CORRELATE OF ENVIRONMENTAL SUSTAINABILITY DISCLOSURES IN NIGERIA: A PERCEPTUAL APPROACH

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Abstract

The need for environmental sustainability disclosure (ESD) by listed firms in Nigeria has received considerable attention from researchers. Contingency theory suggests that reporting practices of firms are determined by both internal and external factors. However, discussion around what drives sustainability reporting in the first place has been tilted only towards the firm characteristics. In this regard, this study examines whether nine (9) identified industry-level factors could have sufficient explanatory power for ESD in listed non-financial firms in Nigeria. The study employed questionnaire to collect primary data relating to these factors and proxies of sustainability reporting as stipulated in the Global Reporting Initiative Framework. Responses were received from 165 accountants and 157 investors who either work or invest in listed non-financial companies in Nigeria. Logistic regression was used to test the stated hypothesis using E-Views 8 to aid the analysis. Outcome of the study revealed that ESD is significantly determined by the identified industry-level factors. Individually, the statistical evidence provides that pre-empting environmental regulation, occurrence of global environmental events; desire to attract international investors and competition for sustainability reporting awards motivate listed firms towards ESD more than others. Evidence from this study provides support for contingency theory and enriched sustainability reporting literature. The study recommends that managers of listed firms should take cognizance of these contingent industry-level factors while deciding on the level of their ESD as well as when formulating sustainability policy for their companies.

Keywords: Environmental Sustainability Disclosure, Global Reporting Initiative, Contingent factors, Non-financial companies.

1. Introduction

The concept of sustainability is hinged on the notion of distributive justice which aims at ensuring a sustainable future guaranteed by the activities of the present generation (Global Reporting Initiative, 2011). The presence of corporate organisations in an environment is expected to engender symbiotic relationship and ensure the achievement of this sustainable goal. However, this organisation-society interaction has been fraught with a number of unexpected environmental challenges. Among the concomitant environmental effects of companies' activities are the preponderant destruction of ecological essence of the host communities, water, air and noise pollution, dumping of toxic wastes and oil spillage (Owolabi, 2010; Eneh & Agbazue, 2011; Eze, Nweze & Enekwe, 2016). On the global scene, the world has witnessed oil spill in the Gulf of Mexico in 2010 by the British Petroleum, Mayflower and Mississippi oil spillage in 2013 and the Volkswagen environmental scandal in 2015. In Nigeria, sustainable development has also been jeopardized owing to the continuous exploration activities especially in the oil-rich Niger Delta areas which have resulted in negative experiences such as the Exxon Mobil oil spill in 2010 and the incessant youth restiveness (Owolabi, 2010; Donwa, 2011; Eze, *et al*., 2016).

Environmental sustainability issues have become major issue due to the threat they constitute to the ecosystem (Okwuosa & Amaeshi, 2018) and this has brought about the need for companies to expand the scope of responsibility and accounting disclosures (Idowu, Bolarinwa & Yusuf, 2013). An expanded responsibility to disclose efforts of organisations toward placating environmental impact of their operations would influence management attitudes and behaviour, increase transparency, precipitate plausible dialogue between the firms and environment and improve performance (Priyanka, 2013; Dibia & Onwuchekwa, 2015).World-wide, appreciable efforts have been made by different reporting jurisdictions to ensure that corporate organisations disclose outcome of their business operations with significant environmental impact. The Global Reporting Index(GRI) framework has been widely used as a guide to corporate sustainability information disclosure. The Nigerian Stock Exchange (NSE), in July 2018 released its sustainability reporting guidelines for all listed companies in Nigeria. By this, the NSE encouraged all companies to consider and adopt the practice of sustainability reporting (NSE, 2018). Prior to this effort by the NSE, researchers have shown that listed companies in Nigeria had embraced sustainability reporting to a very low extent and this had led to a call for a mandatory sustainability practices by listed companies (Owolabi, 2010; Uwuigbe, 2011; Iredele & Akinlo, 2015).

Consequently, a question arises as to what would have prompted listed firms in Nigeria to reflect outcome of their interactions with the host environment in the annual report without being statutorily required to do so? Understanding such motivations provide insights into why researchers have categorized listed organisations into environmentally responsive and non-responsive companies (Eze, *et al*., 2016) and would reveal the extent to which companies are ready to take responsibility for the outcome of their operations without necessarily being compelled by law.

In the extant literature, researchers have made considerable efforts at identifying factors motivating corporate organisations to disclose environmental sustainability information in their annual reports (Mgbame, 2012; Dibia & Onwuchekwa, 2015) despite the voluntary nature of environmental sustainability information disclosure. For instance, prior studies have evaluated the role of certain firm-specific factors (leverage, profit, industry type and firm size) at determining corporate environmental disclosure (Dibia & Onwuchekwa, 2015). Similarly, study by Okpala, Adeyemi & Ogunleye (2017), considered six firm characteristics such as firm size, financial performance, leverage, board size, industry and foreign affiliation as sources of pressure for disclosure of social and environmental information in Nigeria.

However, as plausible as these prior research efforts are, certain grey areas in relation to environmental sustainability disclosure drivers are yet to be addressed. First, those studies have approached the subject matter using only financial (secondary) data as reported in the firms' annual report through content analysis. As noted by Cochran and Wood (1984), content analysis only reveals what a business concern claimed it is doing, and which may be different from what it is actually doing. Second, leveraging on the contingency theory, both internal (firm-level) and external (industry-level) factors determine what level of information would be disclosed by corporate organisations (Iredele & Akinlo, 2015; Ajibolade & Uwuigbe, 2014). The bulk of prior literature on drivers of sustainability disclosure has been tilted only to discussing firm-level factors as motivators of ESD in listed firms in Nigeria (e.g. Okpala, Adeyemi & Ogunleye, 2017). The present study fills these voids in the literature especially within the context of the contingency theory. This study contributes to environmental sustainability disclosure (ESD) literature through examination of industry-level contingent factors capable of driving sustainability reporting, which at least in Nigerian context, seemed to have received little research attention. Thus, determinants of ESD is evaluated within the purview of the second dimension of the taxonomy of contingent factors (industry-level factors) through primary data gathered from two key stakeholders- investors and accountants.

The study is organised as follow. In the next section, literature on industry-level factors is briefly reviewed and hypothesis of the study developed. This is followed in section three by discussion of the contingency theory which formed the basis of this study and conceptual framework is developed to show linkages between the study's variables. Section four details the research method. The penultimate section is devoted to presentation and discussion of the result while the last section reveals the conclusion and recommendation.

2. Literature Review

2.1 Industry-Level Factors Driving Environmental Sustainability Disclosure

In the extant literature, several industry-level factors capable of driving the environmental information disclosures by managers of business organizations have been alluded to. These include pressure from environmental Non-Governmental Organisations (Guthrie & Parker, 1990; Deegan, 2002; Deegan and Gordon, 1996; Natarajan and Wyrick, 2011), desire to be ahead of environmental regulation, consideration of the risk associated with ignoring environmental sustainability reporting and occurrence of global environmental event (Deegan, 2004),and a belief in environmental accountability or responsibility to reporting environmental issues (Hasnas, 1998). In addition, Deegan (2002) listed compliance with community expectations from the fulfilment by companies of their own side of social contract, satisfaction of international investors' requirements so that companies can attract international funds, while competition among listed companies to win prestigious environmental sustainability reporting awards was also mentioned in Deegan and Carrol (1993) as well as Bansal and Roth (2000) as possible determinants of ESD.

H_0: Industry-level factors do not jointly drive environmental sustainability disclosure in the listed non-financial firms in Nigeria.

2.2 Theoretical Framework

This study is hinged on contingency theory. Contingency theory was propounded by the Australian psychologist, Fred Edward Fiedler in 1964. According to Fiedler (1964), the effectiveness of a leader is inextricably linked to both the personality of the leader and the situation in which the leader operates. Thus, effective performance of a leader is contingent upon both personal attributes (internal) of the leader and situational factors (external) of his environment. From this understanding, Islam and Hu (2012) argued that the theory could be used in studying organisational behaviour where contingent factors influence the design and function of organisations. Therefore, organisational behaviour is a function of both contextual (internal) factors (such as technology and size of an organisation) and environmental (external) factors (such as dimensions of task environment).

Accounting scholars have adopted contingency theory in their different studies. Merchant (1985) applied this theory in describing relationships between corporate contextual factors, such as size of the firm, product diversity, extent of decentralisation and the use of budgetary information. Studies by Hartmann (2000) and Chenhall (2003) have considered the influence of environmental uncertainty on performance of business and found that, environmental uncertainty was a major explanatory variable as to whether accounting data was appropriate in evaluating the performance of business units. In addition, while Ajibolade (2013) had employed the theory in explaining the drivers of choice of management accounting systems designs in manufacturing companies in Nigeria, Iredele and Akinlo (2015) used the theory to explain drivers of environmental management accounting practices in Nigerian and South African firms.

Contingency theory is adopted in this study to explain that the disclosure of environmental sustainability information by listed firms in Nigeria is likely to be motivated by certain external factors, in addition to internal factors. Consequently this study examined industry-level factors that drive environmental sustainability disclosure (ESD) in Nigerian listed firms. Industry-level factorsare viewed as common to all organisations regardless of their industry affiliation.

2.3 Conceptual Model

Industry-level Factors Motivating ESD

Pressure from NGOs, Pre-empting regulation, Risk of ignoring reporting, global environmental events, Economic rationality, Environmental accountability, Community expectations, Attractions of International funds, Winning reporting awards

$\longrightarrow$

Environmental Sustainability Disclosures

Materials, Energy, Water, Biodiversity, Emissions, Effluents, and Waste, Product and Services, Compliance, Transportation, Overall Environmental Protection Expenditures

Figure 1: A Model Depicting the Linkages between Industry-level Factors and ESD
Source: Author (2018)

Figure 1 depicts the conceptual structure of the study. The industry-level factors motivating firms to disclose environmental sustainability information were conceived as being common to all firms. These are expected to drive organisations' readiness to disclose environmental sustainability information. Thus, these factors should exert significant influence on the level of ESD of listed companies in Nigeria.

3. Research Method

In this study, cross-sectional survey research design was adopted. This approach makes it possible to reach large number of respondents and has potential to improve the ability to gather accurate data, decrease bias and increase quality of data generated (Sekaran, 2003; Creswell, 2005).

The population of the study is made up of accountants and investors in non-financial listed companies in Nigeria. Listed non-financial firms are companies not into banking and insurance services and whose mode of operations has significant environmental impact. The respondents were selected from 6 states; 5 from the Niger Delta and Lagos State. These locations were considered as a result of heavy presence of industrial activities which have significant negative environmental impact. The accountants in the employment of these non-financial firms and investors in the equity shares of these companies have no official statistics as at the time of this study.

Consequently, three hundred and twenty-two (322) respondents (165 accountants and 157 investors) completed and returned the research questionnaire yielding a return rate of 89% (51.24% for accountants and 48.76% for investors) out of the total of three hundred and sixty (360 divided into 180 each for accountants and investors) copies of the questionnaire distributed. Equal number of respondents from each group and from each state was chosen because they appear equally important to this study (Ajape & Adeyeye, 2017).

Data were generated using well-structured questionnaire divided into three parts. Part A elicited information on the demographic characteristics of the respondents. Part B was structured on five point Likert type questions ranging from extremely unlikely (1) to extremely likely (5) and relating to nine industry-level factors listed in the literature as potential drivers of Environmental Sustainability Disclosure (ESD) by listed companies. Part C relates to average of the nine ESD categories as contained in the global reporting initiative (GRI) guidelines on ESD and is structured on a dichotomous yes/no question where yes = 1 and no = 0.

The questionnaire was evaluated for face and content validity through review by three academic colleagues, their comments and suggestions were incorporated in the draft copy before the instrument was administered. Both Cronbach's Alpha and co-efficient of internal consistency were employed to ascertain the reliability of the instrument following the suggestion by Saunders, Lewis and Thornhill (2007). Results of the pilot test of the research instrument used for reliability test is as shown in Table 1. Outcomes in Table 1 was based on the responses of 85 prospective accounting postgraduate students who were either accountants or investors.

Table 1: Reliability of Research Instrument

Item	No. of Items	Item-test correlation	Item-rest correlation	Average inter item correlation	Alpha (α)

Industry-level Factors	9	0.6519	0.4747	0.2433	0.6876
ESD	9	0.5794	0.3872	0.2631	0.6818

Source: Computed by Authors, 2018

3.1 Variable Measurement and Model Specification

The variables in this study include the dependent variable (Environmental Sustainability Disclosure) and independent variable (industry-level factors). The dependent variable is represented by nine categories of environmental information required to be disclosed by listed firms as stipulated in the GRI (2011). These are information relating to:

- Material used and recycled;
- Energy consumption and initiatives to produce energy-efficient product to reduce consumption;
- Water: sources, consumption level, volume recycled and reused;
- Description of impact of activities, product or service on the biodiversity;
- Total direct and indirect greenhouse gas emission and initiatives to reduce the emission;
- Initiatives to mitigate environmental impacts of products and services;
- Monetary and non-monetary sanctions for non-compliance with environmental law;
- Significant environmental impacts of transporting products, other goods and materials members of the workforce; and
- Total environmental protection expenditures and investments by type.

The independent variable is represented by the contingent industry-level factors which are: pressure from environmental NGOs (NGO), pre-empting regulation (REG), risk of ignoring sustainability reporting (RIR), occurrence of global environmental events (GEE), economic rationality (ERA), believe in environmental accountability (EAC), fulfilment of social contract (FSC), Desire for international funds (DIF) and competition for reporting awards (CRA).

Expectedly, these factors should exhibit positive relationship with the level of ESD. Thus, the more companies pay attention to these industry-level factors, the more likely it is that environmental sustainability information will be disclosed. This apriori expectation informed the development of the following null hypothesis:

The following functional logistic regression model was developed in order to gauge the relationship between the dependent variable and independent variables of the study.

$$ESD= \alpha_0 + \alpha_1 NGO + \alpha_2 REG + \alpha_3 RIR + \alpha_4 GEE + \alpha_5 ERA + \alpha_6 EAC + \alpha_7 FSC + \alpha_8 DIF + \alpha_9 CRA + u$$

4. Results

4.1 Descriptive Statistics

Outcome of analysis of data in relation to socio-demographic characteristics of the respondents as well as data relating to variables of the study are presented in this section.

Table 2: Socio-Demographic Characteristics of Respondents

Variables	Classification	Accountants	Investors	Total
		Freq. (%)	Freq. (%)	
Gender	Male	100 (60.61)	111(70.70)	211
	Female	65 (39.40)	46(29.30)	111
	Total	**165(100)**	**157(100)**	**322**
Age Bracket	21- 29	55 (33.33)	38 (24.20)	93
	30-40	89 (53.94)	87 (55.41)	176
	Above 40	21 (12.73)	32 (20.38)	53
	Total	**165(100)**	**157(100)**	**322**
Academic Qualification	OND/NCE	3 (1.82)	8(5.1078)	11
	B.Sc./HND	108(65.45)	87(55.41)	195
	M.Sc./MBA/M.Phil	48(29.10)	52(33.12)	100
	Ph.D	6(3.64)	10(6.37)	16
	Total	**165(100)**	**157(100)**	**322**
State	Lagos	28(16.97)	29(18.47)	57
	Akwa Ibom	27(16.36)	25(15.92)	52
	Rivers	28(16.97)	26(16.56)	54
	Delta	26(15.76)	27(17.20)	53
	Imo	28(16.97)	25(15.92)	53
	Abia	28(16.97)	25(15.92)	53
	Total	**165(100)**	**157(100)**	**322**
Industry	Industrials	30(18.18)	31(19.75)	61
	Consumer Goods	39(23.64)	71(45.22)	110
	Oil & Gas	36(21.82)	25(15.92)	61
	Basic Materials	19(11.52)	10(6.37)	29
	Health Care	15(9.10)	11(7.01)	26
	Consumer Services	26(15.76)	9(5.73)	35
	Total	**165(100)**	**157(100)**	**322**

Source: Research Survey, 2018

The demographic characteristics of respondents as presented in Table 1 revealed that majority of the respondents were male for both accountants and investors. In the accountants group, male and female respondents represented 60.61% and 39.40% while in the investors group, 70.70% and 29.30% represented male and female respectively. The age distribution of the respondents in years showed that most of the respondents across the two categories were between 31and 40 years of age. Respectively, 53.94% and 55.41% of accountants and investors respondents were in the age bracket of 31 and 40 years. In addition, While 33.33% of accountants were between 20-30 years

(24.20% for investors), approximately 13% and 20% of accountants and investors aged above 40 years. The highest academic qualification obtained, which is Ph.D, was found among the accountants (3.64%) and investors (6.37%). However, the prevalent academic qualification among the respondents is B.Sc./HND. The accountants recorded the highest Bachelor Degree holders with 65.45% while the investors accounted for 55.41%.

Further, while 23.64% and 45.22% of the respondents either work as accountant or invest in Consumer Goods companies; approximately 19% either work with or invest in Oil & Gas and Industrial goods companies. In addition, while only 9.10% of the accountants work with health care companies; 5.73% of the respondents invest in Consumer Services companies. In total, only 8.10% of the respondents either work or have investment in Health Care sub-sector. In addition, highest return rate of the questionnaire was from Lagos State, followed by Rivers State and lowest return was from Akwa Ibom State. The descriptive statistics show the appropriateness of the sample to provide relevant information on matters of environmental sustainability raised in the questionnaire and this means that reliance could be placed on the information provided by the respondents.

Table 3:Industry-level factors of environmental sustainability information disclosure

	Accountants		**Investors**	
Practices	Mean rating	F	Mean rating	F
Pressure from NGO	4.00^{b}	1.655	3.88^{b}	0.629
Pre-empting of regulation	3.59^{a}	4.527**	3.67^{b}	2.326
Risk of ignoring reporting	3.67^{a}	3.053**	3.59^{c}	2.169
Global Environmental Events	4.04^{c}	5.048**	3.68^{a}	3.243**
Economic benefits	3.78^{a}	4.838**	3.76^{c}	1.716
Believe in accountability	3.63^{b}	1.359	3.71^{a}	5.943**
Fulfillment of social contract	3.63^{a}	5.139**	3.59^{a}	4.317**
Desire for international funds	3.67^{a}	2.209**	3.61^{a}	4.178**
Competition for reporting awards	3.81^{b}	1.101	3.53^{a}	2.561**

Source: Research Survey, 2018

****, significant at 5%**

$^{a, b, c}$: Means within each row with different superscript are significantly different from zero ($p < 0.05$)

The descriptive statistics in Table 3 from the accountants' view revealed that six factors including pre-emption of environmental regulation, the risk associated with ignoring environmental sustainability reporting, occurrence of global environmental events, consideration of benefits derivable from environmental sustainability reporting, fulfillment of own side of social contract and desire of listed firms to attract international funds have approximate mean value of 4.00 and significant F-statistics ($p < 0.05$). This indicates that accountants in listed firms in Nigeria considered the six factors to drive ESD disclosure in their various organisations. Meanwhile, only five of those factors including the occurrence of global environmental events, organisational believe in environmental accountability, fulfilment of own side of social contract, desire to attract international funds and competition for reporting awards have approximate mean value of 4.00 and significant F-statistics ($p < 0.05$) in relation to the investors view. Obviously, the investors' opinions seemed to be in tandem with accountants' on such factors as pressure from environmental NGOs, fulfillment of own side of social contract by firms and desire for international funds as possible motivators for listed organisations to disclose sustainability matters. However, the respondent groups differ on the level at which competition among listed firms for sustainability reporting awards, a belief in environmental accountability, consideration of economic benefits, risk of ignoring sustainability, occurrence global environmental events and the desire to be ahead of environmental regulation would drive sustainability disclosure.

Among factors with non-significant F-value, accountants considered pressure from environmental NGOs (Mean = 4.00), competition for sustainability reporting awards (Mean = 3.81) and believe in accountability or responsibility for sustainability reporting as more likely to driving environmental sustainability disclosures. Meanwhile, the investors considered pressure from NGO (Mean = 3.88) and consideration of economic benefits (Mean = 3.76) as other likely factors to drive ESD. The results suggest that listed firms in Nigeria do not just venture into ESD without some underlying factors.

4.2: Regression Results of the Effect of Industry-level Factors on ESD

In order to determine the level of the impact of all or some of these factors exerted on the measure of ESD, logistic regression model was developed and evaluated. The diagnostics of the model revealed log likelihood of -177.326. This suggests that the model is appropriate and could be used to gauge the effect of the generic factors on ESD. Also, the value of the logistic regression chi-square is significant (LR $\chi^2(9) = 48.49$, $P < 0.005$). This implies that the combined effect of the nine factors exerted significant influence on the disclosure of environmental sustainability information.

However, only four (4) out of the nine (9) identified generic factors were individually significant (at 5% level) to drive ESD. These are pre-emption of environmental regulation ($\beta = 0.598$, $z = 2.56$, $p < 0.05$), the occurrence of global environmental events ($\beta = 0.598$, $z = 1.97$, $p < 0.05$), desire to attract international funds ($\beta = 0.420$, $z = 2.13$, $p <0.05$) and competition among companies for sustainability reporting awards ($\beta = 0.436$, $z = 2.35$, $p < 0.05$).

The result shows that listed firms do not wait until they are caught up by environmental regulation before indulging in sustainability matters. Also, the occurrence of global environmental events would have higher probability of propelling ESD of firms. Increase in firms desire to attract international funds is also found to have higher effect on corporate sustainability disclosure. This is, perhaps, to satisfy international investors' requirements. Similarly, competition to win prestigious environmental sustainability reporting awards is found to have positive effect on ESD in Nigeria.

Table 4: Effect of industry-level factors on environmental Sustainability disclosure

	Coeff.	Std. Err.	z	P>|z|
Pressure from environmental NGOs	-0.009	0.172	-0.06	0.955
Pre-empting of regulation	0.598	0.234	2.56	0.010**
Risk of ignoring reporting	-0.027	0.198	-0.14	0.892
Global Environmental events	0.337	0.171	1.97	0.049**
Economic benefits	0.769	0.219	0.35	0.725
Believe in accountability	0.325	0.192	1.69	0.091
Fulfillment of social contract	-0.220	0.210	-1.05	0.294
Desire for funds	0.420	0.197	2.13	0.033**
Competition for reporting awards	0.436	0.185	2.35	0.019**
Log likelihood = -177.326				
LR $\chi^2(9)$ = 48.49				
Prob>χ^2 = 0.0000				

Source: Research Survey, 2018.
**** significant at 5% level**

5. Discussion

In this study, nine (9) issues considered as industry-level factors which are likely to drive environmental sustainability disclosure of listed firms in Nigeria were subjected to empirical analysis. Outcome of the study suggests that the identified factors, on aggregate, have significant effect on ESD in non financial listed companies in Nigeria (LR $\chi^2 = 48.49$, $p< 0.05$). Based on the results on table 4, the null hypothesis could not be sustained. On an individual basis, the study revealed that the desire by listed firms to jostle for sustainability awards, consistent with Bansal and Roth (2000), provided the necessary impetus to disclose sustainability information. Further, in congruent with study by CERES (2002); Rahaman *et al*. (2004) and , this study found that desire to attract international funds, occurrence of global environmental events and the need to be ahead of (pre-empting) environmental regulation by listed companies most likely drive ESD in the listed companies in Nigeria. However, the study could not establish that pressure from environmental NGOs, the risk associated with ignoring ESD, consideration of economic benefits derivable from sustainability reporting, believe in accountability to report environmental issues and compliance with expectations of local community (fulfillment of social contract) motivate companies to disclose environmental sustainability information. This is contrary to findings in some extant literature such as Guthrie and Parker (1990); Bansal and Roth (2000);Belal and Owen (2007); Islam and Deegan (2008).

6. Conclusion and Recommendation

The study concludes that, in aggregate, industry-level (generic) factors significantly drive ESD in the Nigerian non-financial listed firms. However, among the identified nine (9) factors, the desire of firms to be ahead of environmental regulation, occurrence of global environmental events, desire to attract international funds and competition to win sustainability reporting awards significantly influence ESD. Thus, the outcome of this study provides empirical support for the industry-level contingent factors as drivers of ESD in the listed firms in Nigeria. The study recommends that managers of listed firms should take cognizance of these contingent industry-level factors while deciding on the level of their ESD as well as when formulating sustainability policy for their companies.

References

Ajape, K. M., & Adeyeye, G. B. (2017). Stakeholders' perceptions on value added tax practice in Nigeria. *UNILAG Journal of Business, 3*(3),186-209.

Ajibolade, S. O., & Uwuigbe, U. (2014). Corporate governance practices and corporate social/environmental disclosure in listed firms in Nigeria. *Global Journal of Accounting, 4*(1), 28-40.

Ajibolade, S. O. (2013). Drivers of choice of management accounting system designs in manufacturing companies in Nigeria. *Global Journal of Accounting, 3*(1), 132-149.

Bansal, P., & Roth, K. (2000). Why companies go green: A model of ecological responsiveness. *The Academy of Management Journal, 43*(4), 717-736.

Belal, A. R., & Owen, D. (2007). The views of corporate managers on the current state of, and future prospects for, social reporting in Bangladesh: An engagement based study. *Accounting, Auditing & Accountability Journal, 20*(3), 472-494.

Chenhall, R. H. (2003). Management control systems design within its organizational context: Findings from contingency-based research and directions for the future. *Accounting Organization and Society*, *28*(2/3): 127-168.

Coalition for Environmentally Responsible Economies (CERES 2002). Corporate Social Responsibility Profile of Ceres, CERES Conference 2002, April 17-19, Washington, U.S. http://www.csrwire.com/members/12463-Ceres.

Cochran, P. L., & Wood, R. A. (1984). Corporate social responsibility and financial performance. *Academy of Management, 27*(1), 42-56.

Connors, E., & Gao, L. S. (2009). The impact of environmental risk on the cost of equity capital. Working paper presented at the Financial Management Association 2009 Annual Meeting.

Creswell, J. W. (2005). *Educational research: Planning, conducting and evaluating quantitative and qualitative research (2nd ed.)*.New Jersey: Pearson Education.

Deegan, C., & Carroll, G. (1993). An analysis of incentives for Australian firms to apply for reporting excellence awards. *Accounting and Business Research*, *23*(91), 219-227.

Deegan, C., & Gordon, B. (1996). A study of the environmental disclosure practices of Australian corporations. *Accounting and Business Research*, *26*(3), 187-199.

Deegan, C. (2002). The legitimizing effect of social and environmental disclosures-a theoretical foundation. *Accounting, Auditing & Accountability Journal*, *15*(3), 282-311.

Deegan, C. (2004). Environmental disclosures and share prices-A discussion about efforts to study this relationship. *Accounting Forum*, 87-97.

Deegan, C., & Rankin, M. (1997).The materiality of environmental information to users of accounting reports. *Accounting, Auditing and Accountability Journal, 10*(4), 562–583.

Dibia, N. O., & Onwuchekwa, J. C. (2015). Determinants of environmental disclosures in Nigeria: A case study of oil and gas companies. *International Journal of Finance and Accounting*, *4*(3), 145-152.

Donwa, P. (2011). Environmental accounting and host community agitation in Nigeria: The petroleum industry experience. *International Review of Business Research Papers, 7*(5), 98-108.

Eneh, O. C., & Agbazue, V. C. (2011). Protection of Nigeria's environment: A critical policy review. *Journal of Environmental Science and Technology*, *4*(5), 490-497.

Eze, J. C., Nweze, A. U., & Enekwe, C. I. (2016). The effects of environmental accounting on a developing nation: Nigerian experience. *European Journal of Accounting, Auditing and Finance Research,4*(1), 17-27.

Fiedler, F. E. (1964). A contingency model of leadership effectiveness. *Advanced Experimental Social Psychology*, *1*, 149-190.

Global Reporting Initiative (GRI) (2011). *Sustainability reporting guidelines*, accessed on 26/11/2017 from https://www.globalreporting.org/resourcelibrary/GRI-Sustainability-Report-2010-2011.pdf.

Guthrie, J., & Parker, L. D. (1990). Corporate social disclosure practice: A comparative international analysis. *Advances in Public Interest Accounting*, *3*, 159-175.

Hartmann, F. G. H. (2000). The appropriateness of RAPM: Toward the further development of theory. *Accounting Organization and Society*, *25*(4/5): 451-482.

Hasnas, J. (1998). The normative theories of business ethics. *Business Ethics Quarterly*, *8*(1), 19-42.

Idowu, K. A., Bolarinwa, S. A., & Yusuf, B. R. (2013). Environmental accounting practices for sustainable development in Nigeria. *Global Journal of Accounting*, *3*(1), 42-59.

Iredele, O. O., & Akinlo, O. O. (2015). Environmental disclosure in the annual reports of quoted companies in Nigeria. *PPCSS International Journal Series*, *2*(1), 269-282.

Islam, J., & Hu, H. (2012).A review of literature on contingency theory in managerial accounting. *African Journal of Business Management*, *6*(15), 5159-5164.

Islam, M. A., & Deegan, C. (2008). Motivations for an organisation within a developing country to report social responsibility information: Evidence from Bangladesh. *Accounting, Auditing & Accountability Journal*, *21*(6), 850-874.

Merchant, K. A. (1985).Budgeting and the propensity to create budgetary slack. *Accounting Organization and Society*, 10(2): 201-210.

Mgbame, C. O. (2012). Environmental accounting audit in selected companies in Nigeria (Unpublished Ph.D. thesis submitted to the University of Benin).

Natarajan, G. S., & Wyrick, D. A. (2011). Framework for implementing sustainable practices in SMEs in the United States, *Proceedings of the World Congress on Engineering 2011*Vol I WCE 2011, July 6 - 8, 2011, London, U.K. Available online: http://www.iaeng.org/publication/WCE2011/WCE2011_pp750-754.pdf. Accessed on 20/10/2018.

Nigeria Stock Exchange (NSE, 2018). Sustainability disclosure guidelines. Accessed from http://www.nse.com.ng/regulationsite/IssuersRules/Sustainability%20Disclosure%20Guidelines.pdf on 20/03/2019.

Okpala, O. P., Adeyemi, S. B., & Ogunleye, O. J. (2017). Determinants of corporate social and environmental disclosure of listed firms in Nigeria. *UNILAG Journal of Business*, *3*(2), 186-205.

Okwuosa, I., & Amaeshi, K. (2018). Sustainability reporting and the professional accountant in Nigeria. Accessed on 18/10/2018 from www.icanig.ng.

Owolabi, A. (2010). *Environmental disclosures in annual reports: The Nigerian perspective*. A paper presented at the 1st Italian CSEAR Conference on Social and Environmental Accounting Research, Rimini, Italy, September 17-19, 2008.

Priyanka, A. (2013). Impact of sustainability performance of company on its financial performance: A study of listed Indian companies. *Global Journal of Management and Business Research*, *13*(11), 60-70.

Rahaman, A. S., Lawrence, S., & Roper, J. (2004). Social and environmental reporting at the VRA: institutionalised legitimacy or legitimation crisis? *Critical Perspectives on Accounting*, *15*(1), 35-56.

Rahim, A. G. (2017). Determinants of perceived usability of mobile phones in Nigeria. UNILAG Journal of Business, *3*(2), 112-129.

Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research methods for business students (4th ed.)*. England: Pearson Education Limited.

Schneider, T. E. (2010). Is environmental performance a determinant of bond pricing? Evidence from the U.S. pulp and paper and chemical industries. *Contemporary Accounting Research*, *28*(5), 1537-1561.

Sekaran, U. (2003). Research methods for business: A skill building approach (4th ed.). New York: John Wiley and Sons, Inc.

Sharfman, M., & Fernando, C. (2008). Environmental risk management and the cost of capital. *Strategic Management Journal* 29, 569-592.

Uwuigbe, U. (2011). *Corporate environmental reporting practices: A comparative study of Nigerian and South African firms*. Ph.D. thesis submitted to Covenant University.