

FIRM'S SPECIFIC ATTRIBUTES AND VOLUNTARY ENVIRONMENTAL DISCLOSURE IN NIGERIA: EVIDENCE FROM LISTED MANUFACTURING COMPANIES

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This paper sought to examine the association between firm's specific attributes (firm size, earnings, leverage and governance) and voluntary environmental disclosure with evidence from listed manufacturing companies in Nigeria. To achieve this, data of firm size, earnings, leverage and governance were obtained from the annual reports and accounts of some selected manufacturing companies during 2011-2015. Data collected were analyzed using both descriptive and inferential statistics. First, it was revealed that some of the studied manufacturing companies have high leverage profile while some with low leverage profile. In addition, some companies' environmental items were not disclosed in their annual reports and accounts while some were disclosed and described in monetary terms. Second, the normality test for the residuals showed that the hypothesis that the residuals are normally distributed is rejected. Thus, we conducted a robust regression analysis in order to resolve the non-normality nature of the variables and error term in our model. Third, the robust regression result validates all the hypothesis of the study that there is a positive relationship between environmental disclosure, firm size, leverage, earnings per share and governance of the studied manufacturing companies in Nigeria. On the basis of the above, it was recommended among others that governance structure of companies should be reinforced by assigning more independent directors in the board composition.

Keywords: Voluntary Environmental Disclosure, Firm-Specific Attributes, Total Assets Earnings per Share, Manufacturing Firms.

INTRODUCTION

The past years have witnessed an upsurge in the demand for companies to be socially responsible and environmentally sensitive. Perhaps, the consistent and growing demands by stakeholders have provoked companies to invest heavily on environmental costs. In the past, environmental issues usually get lesser attention and minimal importance; however this can no longer be sustained, as the subject has attracted both national and global attention. One approach to evaluating company's environmental footprint is to examine if they engage in environmental disclosure. Examples of such voluntary environmental disclosures by companies as noted by Jeroh & Okoro (2016) include information regarding expenses on community involvement, environmental protection, waste management, employee health and safety, product safety, research and development and a host of others. Presently, the new order in corporate reporting enjoins businesses to incorporate environmental responsibility in its reporting of profitability. This consciousness has "led to increased awareness on corporate social responsibility whereby the success of an organization is measured not only by its financial performance but also by its social and environmental impact" (Davies & Okorite, 2007).

According to Deegan and Rankin (1996), corporate environmental reporting refers to the way and manner by which a company communicates the environmental effects of its activities to particular interest groups within society and to the society at large. Environmental reporting as a public relations vehicle adopted by the reporting entity designed to offer reassurance in order to help create a good image (Deegan & Rankin, 1999; Elkington, 1997). Hooghiemstra (2000) argues that companies use environmental report as a communication instrument. The main aim of this instrument is to influence people's perceptions of the company and influence corporate image or reputation. In broad terms, environment reporting is the production of narrative and numerical information of an organisation's environmental impacts or footprints for a particular accounting period (ACCA 2013).

Environmental reporting or disclosure has grown in recent years, although voluntary in most countries including Nigeria. Therefore research concern (Hackson & Milne, 1996; Schneider, 2010; Mgbame, 2012; Dibia, 2015) has been to explain the determinants of voluntary disclosure. However, the research results has been inconsistent and remained unresolved, thereby defining the motivation and significance for this study. The purpose of this study therefore is to evaluate firms' specific attributes and voluntary environmental disclosure of manufacturing companies in Nigeria. It was hypothesized that firm's specific attributes proxied by firm size, corporate governance, profitability and leverage has no significant impact on voluntary environmental disclosure.

EMPIRICAL DISCOURSE

The relationship between firm's specific attributes and voluntary environmental disclosure has been investigated in prior studies using various proxies of the firm specific attributes (Hackson & Milne, 1996; Cormier & Gordon, 2001; Magness, 2006; Dibia, 2015). On the relationship between profitability and voluntary environmental disclosure, mixed results were found to exist. Ahmad et al. (2013); Cormier et al. (2005); Ten (2009); Dibia (2015) found that profitability was not significant in explaining the extent of environmental disclosure. On the other hand, Christensen and Hughes (2004); Smith, Khadijah and Ahmad (2007) attest to the contrary. Following the inconsistent results, this study again evaluated this relationship.

First, leverage has been one of the commonly employed firm's characteristics for corporate environmental disclosure (Hannifa & Cooke, 2015; Bouten et al., 2012; Cormier & Magnan, 2003; Ahmad, et al., 2003). From a legitimacy theory perspective studies such as Ahmad et al. (2003) Maliah et al. (2014); Roberts (1992); Naser et al. (2006) has demonstrated a positive association between environmental disclosure and leverage. Nevertheless other studies such as Brammer and Pavelin (2006); Mejda and Hakim (2013); Toluwa et al. (2016) reported a negative relationship. Given the inconsistent empirical findings, this study re-examined the association between leverage and environmental quality.

Second, Donovan (2002) argued that managerial intentions of using legitimization strategies can vary among industries. In environmental sensitive industries, firms are subjected to greater public exposure, thus management might elect to maintain, gain or repair legitimacy through public disclosure (Hu, 2009). However, management may adopt accounting policies that suit their personal benefit (Yuan, 2007). Prior studies (Yuan, 2007; Nie, 2009) used ratio of independent directors over the total number of directors to measure management role. Accordingly, this study assumes that the higher the management role, the more likely company would issue environmental and social disclosure.

THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

Over the years, a number of theories, models and definitions have been widely used to investigate the association between firm's specific attributes and voluntary environmental disclosure. These include informational asymmetry theory (Healy & Palepu, 2001); stakeholders' theory (Jensen, 2004); legitimacy theory (Villiers & Staden, 2006) and a host of others. Prior evidence on legitimacy theory predicts that companies will do whatever they regard as necessary to preserve the image of a legitimate business in a society (Villiers & Staden, 2006). Legitimacy theory has become one of the most widely used theories within the social and environmental context.

Legitimization is the process by which firms align a convergence between its values and values shared by the society in general, this the firm does to seek societal approval or avoid penalty. Deegan (2002) opines that organizations continually seek to ensure that their activities are perceived by external parties as legitimate. Larger corporations disclosing environmental performance may articulate their resolve and commitment to be more environmentally sensitive. Given this, managers of such large companies should be provoked to provide better quality environmental disclosure (Latridis, 2013). On the basis of the above proposition, the hypothesis below was developed.

H₁: There is a positive relationship between environmental disclosure and firm size.

On the leverage attribute, legitimacy theory predicts that companies may use public disclosure to convey information to stakeholders (Magness, 2006), especially those pertaining to environmental impacts. In the context of this paper, leverage is defined as the ratio of debt to equity. It shows management decision on an optimum mix of financing options. Generally, companies with higher leverage are seen to be more risky due to their fixed interest capital. Thus high leverage companies that fail to show that they are environmentally sensitive are likely to have their survival threatened. For instance, Jensen (1986) and Myers (1977) believed that high levered companies tend not to have incentives to invest sub-optimally in order to maximize wealth and this perhaps may make them environmental insensitive. On the basis of the above proposition, the hypothesis below was developed:

H₂: The quality of environmental disclosure is positively related with high leveraged companies.

The association between economic prosperity and the extent of environmental disclosure has been thoroughly examined in literature. For instance, where firms with higher economic prosperity are more likely to have a more established environmental disclosure, legitimacy theory suggests a binding contractual relationship between firm and the society, for which the going concern is threatened for compliance breaches (Deegan, 2012). Therefore, higher profitability firms are more likely to disclose voluntary environmental information. On the basis of the above proposition, the hypothesis below was developed:

H₃: The extent of voluntary environmental disclosure is positively related to economic prosperity.

Hu (2009) posits that companies are subjected to public scrutiny, thus management might elect to maintain, gain or repair legitimacy by public disclosure from legitimacy theory perspective (Deegan, 2009). Hence management may apply accounting policies that suit their personal gains (Yuan, 2007). Cadbury (1992) defined corporate governance as a system via

which firms are guided and controlled. It is seen as actual demarcation of rights and responsibilities of each group of stakeholders within the company. The assumption of this paper is that the higher the governance structure, the more likely a firm would disclose environmental information (Li, 2006; Yuan, 2007). Hence the following hypothesis will be tested to determine the nexus between corporate governance and the extent of voluntary environmental disclosure.

H4: The extent of voluntary environmental disclosure is positively related governance.

RESEARCH METHOD AND MODEL SPECIFICATION

According to Kazdin (1992, 2003a), research design refers to the plan used to examine question of interest. It is the blue print that guides the researcher in the research process. This study adopted a longitudinal survey research design; a type of non-experimental research design. A sample of 10 companies from the manufacturing sector was selected. Secondary data were employed for the study from the financial statements during 2011-2015 and content analysis was utilized in extracting data for the dependent variable (environmental disclosure). In order to test the hypotheses, the model employed by Onwumere (2009) and Argyrous (2005) was utilized.

$$Y = b_0 + b_1x_1 + b_2 x_2 + b_3 x_3 + b_4 x_4 + E..... (1)$$

Where: Y=Extent of Environmental Disclosure

X₁=Economic Prosperity proxied by Earnings per Share (EPS)

X₂=Size proxied by Log of Total Asset

X₃=Leverage (High Leverage Profile are assigned "1" otherwise "0")

X₄=Governance (1 is assigned if no of independent directors are more otherwise 0)

Furthermore, in evaluating environmental disclosure of firms, numerous studies (Melda & Hakim, 2013; Junru, 2013; Toluwa et al. 2016; Ten, 2009; Mgbame, 2012) have employed the disclosure index to measure the extent of environmental disclosure. This approach is preferred to counting of sentences employed by other studies (Buhr & Freedman, 2001; Wiseman, 1982). In order to objectively measure and allow for comparison across different firms, the disclosure index was developed. To be consistent with other research approaches, the Global Reporting Index (GRI) was adopted in this study. Prior researchers have employed the disclosure index to measure the extent of environmental disclosure (Melda & Hakim, 2013; Junru, 2013; Mgbame, 2012). This approach is preferred to counting of sentences employed by other studies (Buhr & Freedman, 2001; Wiseman, 1982). This approach (counting of sentence) was employed in order to objectively measure and allow for comparison across firms. For the scoring system, a score of 3 is given if a particular item is disclosed and described in monetary terms, 2 is assigned to disclose items with specific information but not in quantitative terms, 1 is given for items mentioned in general terms only and 0 is given, if the item was not disclosed. The inferential statistical analysis was conducted via STATA 13.0.

RESULTS AND DISCUSSION

The results of the study are presented in Tables 1-4 in order of precedence: Descriptive statistics (average/dispersion of variables), variance inflator factor (to ascertain the presence/absence of multi-collinearity among variables), normality tests (to test if residuals are normally distributed) and robust regression (to resolve non-normality nature of the variables).

Variable	Obs	Mean	Std. Dev.	Min	Max
eps	50	68.6022	135.0062	-121.2	744.5
Logta	50	6.5574	1.147216	0	7.85
levdum	50	0.64	0.4848732	0	1
govdum	50	0.6	0.4948717	0	1
edi	50	2.56	0.6114553	0	3

Source: Researcher's Computation via STATA 13.0

Table 1 describes the measure of central tendency and dispersion of the variables (Environmental Disclosure: EDI; Earnings per Share: EPS; Total Assets: TA; Leverage: LEV; and Governance: GOV). The highest mean was recorded by EPS with value 68.6022kobo while the highest standard deviation was recorded by EPS (135.0062). Also, the minimum and maximum values for EPS is -121.2 and 744.5, TA 0 and 7.85, LEV and GOV 0 and 1 respectively while EDI 0 and 3 respectively. The 0 and 1 values for LEV and GOV implies that some of the studied manufacturing companies have high leverage profile (1) while some with low leverage profile (0). Also, the minimum EDI (0) suggests that some companies' environmental items were not disclosed in their annual reports and accounts while maximum EDI (3) revealed that environmental items of some companies were disclosed and described in monetary terms.

Variable	VIF	1/VIF
gavdnm	1.67	0.600165
levdnm	1.65	0.607616
logta	1.07	0.936003
eps	1.07	0.936547
Mean VIF	1.36	

Source: Researcher's Computation via STATA 13.0

The mean VIF for all the variables did not exceed the standardized VIF level ($1.36 < 10.0$), suggesting that there is the absence of multi-collinearity among the variables (Table 2).

Variable	Obs	Pr (Skewness)	Pr (kurtosis)	Adj chi ² (2)	Prob>chi ²
edi	50	0.0000	0.0000	38.56	0.0000
eps	50	0.0000	0.0000	49.50	0.0000
logta	50	0.0744	0.0000	73.47	0.0000
levdnm	50	0.2006	0.0000	00.00	0.0000
gavdnm	50	0.0001	0.0011	19.85	0.0000

Table 3 showed the normality test for the residuals if they are normally distributed. Based on the probability of the skewness and kurtosis, it revealed that the residuals are not normally distributed. On the basis of the above results, we conducted a robust regression analysis in order to resolve the non-normality nature of the variables and error term in our model. It was based on the robust regression outcome that the relevant hypotheses of the study were tested.

Table 4						
ROBUST REGRESSION RESULT OF THE MODEL						
Linear regression					Number of obs=50 F(4,45)=3.63 Prob>F=0.0120 R-squared=0.1875 Root MSE=1.0623	
edi	Coef.	Robust Std. Err.	t	P> t 	(95% Conf. Interval)	
eps	0.0010532	0.0008627	1.22	0.229	-0.0006844	0.007909
logta	0.1514402	0.10878117	1.39	0.171	-0.0676553	0.3705358
levdnm	0.3723882	0.4045548	0.92	0.362	-0.442427	1.187203
gavdnm	1.123629	0.39614114	2.84	0.007	0.325761	1.921496
_cons	-0.4778149	0.9318079	-0.51	0.611	-2.354572	1.398943

Source: Researcher's Computation via STATA 13.0

From the evaluation of the robust regression result, we find that R^2 is 0.1875 which suggests 18.75% explanatory ability of the estimation for the systematic variation in the dependent variable with an unadjusted value of 81.25%. An evaluation of the coefficients of the explanatory variables revealed the existence of positive relationship between EPS (.0010532), TA (.1514402), LEV (.3723882), GOV (1.123629) and EDI. This implies that all the independent variables (EPS, TA, LEV & GOV) are positively influenced positively by EDI. However, the relationship is statistically significant at 5% level ($p=0.007<0.05$) for GOV and contrary for EPS ($p=0.229>0.05$), TA ($p=0.171>0.05$) and LEV ($p=0.362>0.05$). The result above is further supported by the computed t-values for GOV (2.84) which is greater than t-tabulated (1.676) suggesting that GOV is the major determinants of EDI. Also, EPS (1.22), TA (1.39) and LEV (0.92) which is lesser than t-tabulated (1.676) suggesting that EPS, TA and LEV are not the major determinants of EDI. Furthermore, the f-value ($4.45=3.63$) and Prob ($0.01250<0.05$) validates all the hypothesis of the study that there is a positive relationship between environmental disclosure, firm size, leverage, economic prosperity and governance of the studied manufacturing companies in Nigeria.

CONCLUSION AND RECOMMENDATIONS

This study sought to examine firm's specific attributes (firm size, earnings, leverage and governance) and voluntary environmental disclosure with evidence from listed manufacturing companies in Nigeria. The data were obtained from the annual reports and accounts of the studied manufacturing companies during 2011-2015. The data obtained were analysed using both descriptive (mean and standard deviation) and inferential statistics (variance inflator factor, normality tests and robust regression) and analysis was done via STATA 13.0. First, our analysis revealed that some of the studied manufacturing companies have high leverage profile while some with low leverage profile. Also, that some companies' environmental items (e.g. community involvement, environmental protection, waste management, employee health and safety, product safety, etc.) were not disclosed in their annual reports and accounts while some were disclosed and described in monetary terms. Second, the normality test for residuals showed that the residuals are not normally distributed. Thus, we conducted a robust regression analysis in order to resolve the non-normality nature of the variables and error term in our model. Third, the robust regression result validates all the hypothesis of the study that there is a positive

relationship between environmental disclosure, firm size, leverage, economic prosperity and governance of the studied manufacturing companies in Nigeria. The findings of our study are in agreement with prior empirical evidence (Ahmad et al., 2003; Maliah et al., 2014; Roberts, 1992; Naser et al., 2006; Christensen & Hughes, 2004; Smith, Khadijah & Ahmad, 2007) that governance and leverage significantly and positively influence the extent of environmental disclosure.

These results in some way has provided some support for the legitimacy theory, which suggests that companies will undertake processes to ensure that there is a convergence between the operations and performances of the firm and the acceptable norms of the society. Hence such companies may employ their annual reports to disclose their environmental impact in order to portray the image of being environmentally sensitive. On the basis of the findings, it was recommended that governance structure of companies should be reinforced by assigning more independent directors in the board. In addition, information on environmental impact disclosure by companies should be made mandatory rather than voluntary. Also, it is recommended that further studies should evaluate the influence of other firm's attributes on environmental reporting quality. Finally, the results of the study should be interpreted in the light of certain limitations. First, the study is limited to the Nigerian manufacturing industries and therefore does not provide a generalized view for other sectors in Nigeria. Future research can be extended to incorporate other sectors of the economy. Second, the study relied heavily on annual reports, thereby excluding other sources of information disclosing environmental issues. Last, the four independent variables used in the study may not adequately represent all the determinants of environmental quality. Despite these limitations, the results of the present study may provide support for other research results and a basis for future research.

APPENDIX

Appendix I					
*(7 Variables, 50 observations pasted into data editor					
-Summarize eps logta levdum govdatum edi					
Variable	Obs	Mean	Std. Dev.	Min	Max
eps	50	68.6022	135.0062	-121.2	744.5
logta	50	6.5574	1.147216	0	7.85
levdum	50	0.64	0.4848732	0	1
govdatum	50	0.6	0.4948717	0	1
edi	50	2.56	0.6114553	0	3
-Sktest eps logota levdum govdatum edi					
Skewness/Kurtosis tests for Normality					
Variable	Obs	Fr (Skewness)	Fr (Kurtosis)	Adj chi ² (2)	Frob>chi ²
eps	50	0.0000	0.0000	38.56	0.0000
logta	50	0.0000	0.0000	49.50	0.0000
levdum	50	0.0744	0.0000	73.47	0.0000
govdatum	50	0.2006	0.0000		
edi	50	0.0001	0.0011	19.85	0.0000

Appendix II
UNBALANCED PANEL DATA

YEAR	COMPANIES	EPS	LogTA	LEV Dum	GOV Dum	EDI
2011	Ashaka Cement Plc	129.00	7.74	1.00	0.00	3.00
2012	Ashaka Cement Plc	140.00	7.76	1.00	0.00	3.00
2013	Ashaka Cement Plc	126.00	7.78	1.00	0.00	3.00
2014	Ashaka Cement Plc	204.00	7.80	1.00	0.00	3.00
2015	Ashaka Cement Plc	123.00	7.85	1.00	0.00	3.00
2011	Glaxosmithkline Plc	241.00	7.25	0.00	1.00	3.00
2012	Glaxosmithkline Plc	295.00	7.34	0.00	1.00	3.00
2013	Glaxosmithkline Plc	305.00	7.42	0.00	1.00	3.00
2014	Glaxosmithkline Plc	193.00	7.45	0.00	1.00	3.00
2015	Glaxosmithkline Plc	0.00	0.00	1.00	1.00	0.00
2011	Beta Glass Plc	3.55	7.26	1.00	1.00	3.00
2012	Beta Glass Plc	2.66	7.35	1.00	1.00	2.00
2013	Beta Glass Plc	3.12	7.43	1.00	1.00	2.00
2014	Beta Glass Plc	4.78	7.41	1.00	1.00	2.00
2015	Beta Glass Plc	3.98	7.43	1.00	1.00	2.00
2011	Chemical and Allied Product	-13.00	6.83	0.00	1.00	3.00
2012	Chemical and Allied Product	14.00	7.04	0.00	1.00	3.00
2013	Chemical and Allied Product	15.00	7.09	0.00	1.00	3.00
2014	Chemical and Allied Product	10.00	7.13	0.00	1.00	3.00
2015	Chemical and Allied Product	-54.00	6.82	0.00	1.00	3.00
2011	Neimeth Int•1 Pharm. Coy	14.00	6.24	1.00	0.00	2.00
2012	Neimeth Int•1 Pharm. Coy	-5.00	6.26	1.00	0.00	2.00
2013	Neimeth Int•1 Pharm. Coy	10.00	6.29	1.00	0.00	2.00
2014	Neimeth Int•1 Pharm. Coy	-15.00	6.22	1.00	0.00	2.00
2015	Neimeth Int•1 Pharm. Coy	-21.00	6.14	1.00	0.00	2.00
2011	Dangote Cement Plc.	7.13	5.67	0.00	1.00	3.00
2012	Dangote Cement Plc.	8.57	5.71	0.00	1.00	3.00
2013	Dangote Cesaent Plc.	12.34	5.82	0.00	1.00	3.00
2014	Dangote Cement Plc.	10.90	5.92	0.00	1.00	3.00
2015	Dangote Cesaent Plc.	12.51	5.00	1.00	1.00	3.00
2011	PharmaDeko Nigeria Plc.	76.00	6.41	1.00	0.00	2.00
2012	PharmaDeko Nigeria Plc.	744.50	6.44	1.00	0.00	2.00
2013	PharmaDeko Nigeria Plc.	-121.20	6.40	1.00	0.00	2.00
2014	PharmaDeko Nigeria Plc.	101.00	6.45	1.00	0.00	2.00
2015	PharmaDeko Nigeria Plc.	334.00	6.41	1.00	0.00	2.00
2011	VitaFoam Iligeria Plc.	0.82	6.58	0.00	1.00	3.00
2012	VitaFoam Iligeria Plc.	0.69	6.59	0.00	1.00	3.00
2013	VitaFoam Iligeria Plc.	0.48	6.62	0.00	1.00	3.00
2014	VitaFoam Iligeria Plc.	0.81	6.64	0.00	1.00	3.00
2015	VitaFoam Iligeria Plc.	0.53	6.73	0.00	1.00	3.00
2011	Livestock Feeds Plc.	17.56	5.75	1.00	0.00	2.00
2012	Livestock Feeds Plc.	12.71	5.88	1.00	0.00	2.00
2013	Livestock Feeds Plc.	17.56	6.25	1.00	0.00	2.00
2014	Livestock Feeds Plc.	12.71	6.32	1.00	0.00	2.00
2015	Livestock Feeds Plc.	9.40	6.32	1.00	0.00	2.00
2011	Berger Paints	105.00	6.41	1.00	1.00	3.00
2012	Berger Paints	83.00	6.47	1.00	1.00	3.00
2013	Berger Paints	89.00	6.56	1.00	1.00	3.00
2014	Berger Paints	51.00	6.56	1.00	1.00	3.00
2015	Berger Paints	114.00	6.59	1.00	1.00	3.00

REFERENCES

- Ahmad, Z. Salleh, H. & Junaini. (2003). Determinants of environmental reporting in Malaysia. *International Journal of Business Studies*, 2(1), 69-90
- Argyrous, G. (2005). *Statistics for research with a guide to SPSS*. London: Sage Publications Limited.
- Buhr, N. & Freedman M. (2001). Culture, institutional factors and differences in environmental disclosures between Canada and United States. *Critical Perspectives on Accounting*, 12,293-322
- Cadbury. (1992). *The Cadbury committee reports: Financial aspects of corporate governance*, London: Burgess Science Press.
- Cormier, D. & Gordon, I.M. (2001). An examination of social and environmental reporting strategies. *Accounting, Auditing and Accountability Journal*, 4(5), 587-616
- Davies, N. & Okorite, T. (2007). Corporate social responsibility accounting: A wake-up call to the Nigerian accountant. *The Nigerian Accountant*, 40(2), 44-48
- Deegan, C. & Rankin, M. (1996). Do Australian companies report environmental news objectively? An analysis of environmental disclosures by firms prosecuted by the environmental protection authority. *Accounting, Auditing and Accountability Journal*, 9(2).
- Dibia, O.N. (2015). Environmental disclosures in oil and gas industry. *The Nigerian Accountant*, 48(3), 35-41
- Elkington, J. (1997). Tripple bottom line reporting: Looking for balance. *Australian Accountant*, 69(2), 18-21
- Guthrie, J. & Mathews, L. (1985). Corporate social reporting: A rebuttal of legitimacy theory. *Accounting and Business Research*, 9(76), 343-352
- Hackston, D. & Milne, M.J (1996). Some determinants of disclosures in NZ companies. *Accountancy, Auditing and Accountability Journal*, 9(1), 77-108
- Healy, P.M. & Palepu, K.G. (2001). Information asymmetry, corporate disclosure, and the empirical disclosure literature. *Journal of Accounting and Economics*, 31,405-440.
- Hoooghiemstra, R. (2000). Corporate communication and impression management-new perspectives why companies engage in corporate social reporting. *Journal of Business Ethics*, 27(1-2), 55-68
- Jensen, M.C. (2004). *Value maximization, stakeholder theory, and the corporate objective function*. Working Paper No. 01-01, Harvard Business School.
- Jensen, M.C. (1986). Agency cost of free cash flow, corporate finance, and takeovers. *American Economic Review*, 76(2), 323-329.
- Jeroh, E. & Okoro, G.E. (2016). Effect of environmental and dismantling costs on firm performance among selected oil and gas companies in Nigeria. *Sahel Analyst: Journal of Management Sciences*, 14(5), 14-26
- Latridis, G.E (2013). Environmental disclosure quality: Evidence on performance, corporate governance and value relevance. *Emerging Market Review*, 14, 55-75
- Mgbame, C.O. (2012). *Environmental accounting audit in selected companies in Nigeria*. Unpublished PhD thesis submitted to the University of Benin.
- Myers, S.C. (1977). Determinants of corporate borrowing. *Journal of Financial Economics*, 5(2), 147-175.
- Onwumere, U.J. (2009). *Business and economic research methods*. Enugu: Vougasen Limited.
- Onyali C.I., Gloria O.T. & Priscilla C. (2014). An assessment of environment information disclosures practices of selected Nigerian manufacturing companies. *International Journal of Finance and Accounting*, 3(6), 349-355
- Owolabi, A. (2008). Environmental disclosures in annual reports. *The Nigerian Perspective 1st Italian CSEAR Conference on Social and Environmental Accounting Research*.
- Wiseman, J. (1982). An evaluation of environmental disclosures made in corporate annual reports. *Accounting, Organization and Society*, 7(1), 53-63.