International Journal of Innovative Research in Accounting and Sustainability
ISSN: 2736-1381 (Print), ISSN 2736-1500 (Online)
Vol. 7, No. 1, 2022

IJIRAS/AAUA
https://ijiras.org

Green Accounting Disclosures and Financial Performance of Oando Plc, Nigeria

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Abstract

The unprecedented level of increase of oil spillage in Nigeria has increased the call for environmental accounting disclosures. This study investigated how green accounting affects the financial performance of Oando Plc. The variables of the study include; environmental cost, net income, return on assets (ROA), return on capital employed (ROCE), where Leverage and firm size are used as control variables. Data obtained were analysed using descriptive statistics which include the mean, standard deviation, minimum and maximum values; and inferential using correlation and granger causality. The findings revealed that there is no relationship between environmental cost and net income and return on capital employed. It is however recommended that Oando Plc should overlook the insignificant effect of green accounting disclosure and cultivate the habit to disclosing the environmentally event and activities in their annual report as this will be of great use for some stakeholders.

Keywords: Environmental cost, leverage, firm size, return on capital employed, return on asset, net income

1. Introduction

The negative environmental impact of economic expansion has been a major source of public concern throughout the world in recent years. Economic, social and political problems are gradually becoming a much more serious situation. Environmental protection and the potential participation of accountants are becoming a prominent subject of debate between accountants worldwide. The requirement for information on environmental accounting has led to the notion of green environmental accounting and reporting. In corporate accounting and reporting systems, environmental disclosures have become required (Gupter, 2011). With the advent of liberalization and the removal of trade barriers, accountants are expected to take a proactive role in environmental conservation. It is natural that the costs of environmental degradation due to industrial operations should be integrated as much as possible in business accounts. As a result, environmental green accounting disclosures are now more important than ever.

Accountants are anticipated to play a proactive part in environmental conservation with the advent of liberalization and the reduction of trade barriers. It is only reasonable that the expenses of environmental degradation caused by industrial operations be factored into corporate accounting as much as feasible. As a result, green accounting disclosures for the environment are now more crucial than ever. Stakeholders have begun to consider environmental issues as one of the risks of investing in a new or existing business as part of their Corporate Social Responsibilities in assessing the risk of investing in any firm. In like manner, for firms to remain relevant, they have begun to consider environmental issues as one of the risks of investing in a new or existing business and as part of their Corporate Social Responsibilities (CSR).

Including environmental performance in a company's reports is unusual in terms of fulfilling the growing demand for environmental data (Kalunda 2007). As a result, the publication of unsolicited environmental green accounting reports has become a priority for corporate entities. As a result of the increased demand for environmental accounting data, environmental green accounting and reporting has become increasingly significant. Such environmental disclosures are appealing to stakeholders when they comply with ethical standards, which are based on the quantity and quality of information made available to the public. Therefore, appropriate accounting of environmental consequences is considered by corporate operations that have environmental consequences, according to Halil and Seda (2014), is a criterion for sustainable development.

1.2 Statement of Problem

Both developed and developing nations have adopted environmental financial reporting (Shukla & Nid-hi, 2013). Even though Nigeria continues to face the challenge of environmental contamination and degradation caused by oil and gas development in the nation, particularly at the sites of exploration, discoveries, and sales, such accounting disclosures are still in their infancy. As a result, the activities of onshore and offshore oil and gas corporations in Nigeria have long-term negative environmental and socioeconomic consequences. Different studies in Nigeria, on the other hand, have looked at how various forms of environmental green accounting disclosures have influenced the financial performance of the oil and gas industry. Because of the enormous damage that oil and gas exploration has caused in Nigeria, many of these studies have only established the relationship between environmental green accounting disclosures and financial performance of oil and gas companies, ignoring how environmental green accounting determines or influences the profitability of oil and gas companies.

The disclosure of a firm's green costs is thought to make the firm more responsive (Cortez & Cudia, 2011; Muller, *et al.,* 2011; Shelly, *et al.,* 2007), and it is also a key determinant of profitability and performance (Cortez & Cudia, 2011; Muller, *et al.,* 2011; Shelly, Fust & Lisa, 2007). (Jeroh & Okoro, 2016; Okoye & Ezejiofor, 2013; Lee, *et al.,* 2011). In Nigeria, however, only a small number of recent research have found a link between green accounting and profitability (Agbiogwu, et al., 2016; Nnamani, et al., 2017). There have also been studies that show that green accounting has a detrimental impact on a company's profitability, (Adekanmi, *et al.,* 2015; Dibia & Onwuchekwa, 2015: Makori & Jagongo, 2013). As the environment is continuously deteriorating as a result of increased industrial activity, environmental green accounting is increasingly being called for in the organization to keep track of the environmental activities to know whether the generated data has significant impact on the performance of companies, particularly the petroleum and gas companies that operate (Oti & Mbu-Ogar, 2018).

The unprecedented level and increase of oil spillage in Nigeria that has demanded environmental accounting disclosures is tied to the oil spillages in Nigeria, which are majorly caused by corrosion of pipeline, which amounts to 50% of the total spillages in Nigeria (Library.thinkingquest.org, 2010) sabotage, vandalism, oil production operation, ship seepage, tankers and oil terminal leakages, equipment failure or malfunction, deliberate/incidental discharge of oil from leaking tankers and ships etc. The different types of oil spillages and gas flaring by the oil and gas companies in Nigeria, impacts negatively on the environment and the inhabitants of the host communities. The effect of oil spillages depends on the enormity of the spillage, what is affected in the environment and the season it occurred (Environmental Pollution Center, 2018). The leakage of such oil also catalyzes a number of difficult health problems such as respiratory difficulties, skin rashes, cancer, gastrointestinal disorders and malnutrition.

Green accounting reports remains voluntary. Oil and gas firms could therefore capitalize on the challenges faced with, while preserving the scarce resources and the cost on their profit and nondisclosure of their environmental green accounting reports to the public is preferred. The major significance of this study is to investigate how environmental sustainability or green accounting has affected the financial performance of Oando Plc. However, the study will be useful to gauge the optimum profit levels of Oando Plc against their cost incurred on environmental activities or operations. This therefore will expose how green accounting of Oando Plc has addressed the financial performance of the firm. Hence, the broad objective of this study is to evaluate the relationship Green Accounting Disclosures and Financial Performance of the Oil and Gas Company: A study of Oando Plc. The specific ones are to:

i. Examine the relationship between environmental cost and net income of Oando Plc.
ii. Investigate the correlation between environmental cost and return on asset (ROA) of Oando Plc.
iii. Assess the association between environmental cost and the Return on Capital Employed (ROCE) of Oando Plc.

2. Literature Review

2.1 Green Accounting Disclosures

Green Accounting, also known as Environmental accounting has several definitions in literature. US EPA (1995) defined Green Accounting as "the cost identification and measurement of environmental materials, and the use of environmental management decision-making information." This estimated cost is to detect and plan to address the negative impacts of activities and systems on the environment. How es (2002) also describes the "production, analysis, and application of monetized environmental data to optimize company environmental and economic performance" as Environmental Green Accounting. The costs of creating, detecting, remediating and preventing environmental deterioration' are also Hansen and Mowen's (2000). However, the Environmental Green Accounting reported by Howes (2002) not only focuses on internal and external environmental accounting but also makes the connection between environmental and financial performance clearer. Environmental green accounting communications therefore contribute to environmental sustainability in the culture and operations of a business.

Therefore, the identification of gaps in the past, the budgeting of current and the supply of future environment costs and benefits for managing policy, supervision and public disclosure is a major concern within the organization's environmental green accounting disclosures. The ACCA (2015) has indicated that disclosures of environmental accounting relate to the creation, for a particular period of accounting, of monetary and non-monetary information on or following an organization's environmental effect. As such, corporate environmental disclosures entail reporting regarding the effect of organizations' activities on the natural environment that is budgeted for in environmental green accounting disclosures.

Environmental green accounting costs include waste management, recycling, repackaging, saving and conserving energy and materials, emissions, pollution, conservation of wetlands, wildlife, and many other activities.

The categories of corporate green reporting practices are: Environmental financial accounting, Environmental cost management, Environmental energy and materials reporting and Economic accounting audit, in line with the GRI (2006/08/2011/2013). Environmental accountants, for example, are designed to audit our environment and achieve the following goals: pollutant and hazardous waste elimination; environmentally safe market products; conserving trees that preserve non-renewable resources; safeguarding employees; providing a board member of the environmentalists; and prepare for an accident and the rehabilitation of the damaged environment, according to Udo (2018) and Wyse (2014). Environmental accounting is a quantitative study that focuses on the conservation of ecosystems and the long-term viability of the environment.

Environmental/green accounting is designed to account for all environmental costs, both positive and negative. According to Ekemezie and Okafor (2020), there are two forms of environmental accounting disclosures: required disclosures and optional disclosures. Uwaloma (2011) also described an involuntary disclosure as a sort of environmental accounting disclosure. Mandatory disclosures are those that are made in accordance with the country's legislative norms and laws on sustainability (Ekemezie & Okafor, 2020). Voluntary environmental accounting, on the other hand, occurs when a corporation voluntarily discloses environmental expenses rather than complying with the law. Financial institutions, investors, and the general public put pressure on the government to do so. The preferences of the dominant management and CEOs of a corporation or organization may also impact the disclosures of environmental green accounting. Environmental green accounting disclosures provide businesses credibility in the eyes of the public, with long-term advantages available to all members of the public (Eltaib, 2012). Disclosures that are made against the company's will are known as involuntary disclosures. Because of the company's harmful acts toward society or the environment, the disclosure is made by the media, civil society organizations, and green group activists (Uwaloma, 2011). It is generally exposed after the negative action has taken place.

2.1.2 Financial Performance

Financial performance in business is an account of income and expenditure by the management to the shareholders. This entails calculating a company's or business's profitability, market worth, and growth prospects. Financial performance is needed for a company to find out and to evaluate the level of success of a company based on financial activities that have been implemented (Rudianto, 2013). Likewise, a company's financial performance is determined by social performance and accounting data, such as previous audited financial records (Magara, Aminga, & Momanyi, 2015). Financial performance is the outcome or accomplishment that has been accomplished by the administration of an organization in overseeing organization resources viably during a specific period. It is a description of a company's financial state through time, including both elements of fund raising and fund channeling, and is commonly quantified using capital adequacy, liquidity, and profitability metrics. The motivation behind estimating an organization's financial performance according to Munawir (2012) is to find out the level of liquidity that shows the ability of a company to meet financial obligations when billed, knows the level of solvency that indicates a company's ability to meet short-term and long-term financial obligations if a company liquidated, knows the level of profitability or gain which shows a company's ability to generate profits in a certain period and find out the level of stability that shows a company's ability to run its business which can be measured by considering a company's ability to pay debts and interest charges on debt on time. Financial performance of a company can be measured using financial ratios.

Financial ratios are analytical tools that connect various estimates contained in financial statements. Financial performance refers to the company's work performance during a specific time period as shown in its financial accounts. The most often used profitability measurements are Return on Capital Employed (ROCE), Return on Investment (ROI), Return on Assets (ROA), Return on Equity (ROE), Earnings per Share (EPS), and Net Profit Margin (NPM). According to Fahmi (2012), financial ratios are critical when analyzing a company's financial situation. Financial ratios provide the foundation for addressing numerous key questions about a company's financial health. For management, the financial ratios in financial reporting analysis are used to anticipate future conditions and a starting point for planning actions that will affect a firm future event. The decision of a company by stakeholders is therefore influenced by a company financial performance.

2.1.3 Firm Size

The size of a company is the most commonly analyzed feature in the reviewed studies to explain the level of disclosure in general. According to Roberts et al. (2005), firm size plays an important role in determining the extent of information disclosure in annual reports. Ousama and Fatima (2010) explain the relationship between firm size and the extent of disclosure. Bronson, Carcello and Raghunandan (2006) and Macagnan (2007) tested the size hypothesis. Large companies have a greater number of contracts between managers and shareholders than small companies and, hence, a greater principal agent problem. A higher level of disclosure might reduce agency costs between managers and shareholders. Another motivation for increased disclosure in a large company is the existence of a more complete information system, which would allow lower costs of obtaining and publishing information compared to those incurred by a small company (Watson *et al.*, 2002). It is also understood that a smaller company is more vulnerable to a loss in competitive advantage than a larger company.

2.1.4 Firm Leverage

Leverage one of the important items in the capital structure of companies and it provides a medium for corporate financing as firms borrow money in order to obtain the capital, they require for operating their businesses. Leverage can either be short-term or long-term. Short-term leverage represents funds needed to finance the daily operations of the firm, such as trade receivables, short-term loans and inventory financing. Given that firms with higher leverage levels incur more agency costs (potential wealth transfers from debt-holders to shareholders and managers), they seek to reduce these costs and information asymmetries by disclosing more information to satisfy the needs of creditors for information (Prencipe 2004).

2.2 Theoretical Review

2.2.1 Stakeholder Theory

Freeman came up with the stakeholder theory (1984). According to the hypothesis, organizations disclose environmental information as a result of stakeholder pressure, and that an organization would respond to the worries and expectations of influential stakeholders, with some reactions taking the form of strategic disclosures. The society, shareholders, creditors, workers, customers, and suppliers, all of whom may be interested in the business's social and environmental actions, are stakeholders in the context of a business. These individuals are referred to as stakeholders by Freeman (1984). Stakeholders vary in terms of their type and extent of influence on a company's operations. Organizations are thus responsible to these stakeholders and rely on their continual approval to sustain a successful operating environment, according to Roberts (1992). Stakeholder theory focuses on establishing elements that influence a company's ability to continue to exist. According to stakeholder theory, companies require the support and acknowledgment of stakeholders in order to improve their environmental performance. These enterprises must communicate their positions, efforts, and accomplishments in the application of environmental responsibility to their stakeholders (Elijido-Ten, 2004). Firms must consequently increase stakeholder trust, remove misunderstandings about environmental protection, and build relationships with external stakeholders, before disclosing additional environmental data.

2.3 Empirical Review

The impact of the environmental and deconstruction expenses on the performance of the selected Nigerian oil and gas businesses was examined by Jeroh and Okoro (2016). The data on return on assets, environmental, and dismantling costs were collected from annual reports and accounts of selected oil and gas businesses from 2008 to 2015 and evaluated using the ordinary least square method. The study found that environmental and dismantling expenses had a favorable impact on a company's performance. Furthermore, the size of a firm, which is an intervening variable, was found to have a negative and significant impact on a business's performance.

Likewise, Nnamani Onyekwelu and Ugwu (2017) have assessed the financial performance of the list of Nigerian manufacturers as being affected by sustainable accounting. These companies belonged to the sub-sector of brewery. The secondary details were derived from the annual reports and accounts for the total asset, equity revenue, total personal turnover and return on assets of the three breweries listed on the Nigerian Stock Exchange, and were examined by utilizing the commonly less square method of estimate. This study showed that the reporting of sustainability has a favorable and important impact on the financial performance of the breweries under scrutiny.

Agbiogwu, Ihendinihu, and Okafor (2016) also analyzed, using secondary data obtained from 10 randomly selected annual reporting and accounting in 2014, the impacts of environmental and social costs on the performance of Nigerian producer companies, and t-tested statistical tools were employed in analyzing the data. The studies have shown that social and environmental expenses have a major impact on the net profit margin, per share earnings and capital returns employed.

The influence of sustainable accounting on the performance of corporate companies in Nigeria has also been explored by Ezejiofor, Racheal and Chigbo (2016). The former research design was used and the secondary information came from annual reports and accounts. In the assessment of the pertinent studies hypotheses, regression statistical methodology was utilized. Based on the data analyzes, it has been shown that environmental costs do not have a substantial effect on business revenues. There was nevertheless a favorable association. Furthermore, environmental costs impact the profits generated by companies in Nigeria substantially and favorably.

The factor of socio-environmental accounting of the companies listed in Nigeria was investigated by Adekanmi, Adedoyin, and Adewole (2015). The secondary data was obtained in the period between 2005 and 2013 from the 50 companies listed on the Nigerian stock exchange. In analyzing the data, which was accomplished using the common least square estimate technology, descriptive and inferential statistics were used. However, the study showed that the companies' size, profitability and the analysts analysis number of the business were the three main favorable characteristics in Nigerian zooscopic reporting. Furthermore, the socio-environmental performance of socio-environmental reporting by the Nigerian traded businesses showed a substantial adverse effect.

The environmental variables in the oil and gas business in Nigeria have been experimentally examined by Dibia and Onwuchekwa (2015). The research factors were company size, profit, leverage, kind of audit firm and environmental information. A sample of 15 firms in the oil and gas industry was selected. The transversal design was adopted. The Nigerian stock exchange quoted these oil and gas businesses over the period 2008-2013. In the examination of the data, the binary regression methodology was used. The research indicates that the size of the company and corporate socially responsible disclosures have a strong link. No considerable relationship of profit, leverage, audit type and socially-responsible business disclosures have also been considered.

Obara and Nangih (2017) performed another research on the impact of accounting methods on the profitability of Nigerian oil and gas businesses, particularly those in the upstream sector. The particular goals were to see how accounting methods affected the Return on Assets (ROA) and Return on Capital Employed (ROCE) of Nigerian oil and gas companies. The empirical review was driven by the study goals. The researchers utilized a method called Stratified Sampling Design. Oil and gas companies in Nigeria were the target audience. The population yielded a total of 84 responders. The study used both primary and secondary data. Primary data was gathered via questionnaires based on the Likert's Scale, which has five points ranging from very much to none, while secondary data was gathered from previously published sources. SPSS Software and other descriptive statistical tools such as percentages and tables were used to create hypotheses and evaluate data. The study's findings revealed that accounting procedures had a considerable impact on oil and gas company performance, notably Return on Assets and Return on Capital Employed. Oil and gas firms should follow correct and best accounting methods to ensure greater performance on the one hand, and fair, transparent, and dependable financial reporting on the other.

The study by Nwaiwu and Oluka (2018) focused on environmental cost disclosure and oil and gas financial performance in Nigeria. The impact of environmental cost disclosure and financial performance indicators on listed oil and gas firms in Nigeria is investigated in this study. Time series data were acquired from the Central Bank of Nigeria's annual financial reporting and economic review; Pearson product moment coefficient of correlation and multiple linear regression analysis were performed using SPSS version 22. The econometric findings looked at whether proper information on environmental costs and corporate environmental rules have a positive significant influence on financial performance metrics. As a result, the research advocated for regulatory enforcement to ensure sufficient environmental cost disclosure and reporting. Management of Nigerian oil and gas businesses should build a well-articulated environmental costing system to provide a conflict-free corporate environment conducive to better corporate performance.

The influence of environmental and social disclosures on the financial performance of listed oil and gas firms in Nigeria was investigated by Oti and Mbu-Ogar (2018). The ordinary least square regression methodology was used to evaluate five years of time series data. The theoretical framework was based on stakeholder and legitimacy theories, which characterize the relationship between companies and the need for disclosure and financial performance among social/societal strata. The statistical research indicated that while disclosures on employee health and safety and community development had no meaningful impact on financial performance, disclosures on waste management have a favorable and substantial impact. According to the report, oil and gas businesses should examine their waste management strategy on a regular basis and use tailored waste management technologies to reduce their environmental effect. Furthermore, for increased firm value, oil and gas businesses should make employee health and safety a priority in their goal and vision statements. Companies should also assure the long-term development of their host communities to minimize stakeholder antagonism, which would negatively impact operations and, as a result, performance.

3. Data and Methods

This study engaged the *ex-post facto* research design as it analyzed already existing information of financial report of Oando Plc. Therefore, the study made use of already existing financial report of Oando plc (2015-2019). The population of this study shall comprise of all the listed Oil and Gas companies in Nigeria stock exchange in Nigeria as at 31st December 2019. This study sampled and focused on Oando Plc using judgmental sampling techniques. The data for the study were sourced from the financial books of Oando Plc 2015 to 2019. Year 2015 was chosen as a base year because it was third year after the implementation of IFRS in Nigeria and firms are expected to have fully complied with IFRS implantation by this year. The variables adopted for the study includes the environmental cost net income, return on asset, return on capital employed, leverage and firm size. Data were analysed using mean, standard deviation, minimum and maximum values, and the correlation was tested using granger causality test.

3.1 Model specification

The model was stated adapting the studies of Adekanmi, *et al.,* 2015; Agbiogwu, *et al.,* 2016; Ezejiofor, *et al.,* 2016; Jeroh & Okoro 2016; and Onyekwelu & Ugwu 2017) while examining the relationship between environmental cost disclosure and corporate performance. The model is stated thus:

$NI = \alpha_0 + \alpha_1 ENVCit + \alpha_2 FSit + \alpha_3 LEVit + \varepsilon it$ …………………..(i)

$ROA = \alpha_0 + \alpha_1 ENVCit + \alpha_2 FSit + \alpha_3 LEVit + \varepsilon it$……………………(ii)

$ROCE = \alpha_0 + \alpha_1 ENVCit + \alpha_2 FSit + \alpha_3 LEVit + \varepsilon it$……………………(iii)

Where;
FP = financial performance
ENVC = environmental cost
NI = net income
ROA = return on asset
ROCE = return on capital employed
FS = firm size

LEV = leverage
ε = Error term
α_0 = Constants; $\alpha_1 \ldots \alpha_2$ = coefficient

Table 1: Measurement of Variables

VARIABLE NAME	SYMBOL	DEFINITION/PROXY
Environmental Cost	**ENVC**	This is measure by the total cost incurred on the environmental activities of the company
Net income	**NI**	Measure as the profit after tax of the organization
Return on asset	**ROA**	Measure as net income divided by the total asset of the company.
Return on capital employed	**ROCE**	Measure by earnings before interest and tax divided by capital employed.
Firm Size	**FS**	Measure as total asset of the firm
Leverage	**LEV**	Measure as total liability divided by total asset

Source: Author's Compilation (2021)

4. Data Analysis and Discussion of Findings

4.1 Descriptive Statistics

The result of the descriptive analyses of the various series in table 2 shows a considerable level of variability in the behavioral pattern of the series. For environmental accounting which is measured by environmental cost (ENVC), the mean value of 5060 indicates that an average yearly cost on environmental activities is over 5 million naira. Net income (NI) is the profit after tax and interest of the firm. The mean value of 15776 indicates that on the firm make a profit of almost 16 million naira since 2015. The standard deviation of 0.01 of ROA suggests that only minimum data points are lying far away from the mean whereas the mean value of 4% approximately indicates that the total asset contributes to the profitability of the firm. Return on capital employed showed that on average, the capital employed generate 7.3 percent of the employed capital. The standard deviation of 2.18 revealed that majority of the distribution are closed to the mean value. The series of firm size (FS) across the years showed a mean value of 344911 and the Leverage (LEV) reflects that over the past 5 years, the average of ratio of debt to equity is 0.18. This means that the company uses more equity fund than debt fund. However, the Jacque-Berra statistics being greater than 5% accept the normality test for all the variable series.

Table 2: Descriptive Statistics

	ENVC	NI	ROA	ROCE	FS	LEV
Mean	5060.000	15776.00	0.045593	7.300000	344911.2	18.14000
Median	4887.000	16150.00	0.047957	7.900000	346196.0	18.00000
Maximum	5646.000	20840.00	0.060197	9.200000	362597.0	19.70000
Minimum	4670.000	7840.000	0.023735	3.900000	330314.0	16.00000
Std. Dev.	388.2377	5155.156	0.014601	2.182888	12331.65	1.415274
Skewness	0.640355	-0.636483	-0.559320	-0.747795	0.288515	-0.506382
Kurtosis	1.994388	2.153896	1.990056	2.140986	1.998152	2.161339
Jarque-Bera	0.552390	0.486737	0.473196	0.619728	0.278472	0.360217
Probability	0.758665	0.783983	0.789308	0.733547	0.870023	0.835179
Sum	25300.00	78880.00	0.227963	36.50000	1724556.	90.70000
Sum Sq. Dev.	602914.0	1.06E+08	0.000853	19.06000	6.08E+08	8.012000
Observations	5	5	5	5	5	5

Source: Author's Computation 2021

4.2 Correlation Matrix

From table 3, the correlation coefficients of the variables are examined. As observed, a negative and low correlation or insignificant relationship exists between ENVC and the following variables; FS (r = -0.038), NI (r = -.158), ROA (r = 0-.143), and ROCE (r = -.079), but has positive correlations with LEV at r = 0.166. Firm size has a positive and insignificant correlation with financial performance including NI (r = 0.428), ROA (r = 0.351), and ROCE (r = 0.366). in addition, LEV reveal a negative and insignificant or low correlation with NI (r = -0.877). and ROCE (r = -0.860) but a negative and significant relationship with ROA (r = -0.897). The positive coefficient suggests that increases in these variables could be associated with increases in another and vice-versa while the negative coefficient suggest that increases in these variables could be associated with decreases in another and vice-versa. Particularly, we observe that the correlation coefficients between the independent variables are quite low and this suggests that the potential for multicollinearity is reduced in the model.

Table 3: Correlation Matrix

		ENVC	(FS)	(LEV)	(NI)	ROA	ROCE
ENVC	**Pearson Correlation**	1					
	Sig. (2-tailed)						
(FS)	**Pearson Correlation**	-.038	1				
	Sig. (2-tailed)	.952					
(LEV)	**Pearson Correlation**	.166	-.119	1			
	Sig. (2-tailed)	.790	.849				
(NI)	**Pearson Correlation**	-.158	.428	-.877	1		
	Sig. (2-tailed)	.800	.472	.051			
ROA	**Pearson Correlation**	-.143	.351	-.897*	.996**	1	
	Sig. (2-tailed)	.818	.562	.039	.000		
ROCE	**Pearson Correlation**	-.079	.366	-.860	.992**	.995**	1
	Sig. (2-tailed)	.900	.544	.061	.001	.000	

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Author's Computations 2021

4.3 Granger Causality Test

This section is dedicated to the estimation of the Granger causality test in order to obtain the source of any relationship or association that may exist between environmental (green) accounting disclosures and financial performance of Oando Plc among all the variables in our study. ENVC of the Oando Plc was paired with financial performance indicator which is the net income form pairs of hypotheses; the result of the first pair suggests that null hypothesis which proposes that ENVC Granger cause NI will be accepted and we also accept that NI does not Granger cause ENVC. It follows that there is no relationship between ENVC and NI of Oando Plc. The ROA does not exhibit a Granger causal relationship with the ENVC of Oando Plc. And it implies that the relationship which may exist between the ROA and ENVC of Oando Plc may be as a result of another variables or outcome but certainly not any of them, hence we accept null hypothesis in both cases and conclude that there is no causal association between the environmental cost and return on asset of Oando Plc.

The ROCE does not exhibit a Granger causal relationship with the ENVC of Oando Plc. And it implies that the relationship which may exist between the ROCE and ENVC of Oando Plc may be as a result of another variables or outcome but certainly not any of them, hence we accept null hypothesis in both cases and conclude that there is no causal association between the environmental cost and return on capital employed of Oando Plc. Summarily, no Granger association was found between ENVC, LEV and financial performance of Oando Plc while unidirectional causality was found to exist between FS and financial performance of Oando Plc.

Table 4: Ganger Causality Test Results

Null Hypothesis:	Obs	F-Statistic	Prob.
NET_INCOME__NI_ does not Granger Cause ENVC	4	1.67801	0.4185
ENVC does not Granger Cause NET_INCOME__NI_		12.8607	0.1731
ROA does not Granger Cause ENVC	4	1.72574	0.4142
ENVC does not Granger Cause ROA		8.07811	0.2154
ROCE does not Granger Cause ENVC	4	1.29365	0.4591
ENVC does not Granger Cause ROCE		10.4051	0.1914
FIRM_SIZE__FS_ does not Granger Cause ENVC	4	0.90734	0.5155
ENVC does not Granger Cause FIRM_SIZE__FS_		1.03270	0.4949
LEVERAGE__LEV_ does not Granger Cause ENVC	4	25.6355	0.1241
ENVC does not Granger Cause LEVERAGE__LEV_		1.92205	0.3978

Source: Author's Computation 2021

4.4 Discussion of Findings

The first specific objectives of this paper are to examine the relationship between environmental cost and net income of Oando Plc. Finding from the data analysis revealed that that there is no relationship between ENVC and NI of Oando Plc. This finding is in contrast with the study of Jeroh and Okoro (2016) who investigated the impact of the environmental and deconstruction expenses on the performance of the selected Nigerian oil and gas businesses and found that environmental and dismantling expenses had a favorable impact on a company's performance. On contrary, this finding is in line with the study of Adekanmi, Adedoyin, and Adewole (2015) whose study considered the factor of socio-environmental accounting of the companies listed in Nigeria and found that socio-environmental performance of socio-environmental reporting by the Nigerian traded businesses showed a substantial negative effect.

Furthermore, this study investigated the correlation between environmental cost and return on asset (ROA) of Oando Plc. Result showed that there is no causal association between the environmental cost and return on asset of Oando Plc. This result is in disagreement with the findings Nnamani, *et al* (2017) who assessed the financial performance of the list of Nigerian manufacturers as being affected by sustainable accounting and Agbiogwu, *et al*

(2016) who analyzed, using secondary data obtained from 10 randomly selected annual reporting and accounting in 2014, the impacts of environmental and social costs on the performance of Nigerian producer companies. Agbiogwu, *et al* (2016) opined those environmental expenses have a major impact on the net profit margin, per share earnings and capital returns employed while Nnamani Onyekwelu and Ugwu (2017) concluded that the reporting of sustainability has a favorable and important impact on the financial performance of the breweries under scrutiny

Lastly, this study assesses the association between environmental cost and the Return on Capital Employed (ROCE) of Oando Plc. Findings showed that the ROCE does not exhibit a Granger causal relationship with the ENVC of Oando Plc. Meaning that no relationship between Oando Plc environmental cost and ROCE. This finding is in agreement with the study of Adekanmi, Adedoyin, and Adewole (2015) whose study considered the factor of socio-environmental accounting of the companies listed in Nigeria and found that socio-environmental performance of socio-environmental reporting by the Nigerian traded businesses showed a substantial negative effect. Nevertheless, this result failed to be in tandem with the study of Ezejiofor, *et al* (2016) and Oti and Mbu-Ogar (2018) whose findings showed that environmental costs impact the profits generated by companies in Nigeria substantially and favorably.

5. Conclusion And Recommendations

This study investigated Environmental Green Accounting Disclosures and Financial Performance. The study reviewed relevant literatures through conceptualization, theoretical and empirical review. The population of this study comprised of all the listed Oil and Gas companies in Nigeria stock exchange in Nigeria as at 31st December 2019. This study sampled and focused on Oando Plc using judgmental sampling techniques. Therefore, this study sought to examine the relationship between Environmental (Green) Accounting Disclosures and Financial Performance of the Oil and Gas Company: A study of Oando Plc (2014-2019). The choice of variables used in this study is informed by previous empirical studies on this topic. These variables are environmental cost, net income, ROA, ROCE and other control variables like leverage and firm size. The variables were grouped into dependent variable, independent variables and control variables. The secondary data were computed and analyzed both descriptive and inferential statistics. The use of descriptive statistics involves; mean, standard deviation, minimum and maximum values. Also, the study used the correlation and granger cause effect data analysis techniques in testing the listed above variables.

Result from the correlation analysis revealed that there is a negative and insignificant relationship between environmental cost and financial performance of Oando Plc. That is, the correlation test showed that ROA, ROCE and NI exhibit a negative relationship with environmental cost. In addition, the control variable firm size also revealed a negative but insignificant relationship with financial performance of Oando Plc while firm leverage revealed a positive but insignificant relationship with financial performance of Oando Plc proxied by net income, return on asset and return on capital employed. To buttress the finding, the granger causal test revealed that there is no relationship between ENVC and NI of Oando Plc. Also, that there is no causal association between the environmental cost and return on asset of Oando Plc and that the ROCE does not exhibit a Granger causal relationship with the ENVC of Oando Plc.

Based on these findings, this study concluded that there is negative but insignificant relationship between green accounting disclosures and financial performance of Oando Plc. It has been revealed that Oando Plc green accounting disclosure has a negative influence on their performance, nevertheless, this influence is insignificant and very low. Nevertheless, some stakeholders are in dire need of this information to know the contribution of the company to the society. This study therefore recommended that oil and gas firm should overlook the insignificant effect of green accounting disclosure and cultivate the habit to disclosing the environmentally event and activities in their annual report as this will be of great use for some stakeholders. Also, Oando Plc should concentrate on green accounting project that will sustain the corporation ability, promoting the corporation corporate social responsibility and goodwill and in order to help fulfill short-term financial obligations and other payables and this will in return aid in the enhancement of return on capital employed.

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