

Impact of Environmental Disclosure on Performance of Cement and Brewery Companies in Nigeria

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Abstract

This research empirically assessed the impact of environmental disclosure on performance of listed cement and breweries companies in Nigeria. The population of the study consists of nine cement and breweries companies listed on the Nigerian stock exchange. Three listed cement and four breweries companies were selected as a sample for this study. Secondary data were used and were collected from annual reports of selected companies for the period of five years from 2011 – 2015. Ordinary Least Square regression technique was employed to analyze the data. Content analysis was used for measuring quantitative environmental disclosure and unweighted approach was used to rank environmental disclosure indices for measuring qualitative voluntary environmental disclosure. Return on Asset (ROA), Return on Equity (ROE), and Earning per Share (EPS) were used as proxies for measuring performance. The empirical result indicates that environmental disclosure quantitative (EDQN) has a positive insignificant on ROA and EPS at 0.707 and 0.616 respectively, it has negative insignificant impact on ROE at 0.756. On the other hand, environmental disclosure qualitative (EDQL) has positive significant impact on ROA at 0.025 also with EPS at 0.00, it however has positive insignificant impact on ROA at 0.660. and is statistically significant, also negative impact on ROE and EPS and is insignificant. . The control variable firm size (FRMS) has positive significant impact on EPS at 0.009. The study recommends that cement and breweries companies should practice how to disclose more environmental information. Government should also come up with clearly define policy on environmental disclosure issues and should ensure its full implementation.

Keywords: Environmental disclosure, firm performance, mandatory disclosure, voluntary disclosure.

INTRODUCTION

Climate change and Global warming is an environmental challenge in the face of the world. This challenge is mostly caused by companies operations. Emission from companies operation is a major source of global warming and climate change (Mishra and Siddiqui 2014). Companies do incur cost for environmental management and abatement of these challenges. Therefore the need for companies to account for environmental expenditure received great attention years ago. Environmental accounting according to environmental accounting guidelines (2012:3) environmental accounting “aims at achieving sustainable development, maintaining favorable relationship with community, and pursuing effective and efficient environmental conservation activities”.

The laws of the Federal Republic of Nigeria 1992 Decree No.82 on Environmental Impact Assessment require that companies before embarking on any activity that has effect on environment, to submit environmental impact assessment policy. The policy includes among others the following information; the description of the activities, description of the potentially affected environment, assessment of potential environmental impacts on proposed activity. The alternatives include cumulative, short term and long term effect, an identification and description of measures available to mitigate adverse environmental impacts of companies activity and assessment of those measures. All companies whose activities have effect on the environment do incur environmental management cost.

In order to capture people’s mind and to prove good citizenship, companies do disclose environmental decisions and management cost in their annual reports. Environmental disclosure can be mandatory or voluntary. Previous studies have shown that environmental disclosure in Nigeria is on voluntary basis. There is no standard or law either locally or internationally that require companies to disclose information on environmental cost in Nigeria. However, companies can dwell on International Accounting Standard 1 (presentation of financial statement) which is used for general purpose. Environmental information disclosure is significant because it helps stakeholders to recognize the impact that organization has on the environment and the impact that the environment has on the organization. Environmental information form part of the items disclosed in the company’s corporate social responsibility.

Currently, the demand for companies to apply environment disclosure is very high in order to save the world, it has also been proved that companies with environment disclosure can achieve good performance (Nor, Bahari, Adnan, Kamal and Ali 2015). Performance according to oxford advance learner’s dictionary is how well or badly something works. Put simply, performance is the act of putting into action, achievement or accomplishment of set objectives.

Firm performance which is often used in business as organizational performance, measures how efficient and effective a company is, in its dealings. In accounting firm performance is used as financial performance, which measure profitability of companies in terms of return on assets, return on investment and return on equity.

It also measure market value which include earning per share.

Firms' can best interact with its stakeholders through disclosing environmental information, this help companies to appear good citizens in eyes of their stakeholders. This will benefit the companies with environmental disclosure in the event of raising capital. They can enjoy the benefit of lower cost of capital and other benefits.

Prior studies conducted on environmental disclosure by various authors such as (Nor, Bahari, Adnan, Kamal & Ali 2015; Ong, Tho, Goh, Thai & Teh 2016; Malcom, Khadijah & Ahmad 2007; Clarkson, Li, Richardson & Vasvari 2007; Jia, Lianxiao and Adam 2011; Juhmani 2014 & Agbadam 2015) have not reach consensus on the effect it has on firm performance. Some found environmental disclosure to have negative effect on EPS, LEV while others found environmental disclosure have positive effect on EPS, LEV. There exist a mixed result and variation of the effects. This variation may be due to voluntary nature of environmental disclosure, where companies tends to disclose environmental information they so wish, it could be because of the variation in format, content or lack of consistent approach on environmental disclosure. Different authors use different approach to measure environmental disclosure in Nigeria, some used environmental disclosure checklist (indices), some content analysis. Therefore, this study tries to fill the gap that exists by using both content analysis and environmental disclosure indices to measure environmental disclosure.

Objective of the study

The main objective of this research is to examine the impact of environmental disclosure on the performance of listed cement and Breweries companies in Nigeria. However, the study will explore on the following specific objectives;

- i. To examine the impact of environmental disclosure on return on assets of listed cement and breweries companies in Nigeria.
- ii. To ascertain the impact of environmental disclosure on return on equity of listed cement and breweries companies in Nigeria.
- iii. To find out the impact of environmental disclosure on earning per share of listed cement and breweries companies in Nigeria.

LITERATURE REVIEW

Environmental Disclosure

Ong, Tho, Goh, Thai and Teh (2016) viewed environmental disclosure as a planned statement that depicts company's environmental burden and environmental efforts including company's objectives, environmental policies, environmental activities and impacts, reported and published periodically to the public.

Environmental disclosure as defined by Alok, Nikhil and Bhagam 2008 (as cited in Olayinka and Oluwamayewa 2014) is the umbrella term that depict different ways that companies disclose information about their environmental activities to various users of financial statement.

From the foregoing definitions, environmental disclosure entails where a company voluntarily or statutorily required by law to provide in annual reports environmental management and environmental development cost.

Dibia & Onwuchekwu (2015) claim that companies through environmental disclosure, may seek to capture public perception toward their operation. By disclosing the quantitatively measured results of its environmental conservation activities, it serves as an external function which allows a company to influence the decision-making of stakeholders, such as consumers, investors, and local residents (Ministry of environment Japan 2002).

Environmental information serves as a medium of communication between the company and its stakeholder. Disclosure is necessary because of the importance of environment and the devastating impact of company's activities on the environment. Disclosure could be fixed into company's annual reports; alternatively it could be presented separately (Akanet 2013). According to Nor et al (2015), the demand for company to apply environment disclosure nowadays is very high in order to save the world and it is proved that company with environmental disclosure can achieve good performance. Based on the reviewed literatures, improved disclosure by the companies reduces the gap between management and outsiders, allow company to gain competitive advantage, improve corporate image, enhance the value of stock in the capital market and reduce cost of capital (Kanda 2010; Dye 2001, Akanet 2013).

Owalomwa and Jafaru (2012) viewed that some developed countries have initiated mandatory disclosures in the reporting requirements; however, in most developing countries like Nigeria, Malaysia and Turkey, environmental disclosure still heavily rely on voluntary initiatives of the reporting entities. Mandatory disclosure entails disclosure of company's information on environment impact of their operation periodically in financial statement as required by the government. Mandatory disclosure consist of information that is been disclosed in order to meet the requirement of law and regulations. According to Burbu, Dumontier, Feleaga and Feleaga (2011), France and UK environmental disclosure is mandatory for listed and large non-listed companies. In France, environmental disclosure is regulated by 'Nouvelles Regulations Economiques' (New Economic Regulation) was enforced in 2002. The regulation requires listed companies to disclose information on the firm

environmental impact of their operation in their annual report.

In UK, the Company's Act of 1985 forced all listed companies to publish a yearly operating and financial review that had capture information on significant firm's environmental impacts. In 2006, non-listed companies were also required to impose disclosure of key environmental performance indicators in business review section of annual report (Burbu et al 2011).

Ejoh, Duke & Acquah (2014) In the United State of America, SEC regulations and accounting standards requires American companies to disclose environmental information in annual reports.

On the other hand voluntary disclosure entails where management disclose information about their environmental impact of their operation that is useful for the users in financial statement without statutory requirement. It can be seen as a willingness or free choice on the company side to disclose in the annual report. The main goal of voluntary disclosure is to communicate better the company's value to its potential investors. As information is available to investor, they can easily recognize the value and predict the future performance. This will increase investor's willingness to invest especially if they perceived the company a good corporate citizen. Voluntary environmental disclosure has no content, format or consistent approach, the content or the format lies completely in the hand of management of the company. Based on prior research, developing countries heavily rely on voluntary environmental disclosure.

Prior research on environmental disclosure and its impact resulted to different conclusions. Dibia and Onwuchekwa (2015), examine the determinant of environmental disclosure in Nigeria, the study used sample of 15 oil companies, data were collected from companies' annual report from 2008-2013. Data were analyzed through the use of regression. Their result show that leverage impact negatively on the decision to disclose information while profit after tax impact positively on the decision to disclose environmental information by quoted companies in Nigeria.

Olayinka and Oluwamayowa (2014), examine the impact of environmental information disclosure on market value of 50 quoted companies in Nigeria. Descriptive statistics was used to analyze the data; the result reveals that market value has positive correlation with corporate environmental disclosure.

Ong, Teh and Ang (2014) examine the impact of environmental improvement on the financial performance of leading companies listed in Bursa Malaysia. Sample size of 78 companies listed in Bursa Malaysia was used. Their study employed content analysis to verify the extent of information disclosed and reported. The result reveals that firm will gain financially through environmental improvement.

Nor, Bahari, Adnan, Kamal and Ali (2015) examine the effect of environmental disclosure on financial performance in Malaysia, based on their findings; there exist a negative relationship between environmental disclosure and firm financial performance's indicator (ROA, ROE, and EPS). On the other hand, there exist a significant relationship between environmental disclosure and firm financial performance indicator (profit margin).

Ong, Tho, Goh, Thai, and Teh (2016) studied the relationship between environmental disclosure and financial performance of public listed companies in Malaysia, data were analyzed through the use of multiple regressions, and the Study reveals that there is only a positive relationship between quality of environmental disclosure and EPS.

Jia, Lianxiao and Adam (2010) studied the relationship between environmental disclosure and firm performance in United States of America, data were analyzed through the use of regression, and their result shows a significant negative impact on firm performance. Leverage also has significant negative impact on firm performance, while firm growth has significant positive impact on firm performance.

Theoretical Framework

For the purpose of this study, stakeholder theory and Legitimacy theory are considered to explain environmental disclosure.

The Stakeholder Theory

The community where the company operates has interest in knowing the company's effort and concern toward improving and reducing the devastating effect of their operation to the environment. To meet this demand, it can only be satisfied through disclosure of environmental information in annual report. Ong et al (2016) Corporate environmental disclosure is been used as a tool of strengthening good relations with stakeholders. Environmental disclosure is seen as dialogue between the corporation and stakeholders. Corporate social and environmental responsibility encourages strong relationship between firm and society where it operate (Aggarwal 2013). He further said, where a company ignore the stakeholders interest it may contaminate the organization image, which would have a devastating effect on firm's financial performance.

The Legitimacy Theory

Legitimacy theory relate to the extent and types of corporate social disclosure in the annual report to be directly related to management's perceptions about the concern of the community (Uwalomwa and Jafaru 2011). Legitimacy theory according Aghdam (2015), imply companies' consideration, concern and expectation of community to appear legitimate in stakeholders' point of view and pledge that their activities are in socially and

acceptable and safe manner. As the organization continue to operate within the domain and norms of society and predicts a firm will use many disclosure strategies to preserve an image of a socially responsible corporate citizen to ensure continued access to resources needed for the success of the business.

Legitimacy theory is the theory that underpin this research because it seek to show that companies operations is carried according to the way that will not harm the society. Moreover, key (1999),criticized stakeholders theory that it lack specificity and cannot be operationalize in way that allow specific inspection. That is there is no clear boundary for stake holder groups to be considered by company.

METHODOLOGY

This research aimed to look at the impact of environmental disclosure on performance of cement breweries companies in Nigeria. The population of the study consists of nine listed cement breweries companies on the Nigeria stock Exchange, out of which seven (7) companies (Ashaka cement Plc, Dangote cement plc., and Lafarge Cement WAPCO Nigeria Plc., champion breweries, Giness Nigeria, International breweries & Nigeria breweries) were sampled based on data availability. Secondary data were used as method of data collection, data were collected from annual reports of companies regarding the environmental information disclosure of seven cement and breweries companies from 2011-2015.

In order to assess the impact of environmental disclosure on performance of listed cement companies, quantitative and qualitative approach was used to measure the independent variable. For the quantitative approach, content analysis was employed; it had frequently been used by researchers include among others; Jerry, Teru and Musa (2015), Uwalomwa and Jafaru (2012), Ebimobowei (2011). This research adopts sentence count as a unit of analysis in order to capture the environmental disclosure to the categories and sub-categories is used to analyze the annual reports. Sentence count as a unit of analysis is appropriate than other units because it provides complete and reliable data (Guthrie and Abeysekera 2006). Sentence is considered as the main unit of speech and writing (Walden and Schwartz 1997). Environmental disclosure checklist was adapted from Akenet (2013), comier, Magnan and Velthoven (2004) to measure the qualitative disclosure. This study adopts the unweight disclosure index approach in order to know whether the company disclose in their annual report information regarding environment. This formula is used to explain disclosure using unweight approach.

$$EDQL = \sum_{i=1}^n di$$

Where EDQL = environmental disclosure qualitative

di = 1 if an item in the check list is disclosed in annual report, 0 if not disclosed

n =number of items in the disclosure check list.

In this study dependent variable is the firm performance which is expected to be influenced by environmental disclosure practices. In order to measure the firm performance, the following are chosen as an indicator of the performance of the companies; Return on Asset (ROA), Return on Equity (ROE) and Earning per Share (EPS) as it has been consistently used in the previous research. The control variables are firm size and leverage of a firm.

In order to examine the impact of environmental disclosure on performance of cement and breweries companies in Nigeria, three (3) regression models were developed as indicated below:

ROA = $\beta_0it + \beta_1it EDQL + \beta_2it EDQL + \beta_3itLEV + \beta_4itFRMS+eit$model 1

ROE = $\beta_0it + \beta_1it EDQL + \beta_2it EDQL + \beta_3itLEV + \beta_4itFRMS+eit$model 2

EPS = $\beta_0it + \beta_1it EDQL + \beta_2it EDQL + \beta_3itLEV + \beta_4itFRMS+eit$model 3

Where:

ROA is return on assets, ROE is return on equity, EPS is earning per share, β is the intercept, EDQN is environmental disclosure quantitative, EDQL is environmental disclosure qualitative, LEV is leverage and FRMS is firm size

Result and Discussion

Table5. 1: correlation matrix of dependent and explanatory variables

	Edql	edqn	roa	roe	eps	lev	frms
edql	1.0000						
edqn	0.2326	1.0000					
roa	0.1999	0.2454	1.0000				
roe	0.4959	0.2163	0.5059	1.0000			
eps	0.6935	0.2438	0.3292	0.6105	1.0000		
lev	0.1700	0.4668	0.2507	0.2746	0.0024	1.0000	
frms	0.3196	0.2326	0.2140	0.3377	0.5629	-0.1114	1.0000

Source: Authors computation using Stata version 12.0

Table 5.1 shows the correlation coefficient results among dependent and the explanatory variables where all of them show positive correlation except for leverage and firm size The overall matrix shows that there is no multicollinearity among the variables.

Table 5.2: summary of the multiple regression Results

Equation	Obs	Parms	RMSE	"R-sq"	F		
roa	35	5	.2300868	0.1327	1.0023	0.4053	
roe	35	5	.224105	0.3369	3.360029	0.0316	
eps	35	5	2.703669	0.6169	7.832048	0.0005	
			Coef.	Std. Err.	T	P> t	[95% Conf. Interval]
roa							
edql			.0989556	.2227946	0.44	0.660	-.3560518 .5539629
edqn			.0004823	.0012724	0.38	0.707	-.0021162 .0030809
lev			.257052	.23265	1.10	0.278	-.2180826 .7321866
frms			1.75e-13	1.71e-13	1.02	0.314	-1.74e-13 5.24e-13
cons			-.1080561	.1087427	-0.99	0.328	-.3301384 .1140262
roe							
edql			.5132993	.2170024	2.37	0.025	.0701213 .9564773
edqn			-.0003894	.0012393	-0.31	0.756	-.0029204 .0021416
lev			.3406987	.2266015	1.50	0.143	-.1220833 .8034806
frms			2.59e-13	1.67e-13	1.55	0.131	-8.15e-14 5.99e-13
cons			-.1598963	.1059156	-1.51	0.142	-.3762049 .0564122
eps							
edql	12.40072	2.617981	4.74	0.000	7.054093	17.74735	
edqn	.0075834	.0149513	0.51	0.616	-.0229513	.0381181	
lev	-1.821493	2.733787	-0.67	0.510	-7.404632	3.761646	
frms	5.59e-12	2.01e-12	2.78	0.009	1.48e-12	9.69e-12	
cons	-.7044411	1.277797	-0.55	0.586	-3.314052	1.905169	

Source: Authors computation using stata version 12

According to **Table 5. 2** The r^2 shows the power of the independent variable in explaining the dependent variables. The r^2 value of the dependent variables ROA, ROE, and EPS are; 0.1327, 0.3369, and 0.6169 respectively. These indicate that about 13.3%, 33.7% and 61.7% of the variation in each of the respective dependent variables is being explained by the explanatory variables EDQL, EDQN, LEV, and FRMS.

At 5% level of significance ($p \leq 0.05$), the Explanatory variable EDQL has positive significant impact on ROE. This reveals that Environmental Disclosure quality is statistically significant at 0.025. It is also statistically significant at 0.00 with the dependent variable EPS. However, it has a positive insignificant impact on ROA at 0.660. The explanatory variable EDQN has positive insignificant impact on the dependent variables ROA and EPS at 0.707 and 0.616 respectively. It however has a negative insignificant impact on ROE at 0.756. The control variables LEV and FRMS have positive but insignificant impact on ROA and ROE. However the control variable LEV has a negative insignificant impact on the dependent variable EPS at 0.510. On the other hand, the control variable FRMS has positive significant impact on EPS at 0.009.

CONCLUSION AND RECOMMENDATION

The study has empirically examined the impact of environmental disclosure on performance of Nigerian listed cement and breweries companies in Nigeria for the period from 2011 to 2015. The results of the regression shows that only the independent variable EDQL has positive significant impact on ROE and EPS with values 0.025 and 0.00. The control variable FRMS shows significant positive impact on EPS with value 0.009. This means that through disclosing environmental information qualitative that is when certain environmental information is disclosed will impact positively on the return on equity and earning per share of listed cement and breweries companies in Nigeria. Consequently, the firm size apart from the environmental disclosure qualitative also impact earning per share.

Based on the findings, this study recommend that companies should practice environmental disclosure qualitative since it has positive impact on return on equity and earning per share. Management should carryout a cost benefit analysis of environmental disclosure. Government should come up with clearly defined policy on environmental disclosure issues and should ensure its full implementation. This is because environmental management and disclosure activities help in raising the standard of living of communities and that the activities of the companies affect the life of the host communities.

References:

- Aggarwal, P. (2013). Relationship between environmental responsibility and financial Performance of Firm. A literature review. *IOSR Journal of Business Management* Vol. 13, pp. 13-22.
- Aghdam, S. A. (2015). Determinant of voluntary environmental disclosure. The case of Iran. *International Journal of Basic Science and Applied Research* vol.4 (6), pp.343-349.
- Akanet, S. (2013). Corporate environmental disclosure in Nigerian quoted cement Companies. *Adsu Journal of Accounting Research*. Vol. 1(2), pp.143-156.
- Buniamin, S. (2010). The Quantity and quality of environmental reporting in annual report of public listed companies. *Issues in social and environmental accounting*, Vol.4 (2), pp. 115-135.
- Burbu, E.M., Dumontier, P., Feleaga, N. and Feleaga(2011). Mandatory Environmental Disclosure by Companies with IAS/IFRS: The Case Study of France, Germany and the Uk. pp 1-28.
- Business Dictionary (2016). Organizational Performance. www.businessdictionary.com/definition/organizationalperformance/html retrieved October 4th 2016.
- Clarkson, P. M., Li, Y., Richardson, G. D., and Vasvari, F. P. (2007). Revisiting the relationship between environmental performance and environmental disclosure: An empirical analysis. *Accounting organizations and society*, doi 10.1016/j.aos. 2007.05.003
- Connors, E. and Gao, L.S. (2011). Corporate Environmental performance, disclosure and leverage: an integrated approach. *International review of accounting, banking and finance*, Vol. (3), pp 1-26.
- Dibia, N.O. & Onwuchekwu, J.O. (2015). Determinant of Environmental Disclosure in Nigeria. A Case Study of Oil and Gas Companies. *International journal of Finance and Accounting*, Vol.4(3). pp.145-152.
- Dye, R. (2001). An Evaluation of essay on disclosure literature in accounting. *Journal of Accounting and Economics*. 32, pp 181-235.
- Ebimobowei, A. (2011). A Study of social accounting disclosure in the annual report of Nigerian companies. *Asian Journal of Business Management* 3(3), pp 145-151
- Ejoh, N.O., Duke E.O. and Acquah (2014). The Development of environmental accounting and disclosure practice of manufacturing companies in Nigeria. *Journal of Economics and Sustainable Development*. Vol.5(12) pp 70-79.
- Environmental Impact Assessment Decree NO.86 of 1992 Laws of the Federal Republic of Nigeria.
- Gavrea, C., Ilies, L. and Stegerea, R. (2011). Determinant of organizational performance: The case of Romania. *Management and Marketing Challenges for society* Vol.6 (2), pp 285-300.
- Guthriene, J. and Abeysekera, I. (2006). Content Analysis of social environmental reporting: what is new? *Journal of Human Resource Costing and Accounting*, Vol.10 (2), pp 114-126.
- Hassel, L., Nyquist, S. and Nelsson, H. (2005). The value relevance of environmental performance. *European Accounting Review*, 14(1). Pp 41-61.
- Jerry, S.M., Teru P. and Musa, B. (2015). Environmental accounting disclosure practice of Nigerian quoted firm: a case study of some selected quoted consumer goods companies. *Research Journal of Finance and Accounting*. Vol.6(22), pp 31-37.
- Jia, W., Linxiao, L. and Adam S. (2010). Environmental disclosure, firm performance, and characteristics: an analysis of S&P firm. *International journal of business and Economic*, Volume 10 (4).
- Kanda, H. (2001). Disclosure and corporate governance. *A Japanese Perspective, corporate Governance in Asia, A Corporative Perspective*. pp 149-152.
- Malcom, S., Khadijah, Y., and Ahmad M. A. (2007). "Environmental disclosure and performance reporting in Malaysia" *Asian Review of Accounting*, Vol.15 Iss:2, pp-185-199 Doi

- <http://dx.doi.org/10.1108/13217340710823387>
- Mishra, and Siddiqui, (2014). A Review of environmental and health impact of cement manufacturing emissions. *International journal of geology, Agricultural and Environmental sciences volume 2*(3) Pp. 26-31.
- Neu, D., Warsame, H. and Pedwell, K. (1998). Managing public impression: Environmental disclosure in annual reports. *Accounting Organization and Society Britain*. Vol.23 (3), pp.265-282.
- Nor, N., Bahari, A., Adnan, N., Kamal, S. and Ali I (2015). The effect of Environmental disclosure on financial performance in Malaysia. *7th International Economics & Business Management conference*. Pp. 117-126.
- Olayinka, A.O. & Oluwamuyowa, I.O. (2014). Corporate environmental disclosure. *The Management Review*. Vol.5 No.3. Pp 171-184.
- Ong, T.S., Teh, B.H. and Ang, Y.W. (2014). Impact of environmental improvement on financial performance of leading companies listed in Bursa Malaysia. *International Journal of Trade, Economic and Finance* Vol. 5, No.5. Pp. 386-391.
- Ong, T.T., Tho, H.S., Goh, H.H., Thai S.B. and Teh B.H. (2016). The relationship between environmental disclosure and financial performance of public listed companies in Malaysia. *International Business Management* 10(4). Pp. 461-467.
- Oxford Advance Learner's Dictionary (2005). New York University Press.
- Reeve, J.M., Warren, C.S., and Duchac, J.E. (2009). *Principle of financial and managerial accounting*. U.S.A, LEAP publishing service, Inc.
- Robert, C.B. (1991). Environmental disclosure. A note on reporting Practices in Mainland Europe. *Accounting, Auditing & Accountability journal* 4 (3).
- Santos, J.B. & Brito, L.A. (2012). Toward a subjective measurement model for firm performance *BAR, Rio de Janeiro* vol. 9. Pp 95-117.
- Uwalomwa, U. & Jafaru, J. (2012). Corporate environmental disclosure in the Nigerian manufacturing industry. A case study of selected firm. *An International Multidisciplinary Journal, Ethiopia*. Pp 71-83.
- Wadden, W.D. and Schwartz, B.N. (1997). Environmental disclosure and public policy Pressure. *Journal of Accounting and Public Policy*, Vol. 16, No.2. Pp 125-254.