The Implication of Corporate Social Cost on the Profitability of Oil Marketing Companies in Nigeria.

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Abstract: *The paper investigates the implication of corporate social cost on the profitability of oil marketing companies in Nigeria. Data were sourced from audited accounts and reports of three sampled firms for fifteen years. Panel regression analysis was used in analyzing the data. Furthermore, the stakeholder theory was used to underpin this study.The study reveals that corporate social responsibility has a positive and significant effect on the profitability of firms studied. Based on this finding the study recommends that firms that prioritized returns on their investment should invest heavily in social issues.*

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I. Introduction

Social responsibilities are becoming more important and more difficult to sustain than a few decades ago, as organizations are becoming more important than production equipment. It is no longer enough to invest in new technology and implement effective production processes. It is about who is the best when it comes to economic, social and environmental performance.

Social responsiveness is fundamentally multi-dimensional and embodies a large and varied range of corporate behavior concerning its resources, processes, and outputs. Stakeholders, especially shareholders, require transparency, and efficiency on the part of managers, to obtain economic benefits and thus ensure the continuity of the organization over the long term, whilst demanding that socially responsible policies be integrated into the companies mission and vision statements.

Oil marketing companies are increasingly focused on issues of social responsibility all the while resolving to maximize economic performance to fulfill the yearning of shareholders and act in a socially, economically, and environmentally responsible manner for the benefit of society as a whole.Therefore, it is against this backdrop that this study intended to examine the implication of corporate social cost on the profitability of oil marketing companies in Nigeria.

1.1 Statement of the Problem

The increasing need for non-financial disclosures awareness and the movement for sustainable economic growth is bringing to the attention of firms towards making its operations sustainable and ecological sensitivity (Utile, 2016; Vanstraelen& Chua, 2009). Professionals draw on different images of the environmental component to elaborate the effect of industrial activities, such as the depletion of resources, destruction of biodiversity, and depletion of the ozone layer, global warming, climatic change, pollution and a number of social problems (Abdulsalam, 2017; Nwaiwu&Oluka, 2018; Aert, Cormier &Maynam, 2013; Clarkson, Li, Richardson &Vasvari, 2011; Horvathova, 2010 &Jasch, 2001).

However, there exist mixed results amongst scholars, quite several scholars opined that potential investors are willing to pay a premium for the shares of a company that disclosed its sustainability performance. In a situation where an organization does not act socially and environmentally responsible, resultant costs could become significant and represent a financial burden that may negatively affect the return on investment. In contrast, if companies that adopt sustainability responsible policies are more profitable, then socially responsible investment will provide an incentive for businesses to increase investments in sustainability activities (Para, 2008). Therefore, this study aimed to evaluate the implication of corporate social cost on the profitability of selected quoted oil marketing companies in Nigeria.

1.2 Theoretical Framework

Several theories explaining corporate social responsibility and financial performance were examined to guide this study. However, the suggested theories to support this study include stakeholder theory, The Stewardship theory, The Signaling/Disclosure Theory, The Institutional theory, The Legitimacy Theory, and The Organizational Theory. Worthy to note that, this study was underpinned by the stakeholder theory.

1.2.1 The Stakeholder Theory

This theory postulated that the steering group known as boards of directors and other management teams are responsible not only to the shareholders but to multifarious stakeholders (Prado-Lorenz et al., 2009; Fasan& Mio, 2016). In support of this motion, Freeman, (1984) pointed that, the behavior and activities of the board of directors can affect shareholders, employees, customers, suppliers, government, public, and many others who have a stake in the business.Amran&Haniffa, (2011) affirmed that the stakeholder theory deals with the ever-changing and complex relationship that companies have with their environment as well as the company's ability to balance the contradictory demands by multifaceted stakeholders.

Abdulsalam, (2017) belief that as businesses become aware of the duty of accountability and transparency owed to stakeholders, then economic, environmental, and social issues (sustainability activities) are a result of the pressure from relevant stakeholders calling for proper accountability, transparency and sustainable development, which can protect the interest of the next generation. It suggested that organizations will respond to the concerns and expectations of powerful stakeholders and some of the responses will be in the form of strategic opinions (Berhad, 2016).

Stakeholder theory provides rich insights into the factors that motivate oil companies concerning the disclosure of corporate social responsibility currently known as sustainability performance. Therefore, preference is given to stakeholders based on the resources they command; power to enact and impose laws and regulation; and influence over the media or consumers (Amran&Haniffa, 2011). On the other end, Nwaiwu andOluka, (2018) contend that stakeholder theory attempts to address the group of stakeholders deserving and requiring management's attention(Donaldson & Preston, 1995). Nevertheless, Clarkson, (1995) suggested that the firm is a system, where there are stakeholders and the purpose of the organization is to create wealth for its stakeholders.

II. Literature Review

2.1 Social Responsibility in the Oil and Gas Companies

Socially responsible companies are those that integrate their operational activities, social, ethical and environmental concerns beyond those required by law and whose outcomes may result in an improved quality of life for most corporate stakeholders. Furthermore, social issues are development or growth that is compatible with organizational arrangements that satisfy unlimited human needs and shaped in a way and manner nature and its reproductive capacities are preserved over a long period and the normative chains of social justice, human dignity and participation are fulfilled. These may lead to a higher level of trust among the employees working together in an organization which likely help in achieving may lower operating cost (Natalia, 2017). Social responsibility deals with the relationship between human rights and human development, corporate power and environmental justice, global poverty, and citizen action, responsible global citizenship in an inescapable element of what may at first glance seen to be simply matters of personal consumer or moral choice (Blewitt, 2008).

Whilst socially sustainable organizations are those that add value to the communities within which they operate by increasing the human capital of individual partners as well as furthering the social capital of these communities. They manage social capital in such a way that stakeholders can understand their motivations and can broadly agree with the organization's value system (Laurence, Michael, &Jereme, 2015). Social sustainability requires values, such as ethics, tolerance, compassion, and honesty to upheld (Townsend, 2008) maintenance and replenishment by shared values and equal rights (Asaolu et al., 2011). Social sustainability involves ensuring the political and economic rights of citizens, the rights of the communities in which their sources are located, proper and socially conscious corporate governance structures, labor rights, community culture, sustainable human development.

2.2 Financial Performance

Profitability relates to the measurement of the operating efficiency of the Oil marketing companies. The profitability ratio measures the efficiency of oil marketing companies using their assets to generate net income as well as return on equity which focuses on return to the shareholders of a company. According to Trivedi, (2010) financial performance refers to the ethical act and manner of performing a financial activity in an organization. In a broader sense, financial performance refers to the degree to which financial objectives as stated in the organizational vision and mission statements being or has been accomplished. It is the process of

measuring the results of a firm's policies and operations in monetary terms. It is used to measure a firm's overall financial health and strength over a given period and can also be used to compare similar firms across the same industry or to compare industries or sectors in aggregation (Venkateswara& Rama, 2013).

2.3 Empirical Review

Shafatand Nasir, (2018) conducted a study that investigated corporate social responsibility and financial performance of Indian Banks. The study aims to examine the relationship between corporate social responsibility and financial performance of banks in the Indian context. The study focused on twenty-eight Indian commercial banks listed in Bombay stock exchange (BSE) from 2007 to 2016. The study was supported by stakeholder's theory and content analysis was used to extracted corporate social responsibility information from their annual reports. Factor analysis was equally used to avoid a trade-off between different measures of financial performance. The study suggested that corporate social responsibility exerts a positive impact on the financial performance of Indian banks. The study, therefore, recommended management to integrate corporate social responsibility with the strategic intent of the business and renovate their business philosophy from traditional profit-oriented to socially responsible approach.

Mercedes, (2015) investigated social responsibility and financial performance: the role of good corporate governance. The objective of the study is to investigate the bidirectional relationship between corporate social responsibility and financial performance in the 121 Spanish listed company. The first objective is to determine if financial performance depends on corporate social responsibility and the second objective is to test the inverse relationship, social responsibility depends on financial performance using a corporate social responsibility index or social behavior index. Agency theory, stewardship theory, dependency resource, and stakeholder theory provides the basis for the conceptual model.

Multivariate regression models were used to carry out statistical analysis. The study finds that social investment enhanced profitability and profitability equally increase social investment, thereby forming a virtuous circle. That socially responsible firms are associated with higher returns and higher profits transform into socially responsible policies. Furthermore, the empirical results confirm that the stakeholder theory provides the most solid formation for the complete study. Based on the findings of the study, therefore, recommends management to develop policies that would boost the levels of social behavior components to contribute globally to the improvement of society.

The main conclusion drawn after this extensive review of related literature suggested that there is a positive, negative, or inexistent correlation between corporate social responsibility and financial performance. It further supports the selection of variables as well as proxies of financial performance and corporate social responsibility used in developing panel models. To fill the existing gap the study measured the actual cost expended on social issues that have not been previously measured and taking into cognizance that the sample companies must satisfy corporate social responsibility. Therefore, to achieve these objectives, the following hypothesis was proposed:

H_{01}: social cost does not have any significant effect on Return on Assets of oil marketing companies in Nigeria.

H_{02}: social cost does not exert any significant impact on Return on Equity of oil marketing companies in Nigeria.

H_{03}: social cost does not exert any significant influence on Net profit Margin of oil marketing companies in Nigeria.

To test the hypothesis a longitudinal research design was adopted for this study.The use of longitudinal research design in this study is based on the fact that the data to be collected is subject to time and cross-sectional attributes, secondly, it minimizes the bias that might result from the aggregation of individual units into broad aggregates. This is because data are made available for several units in a panel data set, and thirdly, it helps to take care of heterogeneity in the estimation process because it allows for individual/specific variable assessment.The estimation results would be evaluated based on individual statistical significance test (t-test) and overall statistical significance test (F-test). In this study, descriptive statistics and correlation analysis were conducted to properly describe the nature of the data. To achieve the objectives of this study, three oil marketing company was chosen. The selection of these Companies is based on the firm Size, Firm Age, and the availability of data for the periods 2004 through 2018 financial years.

III. Methodology

3.1 Model Specification

Following the hypotheses earlier stated in chapter one,Panel Data Models showing the functional relationship between the dependent and independent variables are formulated.To carry out the statistical analysis of the econometric software, STATA version 15 which is widely used in empirical research was also used in this study. To estimate a micro panel consisting of 6 firms over 15 years (2004-2018), a panel model is specified as

shown in equation (1). The advantage of a panel model comes with a possibility of controlling for individual or time heterogeneity, which the pure cross-section or pure time-series data cannot accommodate (Baltagi, 2005).

$$y_{it} = \alpha + \beta_1 x_{1it} + \beta_2 x_{2it} + \beta_3 x_{3it} + \beta_4 x_{4it} + u_{it}; \; i = 1, 2, \dots N.; T, , -- (1)$$

Where$i$ represents individual firms 1……..6 at time T. α_0 represent$_s$ the intercept term, $\beta_1 \dots \dots \dots \beta_n$ are the model parameters to be estimated, y represents the dependent variables and stands for sustainability reporting proxy by economic, social, environmental and health costs. $x_1 \dots \dots x_4$ represents performance measures, measured by return on equity (ROE), return on asset (ROA) and Net profit margin (NPM), while Farm size serves as a control variable.

$$SOC_{it} = \alpha + \beta_1 ROA_{it} + \beta_2 ROE_{it} + \beta_3 NPM_{it} + \beta_4 LNASSET_{it} + u_{it}; \; \text{where: } i = 1, 2, \dots N.; T, \dots \dots . (2)$$

Furthermore, to account for the cross-section and time heterogeneity in this model, the study adopts a two-way error component assumption for the disturbances, u_{it}, with

$$u_{it} = \mu_i + \lambda_t + v_{it} \quad --------(3)$$

Where μ_i represents the unobservable individual firm (cross-section) heterogeneity,
λ_t Denotes the unobservable time heterogeneity, and
v_{it} Is the remaining random error term.

Assuming that the μ_i and λ_t are fixed parameters to be estimated and the random error term, v_{it}, is identically and independently distributed with zero mean and constant variance σ_v^2 (homoscedasticity), that is, $v_{it} \sim IID(0, \sigma_v^2)$, then equation (1) gives a fixed-effects model. But if we assumed the μ_i and λ_t are random just like the random error term, then we have random effects.

IV. Findings
Table 4.1: Estimation Results for Social Cost

Dependent Variable: Social Cost				
Independent Variables	Pooled OLS	Fixed Effects	Random Effects	Fixed or Random Effects Model with Robust Error Term
Constant	27.19948	18.47466	17.29881	17.28891
ROA: Coefficient t-value p-value	-.0402139** -2.04 0.044	-.0402139** -2.04 0.044	-.0296716 -1.05 0.295	-.012808[**] -1.74 0.082
ROE: Coefficient t-value p-value	-.0012929 -0,25 0.807	-.0012929 -0,25 0.807	-.0044466 -0.59 0.295	.0985743[**] 2.56 0.010
NPM: Coefficient t-value p-value	0.0269928 0.99 0.326	0.0269928 0.99 0.326	.041558 1.06 0.290	.041558 1.06 0.290
F-Size Coefficient t-value p-value	.8787596 3.18 0.000	.8787596 3.18 0.000	.9779134 2.46 0.014	.3801956 1.70 0.093
Poolability Test	1895.36 (0.0000)			
Heteroskedacity Chi-Sq Test	29.73 (0.0000)			
Langragian Multiplier Test	123.47 (0.0000)			
No. of Observations	90	90	90	90
R^2	0.9977	0.3146	0.3073	0.3073
Adj-R^2	0.9971	0.2639	0.2920	0.2920
F-Statistics	3783.64	9.18		
Prob. (F- Statistics)	0.0000	0.0000	0.0000	0.0000
Rot MSE	0.45732			
Sigma_u	9.5366072		9.5366072	9.5366072
Sigma_e	0.445731701		0.45731701	0.45731701
Rho	0.99977057		0.9977057	0.9977057
Wald Chi^2		20.18		20.18
P-Value (X^2)		0.0005		0.0005
Hausman Chi-Square Test		1.02 (0.9074)		
Autocorrelation Test		0.650 (0.4569)		

Source: Author's Computation from STATA Version 15 Output (*=10% level of significance, **= 5% level of significance, ***= 1% level of significance).

The results of the Pooled Ordinary Least Square (OLS), Fixed Effects and Random Effects estimation models for the panel data for reporting process factors influencing corporate social responsibility for the sample of companies during the period 2004 to 2018 are shown in Table 4.40. A total of 90 observations were included in the analysis. The R-Squared is 0.9977, showing that the pooled OLS model accounts for approximately 100 percent of the variance in social responsibility. To assess the statistical significance of the result from the pooled OLS model, it was necessary to test whether the R in the population equals 0.

The model in this study reaches statistical significance (Sig. equals 0.0000; this implies that p is less than 0.00005). The poolability test validates the reliability and efficiency of the pool OLS model. The appropriateness of the result of the Pool OLS model with specific firm effects was tested by the Poolability test. The null hypothesis of this test is, there is zero firm effect. Therefore a significant F-value indicates the rejection of Pool OLS and prefers a fixed-effects model and/or random-effects model. Due to the inability of pooled OLS to account for within-effects and omitted variable bias, it is necessary to adopt Panel data estimation tools. Panel fixed effects and random-effects models were used to estimate the model for the third hypothesis. The Hausman specification test was used as prescribed in Clark and Linzer (2012). Based on the Hausman test, the Random Effects model result is more reliable than the fixed effects model as the P-value of the test is insignificant (P equals to 0.4569) at the 5% level.

Holding all other variables constant, on average, a one percent increase in Return on assets would result in a 0.013 score increase in social responsibility. Return on Assets is significantly related to social responsibility at the 1 percent level. Holding all other variables constant, companies that adequately engaged on social responsibility have about 0.013 less Return on Asset than their counterparts that do not contribute to social issues. On average, companies that contributed to social issues have about 0.99 increase in Return on Equity than their counterparts that do not incorporate social responsibility. Simply put Return on Equity exerts a positive and statistically significant impact on social responsibility.

Furthermore, firm size shows a positive and statistically significant effect on social issues. This suggested that a 1% increase and/or decrease in the size of the oil and gas firms will result in a proportionate increase or decrease in social activities. Simply put, a 1% increase in firm size will lead to a 0.98% increase in sustainability investment in terms of social issues and vice versa. Correspondingly, the Net profit margin is positive but statistically significant. This suggested that a one percent increase or decrease in net profit would not have any effects whether positive or negative in the social activities of the firms.

The study used Heteroskedacitity and Serial Correlation Test in an attempt to test the validity of results and its appropriateness for policy implementation. Although Baltagi, (2005) argued that cross-sectional dependence is a problem in macro panels with long time series (over 20-30 years) but this is not much of a problem in micro panels with few years (less than 20 years). Notwithstanding, the study still tested for the presence of these problems. Multicollinearity includes checking for correlations between the variables in the model. In case there are presence of Heteroskedacitity, fixed or random-effects models with a robust error term that control the presence of Heteroskedasticiy were further estimated.

Based on the Random Effects model results, this study concludes that corporate social responsibility exerts a significant impact on the financial performance of oil marketing companies in Nigeria. Thus, hypothesis 1, 2, and 3 holds that those companies that provide better social responsibility achieved the best results in terms of ROA, ROE, and Firm Size. This is consistent with the findings of Joshi and Li (2016);Natalia (2017);XiaoHui et al., (2012) and Schneider et al., (2013); Rodriguez-Fernandez (2015); Frynas (2009); Nwaiwu and Oluka (2018);Ortaset al., (2014) and Uwalomwaet al., (2018).

V. Conclusions and Recommendations

Based on the empirical evidence observed in Tables 4.1 the study, therefore, concluded that the higher the investment on social responsibility the greater the profitability and vice versa.This is consistent with extant literature on corporate social responsibility and financial performance. The study, therefore, recommends that if a company prioritizes return on its investment they should invest heavily in corporate social responsibility.

References

[1]. Asaolu, T. O.; Agboola, A. A.; Ayoola, T. J. &Salawu, M. K. (2011). Sustainability reporting in the Nigerian Oil and Gas sector. International Conference Proceedings, Federal University of Agriculture Abeokuta, Nigeria.
[2]. Amran, A. &Haniffa, R. (2011). Evidence in Development of Sustainability Reporting: Case of A Developing Country. Business Strategy and the Environment, **20**: 141-156.
[3]. Aert, Cormier &Maynam, (2013). Inter-industry Imitation in Corporate Environmental Reporting: An International Perspective Journal of Accounting and Public Policy. 25(3), 431-523.
[4]. Abdulsalam, N. K., (2017). Firm characteristics and sustainability reporting of Oil marketing companies in Nigeria. Ph.D. thesis,UsmanuDanfodio University, Sokoto.

[5].   Clarkson, Li, Richardson &Vasvari, (2011). Does it Pay to be Green? Determinants and Consequences of Proactive Environmental Strategies. Journal of Accounting and Public Policy. 8(30)122-144
[6].   Donaldson, L. & Davis, J. H. (1995). Stewardship Theory or Agency Theory: CEO Governance and Shareholder Returns', Australian Journal of Management, 16 (1): 49-65.
[7].   Freeman, R. E. (1984). Strategic management: A stakeholder approach. Boston, MA: Pitman. USA.
[8].   Freeman, R.E. and Gilbert, D.R. (1988). Corporate Strategy and the Search for Ethics, Prentice Hall, Englewood Cliffs, NJ.
[9].   Frynas, Jedrzy, George, (2009). Corporate Social Responsibility in the Oil and Gas Sector. Journal of World Energy Law and Business. 2(3), pp. 178-195.
[10].   Jasch, (2001). Environmental Performance Evaluation and Indicators. Journal of Cleaner Production. 8(4), 79-88.
[11].   Mercedes Rodriquez-Fernandez, (2015). Social Responsibility and Financial Performance: the Role of Good Corporate Governance. Business Research Quarterly. 19.137-529
[12].   Nwaiwu N. J. Oluka N. O. (2018). Environmental Cost Disclosure and Financial Performance of Oil and Gas in Nigeria. International Journal of Advanced Academic Research/Financial Management/ ISSN: 2488-9849. Vol. 4.
[13].   Ortas E., Moneva J. M., Salvador M. (2014). Do Social and Environmental Screens Influence Ethical Portfolio Performances? Evidence from Europe. Bus. Res. Q. 17, 11-21.
[14].   Prado-Lorenzo, J., Gallego-Alvarez, I. & Garcia-Sanchez, I. (2009). Stakeholder Engagement and Corporate Social Responsibility Reporting: The Ownership Structure Effect', Corporate Social Responsibility and Environmental Management, 16 (2): 94-107.
[15].   Rodriquez-Fernandez M. (2015). Company Financial Performance. Does Board Size Matter? Case of the EUROSTOXX50 Index. Cuad. Gest. 15(2). 15-38.
[16].   Schneider, et al., (2011). "An Analysis of Reported Sustainability-Related Efforts in the Petroleum Refining Industry." The Journal of Corporate Citizenship.44-69.
[17].   Schneider, J., Ghettas, S., Merdaci, N., Brown, M., Martyniuk, J., Alshehri, W., and Trojan, A., (2013). "Towards Sustainability in the Oil and Gas Sector: Benchmarking of Environmental, Health, and Safety Efforts," Journal ofEnvironmental Sustainability: Vol. 3: Iss. 3, Article 6. Available at:http://scholarworks.rit.edu/jes/vol3/iss3/6
[18].   Berhad, F. G. V. H. (2016). Empowering sustainable value: Annual integrated report 2015.
[19].   Horváthová, E. (2010). Does environmental performance affect financial performance? A meta-   analysis. Ecological economics, 70(1), 52-59.
[20].   Joshi, S., & Li, Y. (2016). What is corporate sustainability and how do firms practice it? A   management   accounting   research perspective. Journal of Management Accounting   Research, 28(2), 1-11.
[21].   Mio, C., Fasan, M., &Ros, A. (2016). Owners' preferences for CEOs characteristics: did the world change after the global financial crisis?.Corporate Governance: The International Journal   of Business in Society, 16(1), 116-134.
[22].   Ntalia, G. &Inna, S. (2017). Survey of Sustainability Reporting Integrated into Annual Reports of Estonian Companies for the year 2007-2010; Base on Companies Listed on Tallinn Stock Exchange. 2nd Annual International Conference on Accounting and Finance. Procedia Economics and Finance, 2:26-34.
[23].   Uwalomwa U., Obarakpo T., Olubukola R. U, Ozordi E., Osariemen A., Gbenedio A.E., &Oluwagbemi S. T. (2018). Sustainability Reporting and Financial Performance. A Bi-directional Approach. Academy of Strategic Management Journal.
[24].   Utile B.J. (2016). Effect of Sustainability Reporting on Firms Performance: A review of Literature. International Journal of Business and Management. 4(7), 203-208.
[25].   Van Patten, B., Farmer, J. L., &Clardy, C. L. (2009). Processing instruction and meaning-based   output   instruction: A response to Keating and Farley (2008). Hispania, 116-126.
[26].   Berhad Corporate Reports (2016). Pursuing Legitimacy or Managing Reality? http://hdl.handle.net/123456789/270 [Online][Accessed 30 June 2018].