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# Effects of Sustainability Reporting on Corporate Performance of Selected Manufacturing Companies in Nigeria

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**Abstract**

*Activities carried on by corporate organizations tell on the immediate and remote environment in which they operate. In recent times, sustainability has become an issue of major concern around the globe. Environmental catastrophes brought environmental issues to the forefront since the late 1960s, and such events stimulated a flow of concern which has led to sustainability reporting. It is observed from most financial statements of corporate organizations that it has engendered disclosures of information which totally exclude environmental issues, at best where reported, are grossly inadequate. Environmental disclosures have become critically important to an informed public and financial stakeholders. It is as a result of this that this study evaluates the effect of sustainability reporting on corporate performance of quoted manufacturing firms in Nigeria. The study obtain secondary data from the annual report of quoted manufacturing firms on the Nigerian Stock Exchange (NSE) spanning from 2010 to 2017. The Panel regression technique was adopted to analyse data collected. The result showed positive significant effect on return on equity as indicated by coefficients (0.4852 and 0.0500) prob (0.0000 and 0.0036) respectively at 5% level of significant. The study concludes that sustainability reporting has significant effect on corporate performance of quoted manufacturing firms in Nigeria. The study therefore recommends that Management of manufacturing firms should develop a positive disposition towards cost of environmental remediation and adopt pollution control friendly practice in order to restore and guarantee stable and smooth operations. This will in turn improve performance of their respective companies and employees with a view to yielding optimal performance in future.*

**Keywords:** Sustainability Reporting, Corporate Performance, Return on Equity
**JEL Classification**: M14, Q56

## 1. Introduction

The existence of business organization is to create and maximize wealth for its owners. The shareholders are the capital providers and ultimate risk bearers for the business. It therefore follows that its resources are traditionally applied to reward the provider of capital. More often than not, activities carried on by these organizations tell on the immediate and remote environment in which they operate. In recent times, sustainability of the environment has become an issue of major concern around the globe. Environmental catastrophes brought environmental issues to the forefront since the late 1960s, and such events stimulated a flow of concern which has led to sustainability reporting (Soderstrom, 2016).

Environmental sustainability entails fulfilling the aspiration of the present generation without compromizing the ability of future generations to meet their own needs. There has therefore developed an increased investors' demand for corporate disclosures of information on the environment in the form of company's sustainability report. As a result, sustainability reporting as part of corporate reporting is fast gaining momentum especially with the adoption of International Financial Reporting Standards (IFRS) which emphasizes a lot on environmental disclosures.

Sustainability reporting as described by Elkington (2004) is the integration of reporting and accounting for social, environmental and economic development in corporate reporting. The concept of sustainability reporting maintains that while a firm strives to achieve its traditional objectives of maximizing profit, it is important that this profit is maximized through activities that seek to incorporate social and environmental considerations into the process of making verdict.

Popa, Blidisel & Bodga (2009) are of the view that corporate transparency and disclosures are more useful when sustainability reporting is incorporated. Sustainability reporting provides information that increases corporate transparency and accountability in economic, environmental, social and governance terms. It provides information not entirely captured in traditional corporate financial reports.

According to Gould (2011), sustainability reporting is necessary to equip stakeholders with information of an organization's performance in tangible aspects. In 2011, the International Federation of Accountants (IFAC) developed a sustainability framework, enabling business organizations to incorporate sustainability issues in their business approach, process and reporting practices. The reporting aspect of IFAC's sustainability framework involves providing audit and assurance on sustainability performance to enhance the credibility of sustainability reports, incorporating sustainability impacts in financial statements, and employing narrative reporting to capture sustainability information not included in financial statements.

Klynveld Peat Marwick Goerdeler, (2015) show that South African companies are taking the lead in the practice of sustainability reporting on the African continent; although, companies in Nigeria are also implementing this practice. It has been agreed by world business leaders that sustainability tells on a firm's corporate responsibility, therefore any company that does not produce sustainability report could be seen as working towards unsustainable development (Dorweiler and Yakhou, 2003). Archons within business organization are coming under increased pressure to not only reduce costs, but also to minimize environmental impacts on their operations. Regrettably, substantial impact on the environment has left Nigeria with huge economic, social, and environmental bequest. This pressure is coming from a broad group of stakeholders which include but not limited to employees, investors, regulatory bodies, non-governmental organization, customers, the host communities and the finance providers.

Stakeholders are pressurizing organizations to ameliorate and report environmental performance. Due to stakeholders' insistence, environmental costs are not commemorate with its returns and benefits. There is increasing in-acceptability that conventional management accounting practices often do not provide accurate and enough information for environmental-related cost management. Thus, many organizations significantly under-estimate cost and benefits of sound environmental management (Gray, 2006).

It is important to note that investors that give consideration to ethical issues will only invest in ethically responsible companies. Ethical companies therefore, have marketing advantage if they strategically position themselves environmentally. More so, the challenge of cost and valuation for damage, degradation, and depletion of environment externalities is a critical problem which continues to demand attention.

Since current requirement for reporting information on environmental issues in financial statement is voluntary (Environmental Impact Assessment Act of 1992), it is observed from most financial statements of corporate organizations that it has engendered disclosures of information which totally exclude environmental issues, at best where reported, are partially disclosed. Environmental disclosures have become more important to informed public and financial stakeholders.

Environment accounting entails identification, measurement and allocation of environmental costs, and the integration of these costs into business and communicating such information to companies' stakeholders (Bassey, Sunday & Okon, 2013). In this sense, it ensures good corporate governance that includes transparency and accountability in its societal activities. The non-challant attitudes of several firms not to take environmental accounting into consideration make their performance on environmental disclosure below expectation.

Accountants, as the basic watchmen and light bearer of economic development can no longer shut their eyes to the effect of environmental issues on business management, accounting and audit and disclosure system. Protection of environment and the potential involvement of accountant is becoming a common subject of discussion among accountants all over the world (Nnamani, Onyekwe & Ugwu 2017).

At present, few accounting standards are issued for, or require disclosures on accounting treatment of environmental disclosure. Some guidelines regarding environmental reporting have been issued by many organizations such as International Chamber of Commerce, the Chemical Manufacturing Association, the Japanese Industry Association, Inter-governmental Working Group of Expert on Intimation Standards of Accounting and Reporting. However, these guidelines are not mandatory but advisory in nature (Kercher, 2006). Currently, the adverse environmental effect of economic development has become a subject of public discussion all over the world. Gradually, environment is becoming a much more urgent economic, social and political problem.

However, determining the appropriate pollution prevention approach often leads to additional decisions that must be made by management. These decisions require information about costs and benefits. Traditional cost accounting approach has become inappropriate since conventional accounting practices have ignored the major environmental cost and activities. Corporate neglect of environmental costing created gap in financial information reporting (Nwaiwu & Oluku 2018). Therefore, the adverse effect on the environment could negate corporate financial statements such as creation of actual or contingent liabilities which may have adverse impact on asset values. It is in view of the aforementioned problems that necessitated the need for this study. Thus, the central point of this study is to investigate the effect of sustainability reporting on corporate performance of selected quoted manufacturing companies in Nigeria.

There are studies on environmental reporting, which convey information on environmental performance. Studies such as Nwaiwu and Oluku (2018), Asaolu, Agboola, Ayoola and Salawu (2011), Obiamaka, Akintola and Francis (2017), Uwuigbe, et al. (2018), Nnamani, Onyekwe and Ugwu (2017), Asuquo, Dada and Onyeogaziri (2018), Owolabi, Taleatu, Adetula and Uwuigbe (2016), Owolabi (2009) and Uwuigbe (2011) focus on oil and gas sector, deposit money bank and brewery firms in Nigeria.

There is extensive literature that discusses effects of sustainability reporting on the performance of firms in Nigeria, but there is scarce evidence from prior literature that empirically examines the relationship between sustainability reporting and corporate performance in the country. It is thus a pioneer study which is non-existent in Nigerian literature in respect of manufacturing companies to the best of researcher's knowledge and this has been the justifiable gap for this study.

The study is significant in the sense that it would be of immense benefit not only to the companies in the Nigerian manufacturing sector, but also to the Nigerian economy in its entirety in improving sustainability reporting and enhancing value driven performance for company's survival.

Thus, it is necessary for manufacturing companies in Nigeria to be able to put into consideration sustainability reporting activities and grow over time, if they are ever to play an increasing and prominent role in creating value adding output for stakeholders. Based on this, the following research questions became pertinent: To what extent does community development cost influence the return on equity of quoted manufacturing companies in Nigeria? And in what way does cost of environmental remediation and pollution control affect return on equity of quoted manufacturing companies in Nigeria?

This study evaluates the effect of sustainability reporting on corporate performance with specific reference to selected Nigerian manufacturing companies. The period of study is eight (8) years (between 2010-2017). The specific objectives are to: assess the extent to which community development cost influence the return on equity of selected quoted manufacturing companies on in Nigeria; and to evaluate the effect of cost of environmental remediation and pollution control of return on equity of selected quoted manufacturing companies in Nigeria.

## 2. Literature Review

### *2.1 Conceptual Issues of Literature: History of Sustainability Reporting*

Advocacy for corporate sustainability reporting by leading governments has been on the increase with the coming together of Brazil, Denmark, France and South Africa, in support of the United Nations Conference on Sustainable Development (Rio+20). The aforementioned countries attracted the support of the Global Reporting Initiative (GRI) and United Nations Environment Programme (UNEP). These two bodies became part of recognized leading institutions in sustainability reporting. The GRI has been developing frameworks and guidelines which organizations are employing to report on sustainability. These frameworks include Reporting Guidelines which include the indicators of sustainability reporting which organizations can use in measuring and reporting their sustainability performance. In addition, the United Nations Environment Programme (2012) emphasizes the need for partnership between countries and organizations towards actualization of the goal of sustainable development through provision of relevant information to enable the former improve the quality of life for their people, without putting future generations at risk.

According to Dilling (2010) the European Union (EU) encourages voluntary sustainability reporting. Some countries in the EU such as Denmark, Finland, Sweden, Belgium, the Netherlands and Germany have either legislative or non-legislative bodies which drive social responsibility and sustainability reporting. The Association of Certified Chartered Accountants (2004) notes that the first sustainability reports in Africa and the Middle East were published in 1993 and since then reporting has grown slowly. Majority of the corporate sustainability reporters and reporting developments have occurred in South Africa. For instance, the King Code II (now revised) corporate governance report in South Africa has been noted as the first in any African jurisdiction to include a comprehensive section on integrated sustainability reporting. There is the King III Code of corporate governance with effect from 2010 requiring, amongst others, that, companies incorporate sustainability reporting and disclosures into their financial reports (Integrated Reporting and Assurance Services, 2012).

The United Nations Environment Programme (2013) disclosed that there was a coming together of South Africa, Brazil, Denmark and France in 2012 to support paragraph 47 of the UN Conference on Sustainable Development. According to the United Nations (2012), in paragraph 47 the importance of sustainability reporting is recognized; interested stakeholders in industry, governments, and non-governmental organizations have been encouraged to design ways through which the goal of sustainable development can be actualized. The governments of Austria, Columbia, Norway and the Switzerland have also joined South Africa, Brazil, Denmark and France in favour of Paragraph 47 of the Rio+20 outcome document on this same issue.

The Nigerian experience towards corporate sustainability reporting is still evolving. According to Okoye and Ngwakwe (2004), increasing awareness of social and environmental issues is resulting in clamours for sustainable economic development. There is also a shift towards stakeholder-oriented corporate governance requirements depicted in the changes made to the Code of Corporate Governance for companies operating on the stock market. This code was issued by the Securities and Exchange Commission - SEC (the stock market regulator) in Nigeria. This regulatory board demands that companies incorporate the requirements of the Code in line with reporting on sustainability as part of their corporate governance from the year 2012 (Securities and Exchange Commission, 2011). In furtherance of this course, the Central Bank of Nigeria (CBN) sent a specific circular to financial institutions in September 2012, advising them to incorporate sustainability issues in their corporate reporting by December 31, 2013 to enable them produce a stand-alone report by December 31, 2014. Therefore, financial institutions are expected to abide by a set of sustainable banking principles to promote sustainability reporting (Central Bank of Nigeria, 2012).

Nigeria as a member of the United Nation impliedly adopted the UN global compact on global reporting initiative (GRI) which provided sustainability reporting guideline in 2000 to design and build acceptance of a common framework for reporting on the linked aspects of sustainability. It is in the light of the above, amidst growing demand by the society, over economic, social and environmental accounting company's performance that more research work on sustainability accounting becomes imperative.

Sustainability Reporting is not an end in itself but a means to an end. Sustainability reports are meant to provide stakeholders with information on economic, social, and environmental performance of the reporting organization.

*2.2 Standards and Guidelines on Sustainability Reporting*

A number of standards, guidelines and organizations are crucial in the development of sustainability reporting. Muller (2011) identifies these guidelines as emanating from the Carbon Disclosure Project (CDP), International Standards Organization (ISO), Global Reporting Initiative (GRI), Greenhouse Gas Protocol and United Nations Global Compact (UNGC). Also, assurance of sustainability disclosures and reporting is overseen by accounting firms namely big four - Klynveld Peat Marwick Goerdeler (KPMG), PricewaterhouseCoopers (PwC), Ernst & Young, Deloitte and non-big four, Accountability principles and International Federation of Accountants (IFAC) and other consultants who are not accounting firms.

The Global Reporting Initiative (GRI) is a leading organization in the field of corporate reporting poised with a mission to promote the use of sustainability reporting by government, business and not-for-profit organizations; thereby contributing to sustainable development. The latest reporting principles and standard disclosures of the GRI (G4) were issued in July 2013 (GRI, 2013). Previous guidelines are the G3.1 (issued in 2011), G3 (issued in 2006), G2 (issued in 2002) and the 2000 guidelines. The G3.1 guidelines issued in 2011 classify the standard sustainability disclosures along three lines namely strategy and profile, management approach and performance indicators. Based on Global Reporting Initiative (2011), organizations are supposed to declare the level to which they adhere to the guidelines when they report.

*2.3 Theoretical Framework*

The most widely advanced theoretical perspectives in the sustainability reporting/environmental accounting literature is the legitimacy theory.

Legitimacy theory is derived from political economy theory and relies on the idea that the legitimacy of a company to operate in a society depends on an implicit social contract between the company and society. As described by Deegan (2000), the legitimacy theory is of the view that organizations continually seek to ensure that they operate within the bounds and norms of their respective societies, that is, they attempt to ensure that their activities are perceived by outside parties as being legitimate. Managers continually attempt to ensure that their company complies with its social contract by operating within society's expectations. This suggests that managers have incentives to disclose information that indicates that the company is not in breach of the norms and expectations of society. Therefore, the company attempts to maintain its survival and continuity by voluntarily disclosing detailed information to society to prove it is a good citizen.

*2.4 Empirical Evidences*

Uwuigbe, et al. (2018), examined the relationship between sustainability reporting and firm performance in quoted Deposit Money Banks (DMBs) in Nigeria. The population size of the study comprised of all deposit money banks quoted on the floor of the Nigerian Stock Exchange, the study used judgmental sampling technique to select the sampled banks for the period 2014-2016. The annual reports of the selected banks were analyzed through the use of content analysis and coded in order to obtain the sustainability disclosure index. The panel regression technique was used to analyze the data. The findings revealed that there is a bi-directional relationship between sustainability reporting and firm performance of quoted Deposit Money Banks (DMBs) in Nigeria. The study observed that the market price per share of the samples firms had a significant negative influence on sustainability reporting. In addition, the study also showed that sustainability reporting had a significant positive influence on revenue generation of the sampled firms.

Asquo, Dada and Onyeogaziri (2018), examined the effect of sustainability reporting on corporate performance of selected quoted brewery firms in Nigeria. To determine the association between sustainability reporting and corporate performance, data was obtained from the audited financial statements of the three brewery firms under study for a period of five years (2012-2016). The result of the study showed that Economic Performance disclosure (ECN), Environmental Performance disclosure (ENV) and Social Performance disclosure (SOC) had no significant effect on return on asset (ROA) of selected quoted firms in Nigeria.

Owolabi, Taleatu, Adetula and Uwuigbe (2016), examined the extent of sustainability reporting practised by Lafarge Africa Plc. Content analysis was used to analyze the data extracted from their annual reports and the Global Reporting Initiative (GRI) G4 sustainability reporting guideline was used as the basis of assessment. The study found no disclosures on human rights issues, 3% environmental disclosures and an aggregate of 30% disclosure based on one hundred and sixty-nine indicators used. The study concluded that Lafarge Africa Plc exhibited some level of sustainability reporting, however, the extent of reporting was still below average which suggests there is much work to be done to improve this practice in order to become more transparent and accountable to its stakeholders.

Nnamani, Onyekwelu and Ugwu (2017), evaluated the effect of sustainability accounting on the financial performance of listed manufacturing firms in Nigeria. Firms used for the study were chosen from the Nigerian brewery sector. Data were sourced from the financial statements of three sampled firms. Data were analysed using the ordinary linear regression. The study reveals that sustainability reporting has positive and significant effect on financial performance of firms studied.

Nwaiwu and Oluka (2018), empirically examined the effect of environmental cost disclosure and financial performance measures of quoted oil and gas companies in Nigeria. Time series data were collected from annual financial reporting and economic review of the Central Bank of Nigeria; Pearson product moment coefficient of correlation and multiple linear regression analysis with the aid of special package for social sciences (SPSS) version 22 were used. The econometric results reviewed adequate disclosure on environmental cost, compliance to corporate environmental regulations have positive significant effect on financial performance measures.

## 3. Methodology

*3.1 Model Specification*

Model specification for this study is derived from the research efforts of previous contributors in the area of study, which is on the relationship between sustainability reporting and corporate performance. The procedure is in line with the approach adopted by Enahor (2009) given by:

The model specified for this study is specified as follows:

$$EQR = a0 + a_1EOPEX + a_2ECAPEX + a_3COTEC + a_4PODET + a_5POPREV + a_6EEXTC + \varepsilon \quad \ldots\ldots 1$$

However, the model adopted for this study is re-modified with the inclusion of Cost of Environmental Remediation and Pollution Control and Cost of Environmental Law Compliance because they involve cost of cleaning up or sustainability reporting which can be written in form as:

$$CPRF = f\,(CDC, CERPC) \quad \ldots\ldots 2$$

$$ROE_{it} = \alpha + \beta_1 CDC_{it} + \beta_2 CERPC_{it} + \mu_{it} \quad \ldots\ldots 3$$

Where:
ROE = Return on Equity
CDC = Community Development Cost
CERPC = Cost of Environmental Remediation and Pollution Control
$\alpha$ = the intercept/constant;
$\beta_1 - \beta_2$ = are the parameters;
$\mu$ = error term
$i$ = Number of firms
$t$ = Time period 8years (2010-2017)

*A priori* expectation is that $\beta_1$, and $\beta_2 > 0$

Decision rule: null hypothesis should be rejected if the prob (p-value) is < 5% significance level, otherwise it should be accepted.

*3.2 Research Design*

In this study, the researcher adopted the panel design because the study was carried out on a group of manufacturing firms (cross sectional units) and for more than a year (time series). For the purpose of this study, the target population was the 69 quoted manufacturing firms on the Nigerian Stock Exchange (NSE), and reclassified into five subsectors which were (food, beverages, conglomerate, building material, construction) where the study obtained data from a sample of 10 firms ranged 2010 to 2017 to the extent of data that was available using random sampling technique.

*3.3 Sources and Method of Data Collection*

The study used data mainly from secondary sources because the estimation of the model employed in the study requires the use of data in the form of financial and market information. In this regard, the sources of data for the study were the Nigerian Stock Exchange Fact Books, annual reports and accounts of the companies for the year 2010 to 2017 covered by the study.

*3.4 Population and Sampling Procedure*

The sample focused exclusively on ten (10) selected manufacturing firms within the sector as classified by the Nigerian Stock Exchange and the Corporate Affairs Commission using random sampling techniques out of the sixty nine (69) quoted manufacturing companies. These companies have the required data needed for this study in their annual reports and have filed their annual report within the last eight years (2010-2017). This restriction placed a limit on the number of firms qualified for the study. The empirical study is therefore of ten (10) randomly selected quoted manufacturing companies in Nigeria.

Manufacturing companies were chosen for this study because of the environmental and social effects which some of their operations have on the environment. In addition, these companies were amenable to the regulations and also their activities had caused armed confrontations in the area in which they operated.

*3.5 Technique of Data Analysis*

This study employed the multivariate technique to analyse the data. The model uses multiple dependent variables: Return on Equity and two explanatory variables, Community Development Cost (CDC) and Cost of Environmental Remediation and Pollution Control (CERPC). The basic aims of the multiple regression model in this study is to investigate empirically if any relationship existed between Corporate Sustainability reporting (environmental accounting) of manufacturing companies and their performance in Nigeria. More specifically, the multiple regression model assesses the aggregate impact of the three explanatory variables on corporate financial performance. The model was estimated using the coefficients of the independent variables and their level of significance.

*3.6 Measurement of Variables*

*Return on Equity (ROE):* This is a test of profitability based on investments of the owners of a business. It measures the return which accrues to the shareholders after interest payments and taxes are deducted. This is one of the proxies for financial performance. Stock investors usually use ROE in analyzing stock. This is computed for common shareholders as Net Income divided by Shareholder's Equity multiply by hundred percent.

*Community Development Cost:* This involves donations/ contributions to the community where they operate. These costs may include scholarships, building of modern class room for student, organizing youth entrepreneurship programmes, disaster relief, provision of boreholes and so on. This is a proxy of environmental accounting cost.

*Cost of Environmental Remediation and Pollution Control:* These are the cost of removing pollution or contaminants from environmental media such as soil, groundwater, sediment, or surface water which can impact negatively on human health and the environment where such company operates. This is a proxy of environmental accounting cost.

**4. Analysis and Discussion of Results**

Data for this study was presented and analyzed using the correlation matrix, multicollinearity test to test the individual difference among the cross-sectional data while panel regression analysis was adopted in the test of hypothesis of the study.

Table 4.1: Correlation Matrix

| | ROE | CDC | CERPC |
|---|---|---|---|
| ROE | 1.0000 | | |
| CDC | 0.0630 | 1.0000 | |
| CERPC | -0.1259 | 0.2465 | 1.0000 |

*Source: Author's Computations, (2019).*

Table 4.1 presents the correlation matrix of the dependent and independent variables of this study. The essence of this is to measure the linear relationship between these variables (ROE, CDC, and CERPC). This correlation matrix reflects the relative strength of the linear relationship between these variables. According to Gujarati (2004), multi-collinearity could only be a problem if the pair-wise correlation coefficient among regressors is above 0.80. However, it is obvious that the variables in table 4.1 are orthogonal (statistically independent) and do not pose correlation concern for the study.

Table 4.2: Variance Inflation Factor

| Variable | VIF | 1/VIF |
|---|---|---|
| CERPC | 1.13 | 0.8871 |
| CDC | 1.07 | 0.9371 |
| Mean VIF | 1.06 | |

*Source: Author's Computations, (2019)*

It is an implicit assumption when using the panel least square estimation method that the exogenous variables are not perfectly correlated or near perfect correlation with one another. If there is no relationship between the explanatory variables, they would be said to be orthogonal to one another. Hence, Table 4.2 displays the relationship between the independent variables of this study with the aid of variance inflation factor (VIF). The result indicated absence of multicollinearity among these variables as indicated by VIF of each variable falling below 10, and the average VIF is also less than 10.

Table 4.3: Panel Result: Sustainability Reporting and Return on Equity

| Variable | Coefficient | Std. Error | t-Statistic |
|---|---|---|---|
| C | -4.410650 | 0.704061 | -6.264580 |
| CDC | 0.485151 | 0.104364 | 4.648661 |
| CERPC | 0.050046 | 0.011157 | 3.052279 |
| | Effects Specification | | |
| Cross-section fixed (dummy variables) | | | |
| R-squared | 0.991609 | Mean dependent var | |
| Adjusted R-squared | 0.989180 | S.D. dependent var | |
| S.E. of regression | 0.075524 | Akaike info criterion | |
| Sum squared resid | 0.216749 | Schwarz criterion | |
| Log likelihood | 65.07900 | Hannan-Quinn criter. | |
| F-statistic | 408.2235 | Durbin-Watson stat | |
| Prob(F-statistic) | 0.000000 | | |

*Source: Author's Computations 2019*

Panel 1 shows the linear relationship between sustainability reporting and return on equity (ROE) of manufacturing firms in Nigeria with the use of multiple panel regression analysis. The results obtained from the static model indicates that the overall coefficient of determination R-squared ($R^2$) shows that the equation has a good fit with 99.2 percent of profitability is explained by the variables in the equation. This result means that $R^2$ is highly significant in terms of the goodness of fit.

In terms of the signs and magnitude of the coefficients which signify the sustainability reporting and return on equity, it can be seen that the variables CDC and CERPC concur with *apriori* expectation; with positive sign. This means that both variables CDC and CERPC have direct relationship with return on equity.

The significant coefficients of CDC and CERPC exogenous variable clearly have positive significant effect on return on equity as indicate by coefficients (0.4852 and 0.0500) prob (0.0000 and 0.0036) respectively at 5% level of significant. This means that 1% increase in CDC, will result in 0.4852% increase in return on equity, and also 1% increase in CDC, will result in 0.05% increase in return on equity. Overall, the result of the F-statistic revealed that sustainability reporting have significant effect on the return on equity of quoted manufacturing firms in Nigeria as indicates by F-stat 408.2 and prob (F-stat) 0.0000 at 5% significance level.

**5. Conclusion and Recommendations**

The study examined the relationship between sustainability reporting and corporate performance of quoted manufacturing firms in Nigeria and found that there is positive and significant relationship between sustainability reporting and corporate performance. However, the extent of reporting is still evolving which suggests there is much work to be done to improve on this practice (sustainability reporting) in order to become more transparent and accountable to shareholders.

From the findings and conclusion reached in this study, the following recommendations are suggested: that management of manufacturing firms should increase their participation in CDC to their host communities in order to guarantee a conflict free operation atmosphere needed by managers, customers, employees and interested parties for maximum productivity/profitability. Also, management of manufacturing firms should develop a positive disposition towards CERPC friendly practice in order to restore and guarantee stable and smooth operations. This will in turn improve the performance of their respective companies and employees with a view to attain optimal yield level in the future.

**References**

Asaolu, T.O., Agboola, A.A., Ayoola, T.J. & Salawu, M.K. (2011). Sustainability reporting in the Nigerian oil and gas sector. *Proceedings of the Environmental Management Conference,* Federal University of Agriculture, Abeokuta, Nigeria

Association of Chartered Certified Accountants and Net Balance Foundation (2004). The state of sustainability report assurance in the ASX 100

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.*

Bassey E.B., Sunday O.E, & Okon E.E. (2013). The impact of environmental accounting and reporting on organizational performance of selected oil and gas companies in Niger Delta region of Nigeria. *Research Journal of Finance and Accounting. Vol.33(3), 56-71.*

Central Bank of Nigeria (2012). Nigerian sustainable banking principles - Central Bank of Nigeria. Abuja, Nigeria: Central Bank of Nigeria.

Dilling, P.F.A. (2010). Sustainability reporting in a global context: What are characteristics of corporations that provide high quality sustainability reports-An empirical analysis. *International Business & Economics Research Journal*, vol. *9*(1), 19- 30.

Dorweiler, V.P. and Yakhou, M. (2003), Dimensionality of Environmental Accounting, *Journal of Accounting and Finance Research,* Vol. 9, (4), 47–64.

Elkington, J. (2004). Enter the triple bottom line. The triple bottom line: Does it all add up, 1-16.

Ernst&Young (2013). Six growing trends in corporate sustainability. Retrieved from http://www.ey.com/Publication/vwLUAssets/Six_growing_trends_in_corporate

GRI (2011). *Sustainability reporting guidelines, version 3.1.*

Integrated Reporting and Assurance Services (2012). Review of sustainability reporting in South Africa as per the Global Reporting Initiative (GRI) Guidelines. Retrieved from http://www.iras.co.za/Documents/Research/King_III_and_GRI_13_Research _Report.pdf

Klynveld Peat Marwick Goerdeler (2015). Currents of change: The KPMG survey of corporate responsibility reporting.

Gould, S. (2011). Accounting for Sustainability. *Accountancy Plus*, *1*, 19-20.

Gujarati, D.N. (2004). Basic Econometrics, 4th Edn., New York: The McGraw-Hill Companies.

Gray R. (2006), Current Developments and Trends in Social and Environmental Auditing, Reporting and Attestation: A Review and Comment, *International Journal of Auditing, Vol. 4, 247-268.*

Muller, S. (2011). Quantitative sustainability disclosure – An international comparison and its impact on investor valuation (Master's Thesis). Lappeenranta University of Technology, Finland.

Nnamani, J.N., Onyekwe, U.L. & Ugwu, O.K. (2017), Effect of Sustainability Accounting and Reporting on Financial Performance of Firms in Nigeria Brewery Sector. *European Journal of Business and Innovation Research Vol.5, (1),1-15.*

Nwaiwu, N.J. & Oluku, N.O. (2018), Environmental Cost Disclosure and Financial Performance of Oil and Gas in Nigeria. *International Journal of Advanced Academic Research. Vol. 4 (2), 1-23.*

Obiamaka, A.N., Akintola, A.O. & Fransis, O.I. (2017), Sustainability Reporting in Financial Institutions: A Study of The Nigerian Banking Sector. *Journal of Internet Banking and Commerce, June 2017, vol. 22,(8), 1-15.*

Okoye, A.E., and C.C. Ngwakwe (2004). Environmental Accounting: A Convergence of Antecedent Divergence. In: Accountancy: Management Companion, Nigeria, Ezejelue, A.C. and A.E. Okoye, (Eds.). Nigeria: Nigerian Accounting Association.

Owolabi, A. (2009). Environmental disclosures in annual reports: The Nigerian perspective. *Economia Aziendale Online, vol.1*, (2), 151-160.

Owolabi, F. Taleatu, A. Adetula, D. & Uwuigbe, U. (2016), Assessment of Sustainability Reporting in Nigerian Industrial Goods Sector. *3rd International Conference on African Development Issue*

Popa, A., Blidisel, R., and Bodgan, V. (2009). Transparency and disclosure between theory and practice: A case study of Romania.

Securities and Exchange Commission (2011). Code of Corporate Governance for Public Companies. Nigeria: Securities and Exchange Commission. Retrieved from www.sec.gov.ng/code-of-corporate- governance-.html

Soderstrom, N., (2016), Sustainability reporting: Past, present, and trends for the future. *Insights Home, vol. 13, pp. 31-37.*

United Nations Environment Programme Finance Initiative (2013) UNEP FI guide to banking and sustainability.

Uwuigbe, U. (2011), Corporate social and environmental disclosure in Nigeria: A comparative study of the building material and brewery industry. *International Journal Business Management. 6(2), 258-264.*

Uwuigbe, U., Obarakpo, T., Olubukola, R.U., Ozordi, E., Osariemen, A., Gbenedio, A.E. & Oluwagbemi, S.T. (2018), Sustainability Reporting and Firm Performance: A Bi-Directional Approach. *Academy of Strategic Management Journal Vol. 17, (3), 1-16.*