

Effect of Environmental Disclosure on Performance of Selected Ict Entities in Nigeria

Bingilar Paymaster F. (PhD) and Okoro Longlife Owei

Abstract

we employed return on assets (ROA) as a measure of performance while environmental disclosure (ED), entity size was employed as explanatory variable while entity age was also employed as a control variable to test quoted ICT companies on Nigeria exchange group, the effect of environmental disclosure on performance. Six entities were sampled with the help of secondary data covering from 2011 to 2020 (ten years), using the multiple regression analysis applied on e-view, The regression output above showed that the coefficient of determination (R-squared) value of 0.72 indicates that 72% of changes in the dependent variable are accounted for by the combined impact of variations in the independent variables, also the R-squared value of 58% approximately, implies that the model is good and fit to be used in testing our hypotheses. The model showed an F-statistic 0.04 which is statistically significant at 5% level, with a Durbin-Watson statistics of approximately 2.00 which indicated an absence of autocorrelation among the independent variables, however individually the variable were not significant. Therefore we recommended that; Entity should put more interest in shareholder wealth maximization; all stakeholders should be considered in the course of carrying out economic activities this is because all are significant to the success of the entity and government should create an enabling environment for entities.

Keywords: *Environmental disclosure, Stakeholders, Performance.*

Date of Submission: 28-07-2021

Date of Acceptance: 12-08-2021

I. Introduction

Every shareholder wants the entity she invested her resources to maximize it the firm, however this may not be possible if the entity fail to put the right things in place, there is no any entity in the world that exist in isolation, hence all stakeholder must be considered when to planning to achieve the goals and objective of an entity, no entity can operate smoothly in a hostile community or regulation in the same vein no community or government can attract investors if its environment and policy is not friendly to the entity. Environmental disclosure involves the identification, measurement and allocation of environmental costs, and the integration of these costs into business and encompasses the way of communicating such information to the companies' stakeholders, in a nutshell it is a comprehensive approach to ensure good corporate governance that includes transparency in its societal activities (Magara, Aming, & Momanyi, 2015). As stakeholders are different so also is their motivational factors different, while customer derived value from quality product or service; employment packages such as welfare and remuneration gives employees satisfaction, in the same vein financial value is created for shareholder by the increase in shareholders wealth represented by an increase in entity profit or stock price, also the host community in which the entity also has its motivation factors, hence managers of an entity should be able to identify what gives the entity satisfaction, in contemporary business activities, value is seen as basically being generated from innovation, ideas, people, computer software to mention but are few that are many a time intangible (Marvin, Natarajan & Robert, 2017). An investors can only appreciate its capital if the value of he/she invested its resources is growing in the market either as a result of increasing in earnings in the markets or as a result of return on its investment hence no reason investor would to invest in an entity that is not growing financially. All entity of the globe has stakeholders, hence economic activities cannot be possible without the presence of stakeholders, every stakeholder has what give him/her satisfaction. In this contemporary business practices entities are expected to look beyond its stakeholders and consider other salient factors that can contribute to the materialization of the stakeholders satisfaction such the environments and the society it find itself. The reason behind every investors investing in an entity is to get returns on their investment this may be as result of the fear of loss of value (in the form of inflation) if the resources is not invested other factor that might prompt investors to invest in an entity may be as a result of capital gain, capital appreciation or even self-satisfaction of been a shareholder of an entity, however shareholder satisfaction and cannot be possible if the entity doesn't carry its stakeholders along. All stakeholders are important in an entity, just like the human system are connected in the same vein all stakeholder are connected in one way of the other.

II. Empirical Literatures

2.1 Evidence of research gap

Over the year's scholar have being carrying out a study on the effect of environmental disclosure, however a consensus has not been reached. In the same vein stakeholders have yearning for entities to always disclose the cost of carrying out economic activities (environmental disclosure). Therefore, for an economy to strive the internal and internal stakeholders need each, however this relationship always comes with some financial cost, although it is expedient for both parties (internal and external stakeholders) to consider the cost and benefit associated with a particular nexus before taking any crucial economic decision, this is because any decision that is not well analyzed before taken will not only affect the present generation but it will as well affect the future generation. An investigation into the ICT sector quoted on Nigeria exchange group showed scholars have different opinion on the issue of environmental performance, this was revealed in our empirical literature below.

2.2 Theoretical Review

Stakeholder Theory

Fontaine, Haarman and Schmid (2006) posit that stakeholder theory suggests that the purpose of a business is to create as much value as possible for stakeholders. In order to succeed and be sustainable overtime, business executives must keep the interest of customers, suppliers, employees, communities and shareholders aligned to go in the same direction. stakeholder theory is very is salient for the survival of every company this is because every entity is designed to meet the needs of all stakeholders, if stakeholders are treated very well they will reciprocated positive attitudes and behaviors towards the organization, such as sharing valuable information, buying more products or services, providing tax breaks or other incentives , providing better financial terms, buying more stock , or working hard and remaining loyal to the organization, even during difficult times, stakeholder theory is practical and realistic because it motivate and compelled all firms to manage stakeholders to act socially. Ackermann and Eden (2010) asserted that the stakeholder theory negated the concept of stockholder by recognizing the vast group of interest in the company and requiring the business executives to manage these interests, relationships and trade-offs in aligned direction to create as much value as possible for stakeholders and manage the distribution of the value.

Agency theory

Jensen and Meckling (1976) agents cannot be monitored perfectly by the principal, so they may shirk their responsibilities or act out of sync with the principal's goals. The information gap and the misalignment of goals between the two parties results in agency costs,-which are the sum of the costs to the principal of monitoring, the costs to the agent of bonding with the principal, and the residual loss due to the disconnect between the principal's interests and agent's decisions. Lastly, the shareholder value theory seeks to reform the governance of publicly owned firms in order to decrease the principal-agent information gap. The model calls for firms' boards to be independent from their corporate executives, specifically, for the head of the board to be someone other than the top managers and for the board to be independently chosen. An independent board can best objectively monitor top manager's undertakings and risk. Shareholder value also argues in favor of increased financial transparency. By making firms' finances available to scrutiny, shareholders become more aware of the agent's behavior and can make informed choices about with whom to invest.

2.3 Review of empirical literature

Nicholas (2021) investigated Nigeria oil and gas entities on the nexus that exist between environmental accounting and profitability employed secondary data covering from 2012-2017, gathered from annual reports and accounts of the companies available on the websites and on Nigerian stock exchange with the help of regression analysis the output showed that there is no significant relationship between environmental expenditure and net profit of the oil and gas companies in Nigeria under investigation therefore recommended that amongst others that the management of the oil and gas companies should channel efforts towards engaging in adequate environmental spending and its disclosure as way of increasing stakeholders trust and showing more transparency in their operations.

Festus, Rufus and Janet (2020) Investigated 28 Nigeria quoted companies by who employed secondary data from 2009 to 2018 to analyzed the impact of sustainability reporting on turnover growth, the ex-post facto research design with 167, the pooled OLS model was used, company age and financial leverage were used as control variables, economic sustainability reporting, social sustainability reporting, environmental sustainability reporting and governance sustainability reporting was employed as the explanatory variables while turnover growth served as the response variable, the study discovered that the compliance level of the sampled firms with sustainability reporting requirements for the four dimensions are below average, however, sustainability

reporting has a significant effect on turnover growth hence opined that management of entities should intensify efforts to ensure optimum compliance with Global Reporting Initiative sustainability guidelines.

Syder, Ogbonna, and Akani (2020) investigated quoted oil and gas companies in Nigeria on the impact of sustainability accounting report on shareholder value employed cross-sectional and ex-post facto research designs with secondary data covering from 2009 to 2018 which comprises of entities that operated both on upstream and downstream sectors of the industry, the Autoregressive Distributed Lag (ARDL) bound test, descriptive statistic, model estimations and diagnostic analysis that adopted Augmented Dicky-Fuller Unit root test, error correction model and co-integration and the multiple regressions was employed with help of E-view software version 7, and discovered that employee training and community development expenditures had positive and significant effect on shareholder value added of the companies. However, the environmental compliance cost has no effect on shareholder value added therefore they recommended that the management of the oil and gas companies in Nigeria should pay adequate attention to the practice of sustainability accounting reporting because it is obvious that investments in sustainability performance which are communicated in sustainability accounting information report may increase expenses however it results in increase shareholders value creation.

An investigation of listed companies in Stock Amman Market database by Al-Dmour, Abbod and Al Qadi (2018) who administrated questionnaire of 239 to respondents in this companies, examined empirically the nexus that exist between the quality of financial reporting and non-financial business performance measures in a systematic approach, using variables such as entity type, size and experience to know the effect it has on the quality of financial reporting, the findings revealed that the elements of the quality of financial reporting are significantly influence the non-financial business performance and the changes in the quality of financial reporting among these companies were significantly found to be related to their size and experience and not to their type of business, which they engaged in.

Used descriptive research design to study the impact of environmental accounting on financial performance of corporate organizations in Kisii Country by Magara, Aming, and Momanyi (2015) employed environmental accounting (EA) application being the independent variable, and perceived financial performance as the dependent variable. With a target population of 144 consisting accountants and auditors in 16 corporate organizations, stratified sampling design where simple random sampling technique was used and 49 employees where selected. This involves qualitative and quantitative data i.e. questionnaire, and secondary data, the outcome revealed that the perceived financial performance of the corporate organization in general was in good status as perceived by the employees. Analysis of individual perceived financial performance parameters shows that revenue generation has been improving, cash flows are seen to be in a good state and profitability has been on the increase. Constructs of EA application such as environmental information, environmental evaluation, compliance of environmental laws and tracking of environmental cost savings are significantly positively related to perceived financial performance of the corporate organizations.

Adediran and Alade (2013) investigated if there is any significant relationship between environmental accounting and corporate performance in Nigeria. The data for the study were collected from annual report and accounts of fourteen randomly selected quoted companies in Nigeria. The data were analyzed using multiple regression analysis. The findings of the result show that there is significant negative relationship between environmental accounting and Return on Capital Employed (ROCE) and Earnings Per Share (EPS) and a significant positive relationship between Environmental Accounting and Net Profit Margin and Dividend Per Share. Based on this it was recommended that government should give tax credit to organizations that comply with its environmental laws and that environmental reporting should be made compulsory in Nigeria so as to improve the performance of organizations and the nation as a whole.

III. Methodology

3.0 Research methodology

Descriptive statistics was employed, such as the mean, median, maximum and minimum values to examine the selected variables. Descriptive estimates like the standard deviation and variance were also employed to know the degree of variability of these estimates. The regression model was also employed, which also employed by Magara, Aming, and Momanyi (2015) to infer decision on their study variables.

3.1 Research Design

The researchers also employed the ex-post facto research design. This is because researchers employed secondary data obtained from the company's website, and also data from Nigerian exchange group was used with the assumption that these data cannot be influenced, controlled or manipulated the researchers.

3.2 Population

This research focused on all the quoted ICT companies in Nigeria exchange group which comprises of nine (9) firms as at the time of carrying on this research, which are: Airtel Africa Plc, Chams Plc, Courteville Business Solutions Plc, Cwg Plc, E-Tranzact International Plc, Mtn Nigeria Communications Plc, Ncr (Nigeria) Plc, Omatek Ventures Plc, and Tripple Gee And Company Plc.

3.3 Sampling and Sample Techniques

The sampled entities for this study comprises of six (6) of the listed companies in this sector base on availability of financial data, this therefore mean that. Therefore the selected entities are: Chams Plc, Courteville Business Solutions Plc, Cwg Plc, E-Tranzact International Plc, Omatek Ventures Plc and Tripple Gee And Company Plc.

The available data for this research cover from 2011 to 2020, i.e. ten years data. The choice of this techniques informed by the fact that the selection of any from the population of the study must satisfy the purpose of the study without bias.

3.4 Model Specification

In order to examined environmental accounting and entities performance in the Nigeria consumer goods sector dummy variables such as 1 and 0 was employed, Festus, Rufus and Janet (2020) asserted that a dummy of can be used to represent a variable, hence for the purpose of this study, any entity that discloses its environmental cost elements in its financial statement is assigned 1 while otherwise is assigned 0. Therefor in order for us to empirically investigate environmental accounting and entities performance the following model is stated:

$$ROA = f(ED, Age, Size)$$

This can be expressed into an equation as follows:

$$PER = \beta_0 + \beta_1 E-COST + \beta_2 A + \beta_3 S + \mu$$

Where:

ROA = Return on assets, which served as performance variable (Dependent)

ED = Environmental Disclosure, served as an independent variable

Age = Age, served as an independent variable for the study.

Size = served as a control variable

β_0 = server as intercept or constant term

β_1 to β_3 = served as the parameters or coefficients of the independent variables to be estimated through the regression.

μ = is the error term of the regression equation (stochastic variable)

IV. Data Presentation and Data Analysis

Chapter four of this work will cover descriptive statistics, the tests the hypotheses and presents the study's findings.

4.0 Data presentation

The Secondary data were extracted from companies' web-site and Nigeria exchange group were presented and analyzed in this chapter. Therefore the data presented in this section consist of six (6) ICT companies variables was used for the study.

4.1 Descriptive statistics (Table one)

	ROA	ED	Size	Age
Mean	12.59	0.37	6.91	35.72
Median	12.79	0.33	6.91	35.42
Maximum	15.70	0.50	7.02	39.33
Minimum	8.67	0.33	6.79	32.33
Std. Dev.	2.28	0.07	0.07	2.18
Skewness	-0.46	1.50	-0.08	0.16
Kurtosis	2.15	3.25	2.51	2.15
Jarque-Bera	0.66	3.78	0.11	0.34
Probability	0.72	0.15	0.95	0.84
Sum	125.90	3.67	69.07	357.17
Sum Sq. Dev.	46.77	0.04	0.04	42.67
Observations	10.00	10.00	10.00	10.00

Sources: Researchers computation from financial statements

The descriptive statistics of the study variables above showed the mean of ROA, ED, Size and Age which are 12.59, 0.37, 6.91 and 35.72 respectively. The maximum value of the study variables are: 15.70, 0.50, 7.02 and 39.33 respectively. The table also showed that performance (ROA) is the most dispersed among the study variable with a value of 2.28 while size and age are the least dispersed with a value of 0.07. Jarque-Bera statistics and the associated probability values of the study variable showed that the variables are normally distributed at 5% significant level.

4.3 Regression result (Table two)

Method: Least Squares
 Date: 07/20/21 Time: 04:32
 Sample: 2011 2020
 Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ED	-17.64592	10.83150	-1.629130	0.1544
Size	64.72323	37.68641	1.717416	0.1367
Age	-0.893570	1.255117	-0.711942	0.5032
C	-396.0463	218.1419	-1.815545	0.1194
R-squared	0.722337	Mean dependent var		12.59000
Adjusted R-squared	0.583506	S.D. dependent var		2.279532
S.E. of regression	1.471127	Akaike info criterion		3.899109
Sum squared resid	12.98529	Schwarz criterion		4.020143
Log likelihood	-15.49554	Hannan-Quinn criter.		3.766335
F-statistic	5.202983	Durbin-Watson stat		1.788514
Prob(F-statistic)	0.041644			

Sources: Researchers computation via e-views

4.3.1 Discussion of findings

The regression output above showed that the coefficient of determination (R-squared) value of 0.72 indicates that 72% of changes in the dependent variable are accounted for by the combined impact of variations in the independent variables, also the R-squared value of 58% approximately, implies that the model is good and fit to be used in testing our hypotheses. The model showed an F-statistic 0.04 which is statistically significant at 5% level, with a Durbin-Watson statistics of approximately 2.00 which indicated an absence of autocorrelation among the independent variables. The result of the regression used in examining environmental disclosure and performance of quoted ICT entities on the Nigeria exchange group showed significant relationship between the explanatory and the response variable.

4.4 Hypothesis testing

In this section, the null hypotheses for the study is been tested against the alternative hypotheses.

4.4.1 Hypothesis one

H₀₁ There is no significant relationship between environmental disclosure and entities performance. Table two (2) above showed that environmental disclosure (ED) has a negative relationship with performance with a coefficient value of -17.64592, and statistical value of 0.1544 which is greater than 5% significant level, this also this implies that as environmental disclosure increases by one percent performances also reduces by 18% approximately, based on the output we can conclude that environmental disclosure has no statistical significant effect on performance of Nigeria ICT companies, therefore we accept our null hypothesis for our study.

4.4.2 Hypothesis two

H₀₂ There is no significant relationship between entity size and entities performance. Table two (2) above showed that entity size has a positive relationship with performance with a coefficient value of 64.72323, and statistical value of 0.1367 which is greater than 5% significant level, this also this implies that as entity size increases by one percent performances also increases by 65% approximately, based on the output we can conclude that entity size has no statistical significant effect on performance of Nigeria ICT companies, therefore we accept our null hypothesis for our study.

4.4.3 Hypothesis three

H₀₃ There is no significant relationship between entity age and performance. Table two (2) above showed that entity age has a negative relationship with performance with a coefficient value of -0.893570, and statistical value of 0.5032 which is greater than 5% significant level, this also this implies that as entity age increases by one percent performances also reduces by 89% approximately, based on the output we can conclude that entity age has no statistical significant effect on performance of Nigeria ICT companies, therefore we accept our null hypothesis for our study.

V. Summary, findings, Conclusion and Recommendations

5.1 Summary of findings

Over the years scholar have been carrying out a study on the effect of environmental disclosure, however a consensus has not been reached. In the same vein stakeholders have yearning for entities to always disclose the cost of carrying out economic activities (environmental disclosure). Therefore this has prompted us know the effect of this disclosure on performance, we employed return on assets (ROA) as a measure of performance while environmental disclosure (ED), entity size was employed as explanatory variable while entity age was also employed as a control variable to test quoted ICT companies on Nigeria exchange group, six entities sampled, employed secondary data covering from 2011 to 2020 (ten years), using the multiple regression analysis, with the help of e-view.

5.2 Findings revealed that:

Environmental disclosure has no statistical significant effect on performance of ICT companies quoted on Nigeria exchange group at 5% significant level hence we accept our null hypothesis for our study. In the same vein, entity size and age has statistical insignificant impact on performance (ROA), at 5% significant level hence we accept our null hypotheses for our study

5.3 Conclusion

Environmental disclosure and performance of ICT companies listed on Nigeria exchange group showed that environmental disclosure has no statistical significant on performance, however the model was statistically significant at 5% level. Six (6) listed firms which are selected base on the availability of data ranging from 2011 to 2020 this was done to reduce estimation bias, also the study showed that performance (ROA) has a negative relationship with environmental disclosure (ED), size and entity age, this implies that if performance is on the increase the environmental disclosure and associated variables in the study will reduce however not in the same proportion, although the relationship is weak.

5.4 Recommendations

Based on our findings from the investigation of environmental disclosure and entities performance with data employed from the ICT companies quoted on Nigeria exchange group, we therefore recommended that:

- a. Entity should put more interest in shareholder wealth maximization;
- b. All stakeholders shoulder be consider in the course of carrying out economic activities this is because all are significant to the success of the entity.
- c. Government should create an enabling environment for entities.

References:

- [1]. Ackerwan, F., & Eden, C. (2010). Strategic Management of stakeholders: Theory and Practice, *ELSEVIER*, 44(20), 179-196.
- [2]. Adediran, S. A., & Alade, S. O. (2013). The Impact of Environmental Accounting on Corporate Performance in Nigeria. *European Journal of Business and Management*, 5(23), 141-151. ISSN 2222-1905.
- [3]. Agustina, I., Aisjah, S., & Indrawati, N. K. (2016). The Role of Risk and Sustainability Management in the Effects of Corporate Governance on Firm Value. *Journal of Research in Business and Management*, 4(6), 14-32.
- [4]. Al-Dmour, A., Abbod, M., & Al Qadi, N. S. (2018). The Impact of The Quality of Financial Reporting on Non-Financial Business Performance and The Role of Organizations Demographic' Attributes (Type, Size And Experience). *Academy of Accounting and Financial Studies Journal*, 22(1), 1-18.
- [5]. Berle, A. A., & Means, G. C. (1932). *The Modern Corporation and Private Property*. New York, Macmillan Co.
- [6]. Bezares, F. G., Przychodzen, W., & Przychodzen, J. (2016). Corporate Sustainability and Shareholder Wealth—Evidence from British Companies and Lessons from the Crisis. *Sustainability*, 8, 1-22.
- [7]. Bhattacharyya, A., & Agbola, F.W. (2018). Social and environmental reporting: The co-creation of corporate legitimacy. *Contemporary Management Research*, 14(3), 191-223.
- [8]. Festus, A. F., Rufus, A. I., & Janet, T. O. (2020). Sustainability Reporting: Imperative for Turnover Growth. *Asian Journal of Economics, Business and Accounting*, 16(1), 8-18.
- [9]. Fontaine, C., Haarman, A., & Schmid, S. (2006). *The stakeholder theory*. Cambridge: Cambridge University Press.
- [10]. Jensen M. & Meckling W. (1976). Theory of the Firm: Managerial Behavior, Agency costs and Ownership Structure. *Journal of Financial Economics*, 3, 305-360.
- [11]. Magara, R., Aming, N. N., & Momanyi, E. (2015). Effect of Environmental Accounting on Company Financial Performance in Kisii County. *British Journal of Economics, Management & Trade*, 10(1), 1-11. ISSN: 2278-098X.
- [12]. Marvin, B. L., Natarajan, B., & Robert, G. (2017). Toward a dynamic notion of value creation and appropriation in firms: The concept and measurement of economic gain. *Strategic Management Journal*, 39(6), 57-66.
- [13]. Nicholas, N. (2021). Environmental Accounting and Profitability of Selected Quoted Oil and Gas Companies in Nigeria (2012-2017). *Journal of Accounting and Financial Management*, 7(3), 22-39.
- [14]. Syder, I. D., Ogbonna, G. N., & Akani, F. N. (2020). The Effect of Sustainability Accounting Report on Shareholder Value of Quoted Oil and Gas Companies in Nigeria. *International Journal of Management Sciences*, 7(5), 44-57.
- [15]. Tang, Y. (2017). A Summary of studies on organizational legitimacy. *Open Journal of Business and Management*, 5(8), 487-500.
- [16]. Wasara, T. M., & Ganda, F. (2019). The relationship between corporate sustainability disclosures and firm financial performance in Johannesburg stock exchange listed mining companies. *Sustainability*, 11(16), 44-49.