	0.9088	
Adjusted R ²		0.0093	0.8947	
F-statistic		2.4829	64.668	
Prob(F-stat)		0.0426	0.00	
Durbin-Watson		1.4	1.6	
J-statistic Prob (J-stat)				8.9306 (0.9162)
Instrument Rank				21
Model Diagnostics				
χ^2_{Hetero}	(0.3927)		χ^2_{Norm}	0.6712
$\chi^2_{\text{Serial/Corr}}$	(0.862)		χ^2_{Hausman}	11.232
$\chi^2_{\text{Wald-Test}}$	(0.00)			(0.000)
Ar(1)				
Ar(2)				

Source: Researcher's compilation (2023)

Table 4.2 examines the estimation results for the impact of the social disclosure dimension on the margin measurement of firms' financial performance. The 2Hausman statistic and p-value (8.322 p=0.024) indicate that the fixed effects model estimate is the appropriate estimate for the model, indicating the existence of significant correlations between firm-specific disturbances and the betas. The model shows that R² and Adj R² were 60.88% and 59.47%, respectively. The χ^2 Hetero p-value (0.3927) implies the homoscedastic behavior of the errors and the χ^2 Serial/Corr value (0.862) also shows the lack of serial correlation. In addition, the χ^2 Norm p-value (0.6712) shows that the series follows a normal distribution. The F-stat of 64.668 (p-value = 0.00), which is significant at 5%, indicates that the hypothesis of a significant linear relationship between the dependent and independent variables cannot be rejected. It is also an indication of the shared statistical significance of the model. The influence of EMP is negative at 5% (-0.2008), but also significant (p=0.0269). Finally, the impact of CSR on profit margin is found to be negative (-0.0283) and significant (p=0.0046) at 5%. The results of the diagnostic tests confirm the normality of the residuals (χ^2 Norm = 0.684), the absence of a stochastic dependence (χ^2 Serial/Corr= 0.554), and heteroscedastic errors (χ^2 Hetero = 0.554).

The results of the Arellano and Bond (1991) dynamic panel estimator show that the lag of PM (PM-1) is positive (0.3275) and significant at 5% (P = 0.000), implying that previous levels of the profit margin performance affect the current profit margin performance. Looking at the performance of social disclosure indicators, H/S maintains its positive impact (1.2709) on profit margin and is significant at 5% (p=0.0428), but while GD's impact on profit margin is positive (0.0959), but is not significant (p=0.1036) at 5%. The influence of EMP is negative (-1.0534) and significant (p=0.0818) at 10%. Finally, the impact of CSR on PM still retains its negative sign (-0.1054), albeit not significantly (p=0.1036) at 5%. The J-Stat test of limitation over-identification yields all p-values greater than 0.10, indicating that a null hypothesis could not be rejected. Therefore, over-labeling restrictions apply. The AR (1) tests show that the residuals in the first differences correlate as expected, while the AR (2) tests yield p-values greater than 0.10, meaning that a null hypothesis with no second-order serial correlation is not rejected could become. Therefore, all results of the GMM model are valid.

Table 4.3. Environmental Performance Disclosure and Profit Margin Result

Variable	Apriori sign	Random Effects Estimates	Fixed Effects Estimates	Dyn-GMM Estimates
C		0.49116* (0.0257) {0.000}	0.4708* (0.0033) {0.000}	
PM(-1)				0.3250* (0.0568) {0.000}
ECON	+	-0.0459 (0.1128) {0.6842}	-0.0492 (0.0783) {0.5296}	-0.3317 (0.3534) {0.3484}
ECP	+	0.1040 (0.1622) {0.5214}	0.0705 (0.1248) {0.5727}	1.4882 (1.5389) {0.3341}
EDON	+	-0.1677 (0.1735) {0.3342}	0.2156 (0.1777) {0.2258}	-0.62551 (1.1612) {0.5904}
EMS	+	0.17113 (0.1722) {0.3208}	-0.2094 (0.1776) {0.2390}	0.5943 (1.1684) {0.6112}
EGHGE	+	-0.0590 (0.1917) {0.7583}	-0.0170 (0.1416) {0.2390}	-1.3905 (1.5935) {0.3833}
AR(1)	+		0.3343 (0.0383) {0.000}	
Model Parameters				
R ²		0.0025	0.560	
Adjusted R ²		0.005	0.452	
F-statistic		0.3104	123.43	
Prob(F-stat)		0.9067	0.00	
Durbin-Watson		1.31	1.88	
J-statistic Prob (J-stat)				15.9111 (0.3879)
Instrument Rank				21

Model Diagnostics			
χ^2_{Hetero}	(0.658)	χ^2_{Norm}	0.097
$\chi^2_{\text{Serial/Corr}}$	(0.114)	χ^2_{Hausman}	11.232
$\chi^2_{\text{Wald-Test}}$	(0.00)		(0.000)
Ar(1)			
Ar(2)			

Source: Researcher's compilation (2023)

Table 4.3 examines the estimation results for the impact of the environmental disclosure dimension on the margin measurement of companies' financial performance. The 2Hausman p-value = 0.034 indicates that fixed effects estimation is used here. The R2 for the FE model is 56% with an adjusted value of 45.2%. The F-stat of 123.43 (p-value = 0.00) is significant at 5% and suggests that the hypothesis of a significant linear relationship between the dependent and independent variables cannot be rejected. It is also an indication of the shared statistical significance of the model. Analysis of the coefficients shows that ECON has a negative (-0.0492), but not significant (p=0.5296) impact on the 5% profit margin. The influence of EDON is positive (0.2156), but also not significant (p=0.2258) at 5%, and this is also the case for EMS where the influence is negative (-0.2094), but not significant (p=0.2390) is 5%. Finally, it is noted that the impact of EGHGE on the profit margin is negative (-0.0170) at 5%, but not significant (p=0.2390). Overall, the result shows that environmental reporting has no significant impact on the margin development of the companies selected in the study. The results of the diagnostic tests confirm the normality of the residuals ($\chi^2_{\text{Norm}} = 0.097$), the absence of a stochastic dependence ($\chi^2_{\text{Serial/Corr}} = 0.114$), and heteroscedastic errors ($\chi^2_{\text{Hetero}} = 0.658$)

The results of the dynamic panel estimator from Arellano and Bond (1991) show that PM (PM-1) lag is positive (0.3250) and significant at 5% (P = 0.000), implying that previous profit margin performance levels affect current profit margin performance. Looking at the performance of the environmental metrics, ECON has a negative (-0.3317) but not significant (p=0.3484) impact on the profit margin at 5%. The influence of ECP on PM is positive (1.4882) but not significant (p = 0.3341) at 5%. In addition, it is observed that EDON has a negative impact (-0.6255), albeit not significantly (p=0.5904) at 5%. The effect of EMS on PM is positive (0.5943), but not significant (p=0.6112) at 5% and in the same direction the effect of EGHGE on PM is negative (-1.39905) but not significant (p=0.3833)

at 5%. The J-Stat test of limitation over-identification yields all p-values greater than 0.10, indicating that a null hypothesis could not be rejected. Therefore, over-labeling restrictions apply. The dynamic GMM estimates are like the FE estimates and further, confirm that there is no proven impact of environmental reporting on the profit margins of the companies included in the study.

4.1. Discussion of Findings

4.1.1. Economic performance disclosure and net profit margin

Both the results of the Fixed Effects Estimate and the robust Arellano and Bond Dynamic GMM estimates confirm that economic information disclosure has a significant impact on the profit margin of the selected companies used for the study. In particular, the results of the FE estimation show evidence of the statistical significance of the turnover effects ($\log(\text{REV})$) ($p=0.000$), $\log(\text{TASSET})$ ($p=0.000$), while the dynamic panel estimator after controlling for potential endogeneity in the resulting model shows evidence of statistical significance for the effects of LEV ($p=0.000$), DPS ($p=0.0036$), and EPS ($p=0.000$) on PM. This finding is consistent with that reported by Okolie and Igaga (2020).

4.1.2. Social performance disclosure and net profit margin

Table 4.2 examines the estimation results for the impact of the social disclosure dimension on the profit margin measure of the company's financial performance. The results of the FE estimation show that H/S has a positive (0.1988) and significant ($p=0.039$) impact on the 5% profit margin. The influence of EMP is negative at 5% (-0.2008), but also significant ($p=0.0269$). Finally, the impact of CSR on profit margin is found to be negative (-0.0283) and significant ($p=0.0046$) at 5%. The results of the dynamic panel estimator from Arellano and Bond (1991) also have similar results for H/S, and GD on profit margin, although they are positive (0.0959), but not significant ($p=0.1036$) at 5% and EMP is positive. This result is consistent with the results of Okolie and Igaga (2020).

4.1.3. Environmental performance disclosure and net profit margin

Table 4.3 "examines the estimation results for the impact of the environmental disclosure dimension on the margin measurement of the company's financial performance. Analysis of the FE coefficients shows that ECON is negative (-0.0492) at 5%, but not significant ($p=0.5296$). The influence of ECP is positive (0.0705) but not significant ($p=0.5727$) at 5%, EDON is positive (0.2156), but also not significant ($p=0.2258$) at 5%, and this is also the case for EMS, where the

impact is found to be negative (-0.2094) but not significant ($p=0.2390$) at 5%. Finally, the effect of EGHGE on PM is found to be negative (-0.0170), but not significant ($p=0.2390$) at 5%. Overall, the result shows that environmental reporting has no significant impact on the margin development of the companies selected in the study. The result is also supported by the results of the dynamic panel estimator by Arellano and Bond (1991). This result is consistent with Abdulsalam and Babangida (2020).

5.0. Conclusion and Recommendation

In today's world, business enterprises do not operate in isolation, so their activities tend to have some impact on the environment and society at large through their constant interaction with their environment. Most often, the activities of these companies have adverse environmental impacts on the people in the immediate area where they are located, as well as on the environment at large. The study examines the impact of sustainability reporting on the financial performance of telecom companies listed on the Nigerian Stock Exchange. The measure of the financial performance of companies used in the study is the profit margin (PM). The three dimensions of sustainability information examined are economic, social, and ecological information. The results of the study show that (i) economic performance disclosure has a significant positive effect on net profit margin, (ii) social performance disclosure has a significant positive effect on the net profit margin of companies listed on the Nigeria Stock Exchange (iii) the environmental performance disclosure has no material impact on the net profit margin of companies listed on the Nigerian Stock Exchange. The study concluded that sustainability reporting has an impact on the financial performance of telecom companies listed on the Nigerian Stock Exchange. The study, therefore, recommends that companies should strive not only to improve these disclosures, but also to improve the quality of these disclosures.

References

- Abdulsalam, N. K., & Babangida, M. A. (2020). Effect of sales and firm size on sustainability reporting practice of oil and gas companies in Nigeria. *Quest Journals Journal of Research in Business and Management*, 8(1), 1-8.
- Abdulsalam, N. K., Abdulrahman, B. S., Garba, I. T., Mohammed, A. B. & Abubakar, S. Y. (2020). The implication of corporate social cost on the profitability of oil marketing companies.

- Akinlo, O. O., & Iredele, O. O. (2014). Corporate environmental disclosures and market value of quoted companies in Nigeria. *The Business & Management Review*, 5(6),18-36.
- Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *The Review of economic studies*, 58(2), 277-297.
- 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 & Law Research* 6(3),1-10.
- Beredugo, S. B., & Mefor, I. P. (2012). The impact of environmental accounting and reporting on sustainable development in Nigeria. *Research Journal of Finance and Accounting*, 3(7), 55-64.
- Brundtland, G. (1987). Report of the World Commission on Environment and Development: Our Common Future. United Nations General Assembly Document A/42/427.
- Carroll, A.B. (1979). A three-dimensional conceptual model of corporate performance, *academy of management review* 4(4), 497-505.
- Chikwendu, O. U., Okafor, G. O., & Jesuwunmi, D. A. (2016). Effect of sustainability reporting on Nigerian listed companies' performance. *Canadian Contemporary Research Journal*, 11(4), 56-71.
- Dahal, P. K (2013). Mobile communication and its adverse effects. *The Himalayan Physics*, 4(4), 51-59.
- Dembo, A. M. (2017). The impact of sustainability practices on the financial performance: Evidence from listed oil and gas companies in Nigeria, 215-233.
- Dhaliwal, D., Hogan, C., Trezevant, R., & Wilkins. (2011). Internal control disclosures, monitoring, and the cost of debt. *The Accounting Review*, 86(4), 1131-1156.
- Edwards, R. A. (2005). *The Sustainability Revolution: Portrait of a paradigm shift*, Canada: New Society Publishers.
- Epstein, J. M. (2008). Why model? *Journal of artificial societies and social simulation*, 11(4), 12.
- Erhirhie, F. E., & Ekwueme, C. M. (2019). Corporate Social Sustainability Reporting and Financial Performance of Oil and Gas Industry in Nigeria. *International Journal of Accounting, Finance and Risk Management*. 4(2),44-60.
- Ezeabasili, N. (2009). The legal mechanism for achieving environmental sustainability in Nigeria. *African Research Review*, 3(2), 369 – 380.

- Garg, P. (2015). Impact of sustainability reporting on firm performance of companies in India. Doi :10.21863/ijmbc/2015.4.3.018.
- GRI (2002). Sustainability reporting guidelines. <http://globalreporting.org> on 2nd October 2011.
- GRI (2011). Sustainability Reporting Guidelines: G3.1 version. <http://globalreporting.org> on 10th June 2012.
- Hart, S. L. (2007). *Beyond Greening: Strategies for Sustainable World*, in *Harvard Business Review on Green Business Strategy*, Massachusetts: Harvard Business School Publishing Corporation.
- Iheduru, W. T., & Okoro, T. G. (2019). Sustainability reporting and profitability of quoted firms in Nigeria: A multi-dimensional panel study. *Australian Finance and Banking Review*, 3(1), 56-69.
- Korolo, E. O. & Korolo, A.S. (2022). Corporate governance mechanism and financial performance of quoted non-financial companies in Nigeria. *Lafia Journal of Economics and Management Sciences* 7, 177-193
- Nnamani, J. N., Onyekwelu, U. L., & Ugwu, O. K. (2017). Effect of sustainability accounting and reporting on the financial performance of firms in Nigeria's brewery sector. *European Journal of Business and Innovation Research*, 5(1), 1-15.
- Nze, C. I., Ogwude, C. I., Nnadi, K. U., Ibe, C. C. (2016). Modeling the relationship between demand for river port services and vessel supply costs: empirical evidence from Nigeria. *Global journal of social sciences studies*, 2(3), 144-149.
- Okolie, O. A., & Igaga, A. C. (2020). Sustainability reporting and financial performance of deposit money banks in Nigeria. *International Business & Economics Studies*, 2(2), 68-87.
- Olayinka, O. A., & Oluwamayowa, O. (2014). Corporate environmental disclosures and market value of quoted companies in Nigeria. *The Business and Management Review*, 5(4),171-184.
- Onyekwelu, R., & Ekwe, O. (2014). Does corporate social responsibility predicate good financial performance? *ESUT Journal of Management Sciences*, 8(1), 1-10.
- Oyewo, B. M., & Badejo, S. O (2014). Sustainable development reporting practices by Nigerian Banks. *Mediterranean Journal of Social Sciences*, 5(23), 253-259.
- Shehu, A. (2011). Corporate social responsibility and financial performance of quoted conglomerates in Nigeria. *Journal of Economics and Sustainable Development*, 3(4), 28-36.

- Urhoghide, R.O., & Korolo, E. O. (2018). Corporate governance and financial performance of quoted oil and gas companies in Nigeria. *International Journal of Business and Social Science*, 8(7), 114-124.
- Unerman, J., Bebbington, J., & O'Dwyer, B. (2007). *Sustainability Accounting and Accountability*, London: Routledge.
- Viek, C., & Steg, L. (2019). Human behaviour and environmental sustainability: Problems, driving forces, and research topics. *Journal of Social Issues*, 63(1), 1 – 19.
- Welford, R. (1997). *Hijacking environmentalism: Corporate responses to sustainable development*, UK: Earth scan Publications Ltd.
- White, G. B.(2009). *Sustainability reporting: Managing for wealth and corporate health*, New York: Business Expert Press LLC.