SUSTAINABILITY REPORTING AND EARNING CAPACITY OF TIER ONE BANKS IN NIGERIA

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Abstract

In this study, the effect of sustainability reporting on earning capacity of tier one banks in Nigeria was investigated using panel data from 2010 to 2023. The study covered all five tier one banks in Nigeria. Independent variables include Economic sustainability reporting, Environmental sustainability reporting and social sustainability reporting. While earning

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capacity proxy by Return on Equity was employed as the dependent variable. Descriptive statistics, correlation matrix and random effect model (REM) regression were employed in analyzing the data. The study found that Economic sustainability reporting has a positive and significant effect on earning capacity (Return on Equity) of quoted tier one banks in Nigeria: Environmental sustainability reporting has a positive but not significant effect on earning capacity (Return on Equity) of tier one banks in Nigeria. Social sustainability reporting has a positive and significant effect on earning capacity (Return on Equity) of tier one banks in Nigeria. The study recommends amongst others that Tier one banks should improve on their economical sustainability activities because it gives insight to the existing and potential stakeholders that the companies are doing well in raising the stock value of the company, which is good for investment and new investors hence, it will increase the company earning capacity based on statistical evidence. Also, stakeholders should not solely consider environmental sustainability reporting in analyzing the earning capacity of tier one banks for business investment because the result shows that there is no statistical evidence between environmental sustainability and earning capacity of tier one banks, based on the statistical result that shows that environmental sustainability reporting has a positive but insignificant effect on earning capacity.

Keywords: Sustainability, Return on Equity, Earning Capacity**.**
JEL Classification: G21, M14, M41, Q56

1. INTRODUCTION

Recently, most financial firms have increasingly embraced sustainability reporting. According to the United Nations Environment Program (2019), the United Nations has been actively promoting sustainability reporting through various initiatives such as the Sustainable Stock Exchanges (SSE) initiative and the Principles for Responsible Investment (PRI) launched in 2009. Many countries have also incorporated sustainability reporting requirements into their regulatory frameworks or stock exchange listing rules. According to Geerts, Dooms and Stas (2021), over 34 countries in the world including Nigeria now produce sustainability reports. This is in response to the increased demand by stakeholders for organizations to be more transparent in how they treat their economic, social, and environmental activities.

Also, world business leaders and various academic researchers are of the view that any company which does not disclose its sustainability report could be seen as working towards unsustainable development. This is because businesses are part of society and as such, they must support society to grow. As such, for businesses all over the world (banks inclusive) to gain public acceptance and remain a going concern, as a matter of necessity, they must disclose how their operations affect the economy, society, and environments in which they reside (Belasri, Gomes & Pijourlet, 2020).

Additionally, today's heightened interest in the role of businesses in society has also prompted increased sensitivity to the awareness of environmental and ethical issues. In view of this, Cornett, Erhemjamts & Tehranian (2016) posits

companies all over the world are increasingly challenged to extend their accounting information disclosure to cover sustainability reporting practices as part of the corporate strategy and competitive advantage, and the banking sector is not exempted.

Therefore, the banks in its interaction with the environment must adopt the three pillars of sustainability reporting namely: the environment, society, and the economy which are assumed to constitute a major aspect of sustainability reporting. Also, aside from these three pillars of sustainability reporting stated above, banks require strong governance to ensure that the environmental and social needs of current and future stakeholders are incorporated into their corporate strategy. Succinctly, recognizing and incorporating such social and environmental factors into the governance and strategic operations of the banks is therefore referred to as Sustainability Reporting. Therefore, Sustainability Reporting entails aligning the competitive activities of the organization to meet the immediate needs of the existing stakeholders without jeopardizing the continuing ability of future stakeholders in meeting future needs, thereby adding economic, environmental, and social value to the banks (Marano, & Kostova, 2016).

1.1. STATEMENT OF THE RESEARCH PROBLEM

Undoubtedly, banks contribute immensely to economic development. Generally, banks strive to accomplish significant returns from their financial operations and investment activities. Therefore, sustainability ought to be a component of all activities and processes related to the environmental, economic, and social activities of the firm. The argument as to whether there is a nexus between a company's engagement in sustainability practices and firm performance has dominated the literature. This perhaps could be attributed to the assertion that most organizations' activities have engendered a lot of environmental concerns among stakeholders.

The banks are widely recognized to have a significant impact on the economy and society at large, and as such, it has a responsibility to act in a socially responsible manner. Recently, banks in Nigeria have implemented corporate social responsibility (CSR) initiatives to support healthcare, and other social causes in the country. However, it is important to note that the effectiveness of these initiatives can vary, and there may be challenges in ensuring that the benefits of the banks' social responsibility efforts are distributed equitably to all citizens. Banks' accountability is incomplete without a reporting mechanism, which is why sustainability reports are published, and sustainability disclosures are included in corporate annual reports. In recent years, the contents of sustainability reports produced as stand-alone reports or integrated into corporate annual reports in Nigerian corporations have also gotten a lot of attention. According to Asaolu, Agboola, Ayoola, and Salawu (2011), banks in Nigeria voluntarily conduct sustainability reporting; nevertheless, reporting was insufficient because they were not guided by any legislation on what to disclose.

Financial results express responsibility, which is an important part of transparency that cannot be overlooked; nevertheless, financial results alone cannot define and communicate a company's social and environmental implications. However, external factors and organizational environment play a part in the transformation process to improve the content of sustainability reports.

A thorough investigation into extant literature on sustainability reporting like Ikechukwu and Blessing (2020); Amacha and Dastane (2017) clearly reveals few studies conducted in Nigeria have examined the use of global reporting initiatives indicators vis-à-vis the Economic sustainability reporting, Environmental sustainability reporting and social sustainability reporting in assessing the level of sustainability reporting. Hence, examining Social Responsibility using global reporting initiatives indicators is germane.

Despite available empirical evidence which exists on the subject matter in and outside Nigeria, there seems to be a lack of convergence among the outcomes of most previous studies on the subject matter. This is premised on the ground that while some studies like that of Abdul and Maha (2021); Aifuwa and Hope (2020); Amacha and Dastane (2017) reported a positive relationship between sustainability reporting and earnings capacity, others like the studies of Erhirhie and Ekwueme (2019); Zamil and Hassan (2019) reported a negative relationship. Possible factors that may have contributed to the variances in the outcome of existing studies on the subject matter lie in the choice of variable, sample size, geographical scope, and estimation techniques.

Also, focus on evaluating the institutional context and an internal organizational factor of sustainability reporting of tier one banks in Nigeria is limited. Other research on sustainability reporting and earnings capacity has been conducted in other sector such as the banking sector, oil and gas sector and the manufacturing sector.

It is based on this perceived gap in the knowledge that the study evaluated the effect of sustainability reporting on earnings capacity of tier one banks in Nigeria.

1.2. RESEARCH OBJECTIVES

The main objective of the study is to examine the effect of sustainability reporting on the earnings capacity of tier one banks in Nigeria. The specific objectives of this study are to:

i. examine the effect of economic sustainability reporting on earnings capacity of tier one banks in Nigeria;
ii. determine the extent to which environmental sustainability reporting affects earnings capacity of tier one banks in Nigeria; and
iii. evaluate the effect of social sustainability reporting on earnings capacity of tier one banks in Nigeria.

1.3. HYPOTHESES

The hypotheses of this study stated in the null form are as follows:

$H0_1$: There is no significant relationship between economic sustainability reporting and the earnings capacity of tier one banks Nigeria.

$H0_2$: Environmental sustainability reporting does not significantly affect the earnings capacity of tier one banks Nigeria.

$H0_3$: Social sustainability reporting does not significantly affect the earnings capacity of tier one banks Nigeria.

1.4. SCOPE OF THE STUDY.

Content Scope: This subject scope will be limited to examining the effect of sustainability reporting on earnings capacity of tier one banks (Access Bank, Guaranty Trust Company, Zenith Bank, United Bank of Africa and Fidelity bank) in Nigeria.

Variable Scope: Specifically, the independent variables are Economic reporting, Environmental reporting and social reporting. Meanwhile, the dependent variable is Earnings capacity proxied by return on equity.

Geographical Scope: The focused is on tier one banks in (Access Bank, Guaranty Trust Company, Zenith Bank, United Bank of Africa and fidelity bank) in Nigerian.

Time Horizon: In terms of time scope, the study intends to cover a study period of fourteen (14) years spanning through 2010-2023.

2. REVIEW OF LITERATURE

2.1. CONCEPTUAL REVIEW

2.1.1. CONCEPT OF SUSTAINABILITY REPORTING (SR)

Etymologically, sustainability reporting (SR) is likened to triple-bottom-line reporting and Corporate Social Responsibility reporting. For this study, we will be maintaining SR as the acronym for Corporate Sustainability Reporting to differentiate the concept from its sister concept Corporate Social Responsibility (CSR). According to Zyadar (2016), SR is a firm's ability to adopt extra activities that spur it toward events and changes relating to economic, social, and ecological environments as well as risk management resulting from such environments.

2.1.2. DIMENSIONS OF SUSTAINABILITY REPORTING

Economic Dimension: This dimension of sustainability reporting centers on accomplishing sustainable economic development through effective utilization of capital and assets, arrangement of essential needs and prerequisites of the individual, improvement of the standard of living by amplifying returns from products and services, and accomplishment of economic justice (Godard, 2010). The economic

principle of sustainability further emphasizes the importance of balancing nations or an institution's current economic needs with considerations for the needs and well-being of future generations.

Environmental Dimension: This dimension of SR gives biological communities assurance (land, air, and water), conservation of vitality assets, access to inexhaustible wellsprings of assets, and increment in the capacity to adapt to the occasions and environmental changes (Dembo, 2017). Environmental sustainability activities focus on the impact of resource usage, hazardous substances, waste, and emissions on the physical environment. This pillar emphasizes the ability of the environment to support a defined level of environmental quality.

Social Dimension: Within the confine of the banking industry, the social dimension of SR focuses on the impact of both banks and their stakeholders' operations on social variables like equality, social justice, human and labor rights, and cultural tolerance. Additionally, the Social Dimension of SR ensures banks' close monitoring of vendors to avoid their involvement in child labor and human rights violations.

2.2. THEORETICAL REVIEW AND FRAMEWORK

This study was anchored on the stakeholder theory and legitimacy theory

2.2.1 LEGITIMACY THEORY (LET)

This theory was derived from the concept of organizational legitimacy and was founded by Dowling and Pfeffer in 1975. This theory is rooted in social contract as against stakeholder theory which emphasizes the need for organizations to meet all the needs of their stakeholders. The legitimacy theory posited that besides different stakeholder groups, a firm also holds responsibilities to society, and since firms want to hold their license-to-operate they must show to society that it is operating within the bounds and norms of their respective societies.

SR is a response to various environmental, social, political, and economic forces. According to Dowling and Pfeffer (1975), legitimacy is a condition or status, which exists when an entity's value system is congruent with the value system of the larger social system in which the entity is a part. This means that for a firm to continue as a going concern, to survival, achieve growth, and attain sustainable competitive advantage, it must continually seek to operate within the bounds and norms of society.

The implication of the above theory is linked to the fact that firms that undertake SR have more public approval than those without it and are deemed to be socially and environmentally responsible to the environment in which the firm is situated. As such, banks require social approval or legitimacy to avoid social disapproval.

2.3. EMPIRICAL REVIEW

Qamruzzaman, Md., Jahan, and Karim (2021) evaluated the impact of voluntary disclosure on a firm's value. A panel regression model was used to analyze 26 manufacturing firms between the periods of 2017–2019. Earnings capacity serves as the regressor and it is measured by earnings per share (EPS), the market value of assets (MVA), and return on equity while the regressed is voluntary disclosure and is measured by disclosure pertinent to basic company information on, a report focusing on corporate governance of the company, details of financial reporting, key activities for ensuring responsibility to society, and existing accounting practices in the firm. This study found that there are varying effects of voluntary disclosure on the value of the firms using the right selection of alternative means.

Cuong, Thi, Nga, and Hong (2021) examined the influence of sustainability practices on the financial performance of 116 listed Swedish companies in the year 2019. Data were drawn from 116 listed companies in Sweden in the year 2019. Financial performance measured by return on equity (ROE) ROCE (Return on Capital Employed), and EY (Earnings Yield) serves as regressed while the regressor was sustainability performance measured by the Dow Jones sustainability index, global compact, global reporting initiative, corporate social responsibility disclosure, corporate social responsibility ranking, and sustainable growth rate. Data were analyzed using the econometric software E-Views 11. The result shows that sustainability practices have a positive significant effect on financial performance proxies measured by earnings yield, return on equity, and return on capital employed.

Geerts, Dooms, and Stas (2021) examined possible determinants of sustainability reporting in the Present Institutional Context. A multidimensional method was adopted in this study. The regressor is sustainability reporting measured by annual reports and global reporting initiatives while the regressed is organization characteristics measured by the organizations' size, firm's performance, region, level of autonomy, history of data gathering, proximity to the city, environmental and social certification, and integration of sustainability. Data were analyzed using binomial logistic regression. The conclusion shows countless different institutional pressure that influence the decision-making of PMBs about the adoption of sustainability reporting and the most important organizational determinants are proximity to a city, the history of performance data gathering, and the amount of obtained social/environmental certifications.

Dzomonda and Olawale (2021) studied water sustainability and the financial performance of firms listed on the Johannesburg stock exchange (JSE). A multi-case design was used while 8-year data was taken from 32 listed companies. Data analysis was done using the panel regression model. The regress was financial performance measured by market-based variables while the regressor was water sustainability which was measured by the firm's commitment to reduce water consumption, kilometer saved for that year by the firm, total volume of water recycled, total volume of water reused, reduction in water use and rainwater harvested. The study

affirmed that water sustainability has a highly statistically significant effect on share price.

Ifada, Indriastuti, Ibrani, and Setiawanta (2021) examined the role of financial performance on environmental performance and environmental disclosure. The study population was companies in Indonesia Stock Exchange (IDX) from the year 2017-2019. The assessed variables were environmental performance, independent commissioners for the regressor while firm size and financial performance as the regressed. This study affirms that environmental performance and firm size have a positive effect on financial performance while environmental performance, firm size, and financial performance have a positive effect on environmental disclosure.

Abdul and Maha (2021) investigated the determinants of corporate governance, environment, and social reporting among Asian firms. Data were obtained from the Thomas Reuters DataStream under seeing Asian public listed firms from 2005-2017. Cross-sectional model was adopted in this study. The regressed was environment, social and governance disclosure measured by the environment, social and governance scores while the regressor was economic sustainability performance (ESG), profitability, leverage and size were measured by return on equity, average and debt to equity ratio and the natural logarithm of a firm's total assets. The study found that firm characteristics such as economic performance, profitability, leverage, and size affect economic sustainability performance (ESG) information positively and significantly.

3. METHODOLOGY

The study adopted the *ex-post facto* design. The study population covers all five (5) tier one banks in Nigerian as of 31st December 2023 (See Table 3.1). Due to the fewness of the population, the study employed the whole companies as sample. The secondary source of data was used for this study. In line with prior studies, the following variables were considered: Economic sustainability reporting, Environmental sustainability reporting, social sustainability reporting, obtained from the (Annual reports) of the tier one banks in Nigeria in respect to the study variables and time scope. The study adopted the panel data methodology. More so, the choice of the panel data methodology is premised on the fact that the variables investigated exhibited both the characteristics of time series data with that of cross-sectional data. Furthermore, one key test (Hausman Test) was conducted in this study to determine the more appropriate model for the study. Accordingly, the Fixed Effect Model (FEM). The decision rule is to accept that the REM is appropriate for the study if the p-value of the Hausman test is greater than 5%. However, if its p-value is less than 5%, the null hypothesis is rejected while the alternative hypothesis which Hausman test is used to determine between the Random effect model (REM) and the states that fixed effects model is appropriate, will be accepted instead. Put differently, the null hypothesis of the Hausman test is that the REM is more appropriate for the study. However, the alternative hypothesis holds that the FEM is more appropriate.

Additionally, various confirmatory diagnostic tests conducted before running the regression results include descriptive statistics, correlation matrix, multi-collinearity using the Variance Inflation Factor (VIF), and Ramsey Reset Test for checking if any of the study variables are omitted or not, amongst others.

3.1. MODEL SPECIFICATION

To achieve the objective of the study, the model which was specified in equation one draws considerably from the literature. This study adapts Asuquo, Dada, and Onyeogaziri (2018). However, our model differs in that, their study focused on manufacturing firms in Nigeria as against our study which was domiciled in the Nigerian tier one banks. The model for this study is specified as:

$$ROE = f(ECN, ENV, SOC,) \quad (3.1)$$

Their model was restated as: $Tobin's\ Q = \beta_0 + \beta_1 ECN_{it} + \beta_2 ENV_{it} + \beta_3 SOC_{it} + \mu_{it}$ (3.2)

Where:

ROE= Return on Equity

ECN = Economic sustainability reporting

ENV = Environmental sustainability reporting

SOC = Social Sustainability reporting

The modified model will be subjected to Hausman equation, Pooled OLS, Fixed effect equation and Random effect equation in explicit form as specify below:

3.1.1 HAUSMAN EFFECT EQUATION

$$H = (\beta_1 - \beta_0)^{\mathrm{T}} [var(\beta_0) - var(\beta_1)] \dagger (\beta_1 - \beta_0) \quad (3.3)$$

Where, † stands for pseudo inverse,

β_0 = fixed effect estimate

β_1= random effect estimates

H = *distributed as* $H \sim \chi^2_v$ *where v=degree of freedom p* $[var(\beta_0) - var(\beta_1)]$

P = the rank of matrix

Decision rule: if *H* is greater than the critical chi-square value, the null hypothesis is rejected. We conclude that fixed effect estimates are consistent. Whereas random effects estimates are not consistent. Hence fixed effects model should be used. However, if *H* is less than the critical chi-square value, we cannot reject the null hypothesis. Both fixed and random effects models are consistent. However, random effects estimate as well. Hence random effects model is more reliable. This statistic will be estimated through the help of statistical software packages (e-view 9.0).

3.1.2 RANDOM EFFECT MODEL

$Y_{it} = \alpha + \beta_k X_{k,it} + u_{it} + \varepsilon it$ ---(3.4)

Where: i= entity, t= time

α = intercept

Y_{it} = dependent variable

X_{kit} = represents the k^{th} independent and control variables

β_k = the coefficient for respective independent and control variables.

u_{it} = the individual impact of ith entity, is not measurable variables

ε_{it}= the error term

Using the above model

$$ROE_{it} = \alpha + \beta_k ECN_{it} + \beta_k ENV_{it} + \beta_k SOC_{it} + u_{it} + \varepsilon i \quad (3.4)$$

3.1.3 FIXED EFFECT MODEL

$Y_{it} = \beta_0 + \beta_1 X_{it} + yZ_{it} + \varepsilon_{it}$--(3.6)

Where: Y_{it} denotes the predicted variable of concern.

X_{it} depicts the vector of explanatory variables

yZ_{it} designates the firm-level control variables

$\varepsilon_{it}$is the error term.

Using the above model

$$ROE_{it} = \beta_0 + \beta_1 ECN_{it} + \beta_2 ENV_{it} + \beta_3 SOC_{it} + \varepsilon it \quad (3.5)$$

3.1.4 POOLED OLS

$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + v_{it}$*-(3.8)*

Where: Y_{it} denotes the predicted variable of concern.

X_{it} depicts the vector of explanatory variables

$\beta_{1=}$ the coefficient for respective independent and control variables.

v_{it} is the error term.

Using the above model,

$$ROE_{it} = \beta_0 + \beta_1 ECN_{it} + \beta_2 ENV_{it} + \beta_3 SOC_{it} + \varepsilon it \quad (3.6)$$

3.2. MEASUREMENT OF STUDY VARIABLES

Table 3.1 below shows how the variables of interest were operationalized:

***Table 3.1**: Operationalization of Study Variables*

S/N	Variable	Acronyms	Type of Variable	Measurement	Indicators	*Apriori* Expectations
1	Return on Equity	ROE	Regressand	Net income /total shareholders' equity) x 100		Nil
2	Economic sustainability reporting	ECN	Regressor	ECN=$\frac{\sum xi)}{\sum N)}$ Where: $\sum xi)$ = number of indicator items disclosed.$\sum N)$= disclosed indicators item.	Operating capacity, solvency, and ability to resist risks. If a firm report any of the listed items, it scores 1 otherwise, 0	Positive
3	Environmental sustainability reporting	ENV	Regressor	ENV=$\frac{\sum xi)}{\sum N)}$ Where: $\sum xi)$ = number of indicator items disclosed.$\sum N)$= disclosed indicators item.	Energy Water Carbon emissions Waste management Compliance Product & service stewardship Biodiversity. If a company reports on any of the mentioned items, it scores a value of 1 otherwise, 0	Positive

4	Social sustainability reporting	SOC	Regressor	$SOC=\frac{\sum xi)}{\sum N)}$ Where: $\sum xi)$ = number of indicator items disclosed.$\sum N)$= disclosed indicators item.	Employment of minorities, several lawsuits filed by employees, Customers and regulatory agencies. If a firm report on any of the listed items, it is assigned a value of 1 otherwise, 0.	Positive

Source: Researcher's Compilation (2024)

4. DATA ANALYSIS

4.1. ANALYSIS OF DESCRIPTIVE STATISTICS ON SUSTAINABILITY REPORTING AND PERFORMANCE.

The descriptive statistics account for the mean, minimum, maximum value, and standard deviation value. The result is presented below:

***Table 4.1**: Summary of Descriptive Statistics*

	ROE	**ECN**	**ENV**	**SOC**
Mean	0.240760	0.588462	0.620876	0.586923
Median	0.021000	0.750000	0.714300	0.600000
Maximum	4.907200	1.000000	0.857100	0.800000
Minimum	0.105500	0.000000	0.142900	0.200000
Std. Dev.	1.219749	0.194053	0.171261	0.162533
Sum	31.27080	76.50000	80.71490	76.30000
Sum Sq. Dev.	191.9246	4.857692	3.783591	3.407769
Observations	70	70	70	70

Source: Authors' Computation using E-view, (2024)

In the earnings capacity measurement variable represented by the return on equity, descriptive statistical results were obtained with minimum and maximum values of 0.1055 and 4.90720 respectively with an average value of 1.6729 and a standard deviation output value of 1.30382. Because the average value of the earnings capacity variable is greater than the standard deviation value, it can be concluded that the samples used in this study are homogeneous because they are not far from the average value.

Based on the results of the test output in table 4.1, the descriptive results of the research variables are obtained. The number of samples used in this study is 70 data. The minimum and for environmental reporting are 0.142900 and 0.857100 respectively. The average value of the e6nvironmental reporting variable is 0.620876and the standard deviation is 0.171261. The standard deviation value, which is smaller than the average, means that the environmental reporting variable is homogeneous, i.e. there exist low volatility or it does not deviate far away from the mean.

For the social sustainability reporting, the minimum and maximum values are 0.200000and 0.80000 for banks. The average value is 0.586923 and with a standard deviation value of 0.162533 which indicates that the data used in the research sample is increasingly gathering at its average value.

Furthermore, for economic sustainability reporting, the minimum and maximum values are 0.00000 and 1.000000. The average value is0.588462 with a standard deviation value of 0.194053which shows that the standard deviation value is lower than the average value. Thus, it can be concluded that the variable value is homogeneous.

Analysis of Correlation Matrix on Determinants of Sustainability Reporting and Earnings Capacity

Table 4.2 *Correlation matrix*

	ROE	**ECN**	**ENV**	**SOC**
ROE	1.000000			
ECN	0.055165	1.000000		
ENV	-0.014448	-0.065971	1.000000	
SOC	0.110006	0.145275	-0.032277	1.000000

Source: Authors' Computation using E-view, (2024)

The correlation matrix reported in table 4.2 above revealed that economic sustainability reporting, and social sustainability reporting have correlation coefficient values of 0.055165, and 0.110006 respectively. This suggests that economic sustainability reporting and social sustainability reporting exerted positive weak correlation with return on equity. Meanwhile, environmental sustainability reporting exerted negative weak correlation with return on equity with coefficient values of -0.014448. Generally, the result from the table shows that the problem of multi-collinearity is not anticipated though; a further test will be carried out to ascertain this condition.

Table 4.3: *Hausman Test*

Correlated Random Effects - Hausman Test
Equation: POOL
Test cross-section random effects

Test Summary	**Chi-Sq. Statistic**	**Chi-Sq. d.f.**	**Prob.**
Cross-section random	8.049507	6	0.2345

Source: Econometric E-Views Version 9.0 (2024)

Furthermore, with a view to deciding between the fixed effect model and Random effect output, which is often preferable, researchers normally rely on the Hausman (1978) specification test. While the null hypothesis supports the random effect model, the alternative hypothesis supports the fixed effect model. From the table above, the P-value of the

chi-square which stood at 0.2345 implies that random effect model is fit for the study since the p-value is greater than 0.05% level of significant.

Table 4.4: *Diagnostic Test*

Breusch-Godfrey Serial Correlation LM Test:	
F-Statistics	2.051453
Probability	(0.1521)
Heteroskedasticity Test: Breusch-Pagan-Godfrey	
F-Statistics	1.509344
Probability	0.1837

Source: Researcher's Computation via E-views. 9 (2024)

The Breusch-Godfrey Lagrange Multiplier (LM) test for higher order autocorrelation reveals that the hypotheses of zero autocorrelation in the residuals were not rejected. This was because the probabilities (Prob. F, Prob. Chi-Square) were greater than 0.05 and hence the LM test did not therefore reveal serial correlation problems for the model. From the table above, the P-value of the chi-square stood at 0.1837. This proves that there is an absence of Heteroscedasticity in the study, since it is not significant at 5%.

Table 4.5: *Ramsey RESET Test*

Ramsey RESET Test
Equation: UNTITLED
Specification: ROEC ECN ENV SOC
Omitted Variables: Squares of fitted values

	Value	**Df**	**Probability**
t-statistic	1.365969	90	0.1754
F-statistic	1.865871	(1, 90)	0.1754
Likelihood ratio	2.260923	1	0.1427

F-test summary:

	Sum of Sq.	**Df**	**Mean Squares**
Test SSR	0.016599	1	0.016599
Restricted SSR	0.817240	91	0.008701
Unrestricted SSR	0.800641	90	0.008896

LR test summary:

	Value	Df

Restricted LogL	70.34510	91
Unrestricted LogL	99.47556	90

Source: Econometric Views Version 9.0 Output (2024)

From table 4.5 above, the P-value of the chi-square which stood at 0.1754 proves that none of the study variables are omitted since it is not significant at 5%. On this note, the study boldly states that the model is reliable and fit for prediction.

Table 4.6: *Random Effect Model*

Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	0.59341	0.35077	1.691736	0.5442
ECN	0.35604	0.07266	4.900447	0.0000
ENV	0.22025	0.14551	1.51359691	0.2210
SOC	0.573645	0.258665	2.217714	0.0360
	Effects Specification			
			S.D.	**Rho**
Cross-section random			0.065566	0.2897
Idiosyncratic random			0.102655	0.7103
	Weighted Statistics			
R-squared	0.767836	Mean dependent var		0.467358
Adjusted R-squared	0.685774	S.D. dependent var		0.158705
S.E. of regression	0.157836	Sum squared resid		1.589684
F-statistic	2.466578	Durbin-Watson stat		1.977554
Prob(F-statistic)	0.000001			
	Unweighted Statistics			
R-squared	0.747589	Mean dependent var		0.278464
Sum squared resid	1.736766	Durbin-Watson stat		1.875874

Source: Econometric Views Version 9.0 (2024)

The F-statistics value for the result in Table 4.6 above stood at 2.466578while its P-value of 0.000001indicates that on the overall, all the study variables jointly determine earnings capacity of tier one banks. Furthermore, the p-value for the f-statistics is less than the level of significance this implies that the sample data provide sufficient evidence to conclude that the regression model fits the data better. Also, the value of R^2 is 0.767836, indicating that about 77% of the variations in earnings capacity of tier one banks could be explained by changes in sustainability reporting

while about 23% could be accounted for by the error term. Lastly, the Durbin-Watson test of first-order autocorrelation which has a value of 1.977554 (approximately 2) indicates that errors are uncorrelated indicating absence of serial correlation within the period of the study.
Sequel to the above, the individual hypotheses are tested below:

4.2 TEST OF HYPOTHESES.

Ho_1: Economics Sustainability reporting has no significant effect on return on equity of tier one banks in Nigeria

In table 4.6 above the test result shows that the effect of economic sustainability reporting on return on equity (ROE) is significant and the p-value of 0.0000 is less than 0.05. This led to the acceptance of the alternate hypotheses one (H1).

Ho_2: Environmental Sustainability reporting as no significant effect on return on equity of tier one banks in Nigeria

In table 4.6 above the test result shows that the effect of environmental sustainability reporting on return on equity (ROE) is not significant and the p-value of 0.2210 is greater than 0.05. This led to the acceptance of the null hypotheses two.

Ho_3: Social Sustainability reporting as no significant effect on return on equity of tier one banks in Nigeria

In table 4.6 above the test result shows that the effect of social sustainability reporting on return on equity (ROE) is significant and the p-value of 0.0360 is less than 0.05. This led to the acceptance of alternative hypotheses three.

4.3. DISCUSSION OF RESULTS

4.3.1. THE EFFECT ECONOMIC SUSTAINABILITY REPORT ON EARNING CAPACITY

The statistical results in table 4.6 above show that a significance value of 0.000 is less than 0.05 indicating that the economic sustainability reporting has a very significant influence on earnings capacity of tier one banks in Nigeria. The coefficient value shows a positive value of 0.356042, which means that the direction of influence is positive. Put differently, every unit rise in economic sustainability will lead to percentage increase in earning capacity. This is because sustainability can reduce waste, optimize resources, and streamline operations, leading to cost savings and increased earnings. This result is in tandem with previous studies of Abdul and Maha (2021)

4.3.2. THE EFFECT ENVIRONMENTAL SUSTAINABILITY REPORTING ON EARNINGS CAPACITY.

Environmental Sustainability reporting disclosed a significant result of 0.2210 which indicates that environmental sustainability reporting has no effect on earnings capacity. One of the factors that may be the cause of environmental reporting not influencing earnings capacity proxy by return on equity is because the value of the firm cannot be observed directly by investors or potential investors. Characteristics of most investors in Nigeria are still naive (Sundrata et., al. 2021). They pay more attention to profit figures, or the amount of dividends distributed by the company. The results of this study support the findings of Ifada, Indriastuti, Ibrani, and Setiawanta (2021).

4.3.3. THE EFFECT OF SOCIAL SUSTAINABILITY REPORTING ON EARNINGS CAPACITY

The results of the tests show that the social aspect in disclosing sustainable reports on earnings capacity shows a result of 0.0360 which is shown to be less than 0.05, it can be interpreted that the social sustainability reporting has an influence on earnings capacity with a t-value of 2.2177 indicating that the influence has a positive direction. From the research results obtained, social sustainability reporting can be one of the guidelines for investors in supporting their decision to invest. This research is supported by the results of research conducted by Cuong, Thi, Nga, and Hong (2021).

5. CONCLUSION

Sustainability reporting is becoming increasingly important for stakeholders, both investors, the companies themselves and the government. Company management has a responsibility in disclosing sustainability reporting in accordance with applicable standards. This study concluded non-conclusive results regarding this relationship. By examining tier one bank in Nigeria that published sustainability reports in 2023, this study found that sustainability reports with economic and social aspects have a positive influence on Earnings capacity. Meanwhile, environmental sustainability reporting has no effect on earnings capacity.

RECOMMENDATION

Based on the various empirical findings of the study, we recommend as follows:

1. Banks should improve their economical sustainability activities because it gives insight to the existing and potential stakeholders that the companies are doing well in raising the stock value of the company, which is good for investment and new investors hence, it will increase the company earnings capacity based on statistical evidence.

2. The study recommends that Stakeholders should not solely consider the environmental sustainability reporting in analyzing the earnings capacity of listed banks for business investment because the result shows that there is no statistical evidence between environmental sustainability and earnings capacity of banks, based on the statistical result that shows that environmental sustainability reporting has a positive but insignificant effect on earnings capacity.

3. Lastly, managers and directors of banks should improve by evaluating the current state of their sustainability reporting practices and make necessary change, behavioral and structural resulting in better improvement in their sustainability reporting.

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