Corporate Social and Environmental Disclosure in Nigeria: A Comparative Study of the Building Material and Brewery Industry

Uwuigbe, Uwalomwa
Dept. of Accounting and Taxation, College of Business and Social Sciences
Covenant University, Ogun State, Nigeria
Tel: 234-805-236-351 E-mail: alaiwu2003@yahoo.com

Olayinka Marte Uadiale
Department of Accounting, University of Lagos
Lagos State, Nigeria
Tel: 234-805-397-8271 E-mail: ayomideose@yahoo.com

Abstract

This study investigates the level of corporate social environmental disclosure among listed companies in the brewery and building material industry in Nigeria. The corporate annual reports for the periods 2004-2008 were utilized as our main source of secondary data. While the content analysis technique was used as a basis of eliciting data from the annual report, the student t-test statistics was used in the process of analysing if there was a significant difference in the level of corporate social environmental disclosure between the sampled industries. The paper as part of its findings revealed that there is a significant difference in the level of corporate social environmental disclosures between the selected industries. The paper therefore concludes that corporate social environmental disclosures among the selected listed companies is basically very low and still at its embryonic stage. The paper therefore recommends that corporate social environmental disclosure themes and evidence must be established to provide foundation for improving environmental information disclosures among companies.

Keywords: Corporate social environmental, Brewery, Building material, Annual reports, Industry

1. Introduction

The environment has become a crucial concern in today‘s ecological, social and economical set up. The Retention and improvement of the quality of environment has become a big issue a big issue for the business world. Business houses and corporate enterprises are held responsible for ensuring a sustainable environment as their activities exerts tension over the environmental structure. Environmental accounting has emerged during the last two decades in response to these issues. Industrial activity has a large impact on the environment. Recent concerns about global warming and emerging emissions trading market for greenhouse gases have intensified stakeholder interest in corporate environmental activities and its impact (Anderson, 1989). Response to this increase in interest has varied across corporations and across countries. While for most part of the developed countries of world, environmental reporting has developed voluntarily (e.g., through voluntary standards such as the global reporting initiatives). However, this is not the same in developing countries (Azzone, Manzini and Noci, 1996).

Corporate social environmental responsibility has grown to include environmental matters over the years as environmental issues such as environmental pollution and environmental litigations have become more prominent economic, social and political problems throughout the world. These have put force for corporations to engage into environmental responsibility including environmental accounting and reporting matters. As argued by Margolis and Walsh (2003:28) that

"*From society's perspective, creating wealth and contributing to material wellbeing are essential corporate goals. But restoring and equipping human beings, as well as protecting and repairing the natural environment, are also essential objectives. Companies may be well designed to advance the first set of objectives, yet they operate in a world plagued by a host of recalcitrant problems that hamper the second set".*

Nevertheless, based on the increasing pressure and heightened interest from stakeholders for voluntary environmental engagement, this study specifically looked at the level of corporate social environmental disclosure among firms in the brewery and building material industry in Nigeria.

1.1 Scope of Study

This study seeks to find out whether there is a significant difference in the level of corporate social environmental disclosures between the selected industries. In other to achieve this objective, the studied used the judgmental sampling technique in selecting two major industries (that is the brewery and building material industry). The preference for these industries is motivated by the nature of industrial / production activities as a result of their direct impact on the environment. These industries are considered to have a high pollution propensity (Oyeshola, 2008; First Global Select, 2008). Nonetheless, five (5) companies each were selected as depicted in the appendix (table 1) from each of the aforementioned industry. These companies were selected because of the types of raw material used, nature of disposal of wastages, environmental pollution and their market capitalization composition ranking for July, 2008. This eventually gave rise to a total of 10 companies (i.e. 5 companies each from industry). This study focused on listed companies because of the easy accessibility of the mandatory disclosure of companies' annual reports as specified by the stock exchange commission.

1.2 Research Hypothesis

In other to achieve the objectives of this study, the following hypotheses are stated in the null form:

H_o: there is no significant difference in the level of corporate social environmental disclosures between the selected industries.

2. Theoretical Background of Corporate Social Environmental Disclosure

Though Gray, Kouhy and Lavers (1995) consider corporate social disclosure as being the subject of substantial accounting research, it lacks a coherent theoretical framework. Gray (2000) claims that there has been significant growth in environmental and social auditing and reporting since the 1990s. Possible explanation for this trend is not unconnected with business firms' desire to create, maintain or repair their societal legitimacy. Arguably, legitimacy theory is the more probable explanation for the increase in environmental disclosures since the early 1980s (O'Donovan, 2002). Other researchers that have agreed to the dominance of Legitimacy theory as a more profound explanation to corporate social and environmental reporting include (O'Donovan, 1999; Walden and Schwartz, 1997; Gray *et al*, 1995a; Hooghienstra, 2000 and Wilmshurst and Frost, 2000). The theory seeks to explain attempts by corporate entities to narrow any perceived legitimacy gap as an effort to avoid sanctions or threats to their survival. Legitimacy theory suggests that businesses operate in society via an expressed or implied social contract upon which their survival and growth are dependent. Carroll (1989) indicates the terms of the social contract between business and society are largely articulated through laws, regulations, and shared understandings. In addition to market forces, laws and regulations provide the criteria of appraisal and evaluation, of success and failure, of business enterprises. Changes in laws and regulations that limit the activities of business are normal phenomena.

Other theories that provide a sound theoretical foundation to substantiate the value of social and environmental accounting research and by extension their disclosure include Stakeholder theory (Guthrie and Parker, 1990; Roberts, 1992; Gray *et al*, 1995a; and Roberts and Mahoney, 2004); Institutional theory (Cormier *et al*, 2005; Meyer and Rowan, 1977) and Resource Dependence theory (Pfeffer and Salancik, 1978, 2003). Legitimacy theory (Lindblom, 1994; Suchman, 1995) is value system centred. A dichotomy exists between the value system of organisations and those of the society. Legitimacy exists at the organisational level when there is congruence between organisation and society value system. Institutional theory, unlike legitimacy theory specifies how society expectations are met and gained by institutionalising norms and rules. Some code of behaviour to earn, nurture and maintain societal expectations; and thus create a positive organisation-society interface. Resource dependence theory concerns itself with the strategy organisations adopt in drawing resources from the environment. This position is imperative because organisations are interdependent with selves and the environment. The resolution by organisations of different and conflicting expectations of different stakeholders is what stakeholder theory engages in. This is more necessary because of divergent impacts different stakeholders have on organisations. In spite of the diversity in their level of analysis and specificity, the various theories are united in their resolve to advance and sustain positive organisation – society interface.

Therefore being guided by the legitimacy theory, this paper seeks to find out whether there is a significant difference in the level of corporate social environmental disclosure between the selected industries.

3. Prior Research Studies

The almost total domination of interest in corporate environmental accounting in the late 1990s is shown very clearly in the works of Deegan (1994), Fekrat, Inclan and Petroni (1996), Halme and Huse (1997), Deegan and

Rankin (1999) and Wilmhurst and Frost (2000).

Deegan (1994) conducted a study on the incentives of Australian firms to provide environmental information within their annual reports voluntarily. A discussion is given of how environmental lobby groups may impose wealth transfers on the firm, and of how environmental disclosures within annual reports may serve as means of reducing political costs. Using the political cost framework, hypotheses were developed which linked the extent of environmental disclosures with a measure of the firm's perceived effects on the environment. A sample of 197 firms was obtained from Australian Graduate School of Management (AGSM) annual reports file for the year 1991. The results indicate that firms which operate in industries which are perceived as environmental damaging are significantly more likely to provide positive environmental information within their annual reports than are other firms.

Halme and Huse (1997) Investigates the relationship between corporate environmental reporting in annual reports and corporate governance, industry and country variables. The authors sampled annual reports for the year 1992 of 140 largest corporations from Scandinavian countries (Sweden, Finland, Spain, and Norway). The results suggest that corporate environmental reporting is highly correlated with industry variables. However, no significant relationship is found between environmental reporting and company's size, and between environmental reporting and the number of board members. From corporate governance perspective, the factors that are considered important are (1) ownership structure, (2) the board of directors, and (3) industry and country factors. Even though larger firms tend to disclose more than smaller firms, the quality is no better. The limitation of this study regards to (1) construct validity, (2) external validity and (3) internal validity. More refined and detailed measures and classification bases should be used to meet statistical criteria and to distinguish between various degrees and dimensions of environmental reporting.

Wilmhurst and Frost (2000) examined the relationship between factors perceived as important by chief financial officers in the decision to disclose and the observed disclosure of environmental information within the annual report. The survey involved a selected sample from the top 500 listed Australian companies for 1994 to 1995, which is based on the total revenue of the trading companies. Using stratified random sampling method; an initial sample of 105 companies from environmentally sensitive industry was selected. The industry groups selected were (1) chemical, (2) mining and resources, (3) oil gas and petroleum, (4) transport or tourism, (5) manufacturing, (6) construction, and (7) food and household. The result of the study showed that the factors considered most important by chief financial officers in the decision to disclose environmental information were (1) shareholders' or investors' right to information (also ostensibly to provide a "true and fair" view of operations), (2) legal obligations and "due diligence" requirements, and (3) community concerns.

Analysis of prior studies indicates clearly that there is a dearth of literature on corporate social environmental disclosures in developing countries particularly in Nigeria particularly in Nigeria where more than 80% of the total industries operating in the country discharge liquid, solids and gaseous wastes (such as suspended solids, ammonia, cyanides, phenols, phosphates, chlorides, chromium, nickel, cadmium, carbon monoxide, nitrogen oxides, sulphur oxides, particulate matter, sox, iron oxide, cement kiln dust, hydrocarbons, ammonia, acidic, salt flux, solvent fumes and alkaline oxide emissions) directly into the environment in which they operate without adequate treatment that meets the basic international standards (Okeagu, 2008; Omofonmwan and Osa-Edoh, 2008). To this end, this study being guided by the legitimacy theory will attempt to fill this gap in literature.

4. Research Methodology

In other to find out the level of corporate social environmental disclosures between the selected industries, this paper has adopted the use of corporate annual reports of firms as a base for its secondary source of data. This is due to the fact that annual reports are readily available and accessible. The annual reports of the selected companies within the period 2004-2008 will be used due to heighted interest and increased awareness noticed within this periods. To achieve this purpose, the content analysis method of data analysis was adopted. This is due to the fact that the content analysis method is the most commonly used method of measuring a company's social environmental disclosure in annual reports (Ng, 1985; Milne and Adler, 1999). In addition, it allows corporate social disclosure to be systematically classified and compared; which is useful for determining trends. However, this research measured the corporate social environmental disclosure in terms of themes and evidence, using Hackston and Milne's (1996) operational definitions. Theme is measured in the categories of environment, energy, product, community, and employee health. Evidence is measured in the categories of monetary quantitative and non-monetary quantitative disclosures. Furthermore, a dichotomous procedure known as the kinder Lydenberg Domini (KLD) social environmental performance rating system was used to measure the reporting score (RS). A score of one (1) was awarded if an item was reported; otherwise a score of zero (0) was awarded. Consequently, a firm could score a maximum of eighty five (10) points and a minimum of zero (0). The formula for calculating the reporting score by using these 15 attributes is expressed below as:

$$RS = \sum_{I=1}^{15} r_i$$

Where:

RS = Reporting Score

r_i = A score of (1) if the item is reported and (0) if the item is not reported.

i = 1, 2, 3... 15.

In addition, while the t-test statistics popularly known as the student t-test was utilized in making a comparative analysis so as to assess whether the means of the two groups are statistically different from each other, the analysis of variance technique (Anova) was employed in an attempt to find out if there is a significant difference in the level of corporate social environmental disclosures among the selected firms in both industries.

5. Findings

Analysis of the descriptive statistics result as presented in table (1) reveals that on average, all the sampled firms from the selected industry have some form of form of corporate social environmental information disclosed in their annual reports. This is depicted in the minimum and maximum disclosure level of about (40.60 & 22.40) and (56.40 & 48.80) respectively. This is further reflected in the average total disclosure level of about 246.6 and 169.2 respectively for the firms in the brewery and the building industry. These results invariably portends that the corporate social environmental disclosure level in the brewery industry of Nigerian economy is comparatively higher when compared with that of the building material industry. These finding is further supported by the mean disclosure scores of about 49.32 and 33.84 respectively.

(INSERT TABLE 1)

Furthermore, in an attempt to find out whether the level of corporate environmental disclosures between the sampled industries are significantly different as stated in hypothesis, the overall corporate environmental disclosure scores for firms in the sampled industries are analysed in table (2).

(INSERT TABLE 2)

Findings from our analysis as depicted in table (2) shows a t-calculated result of about 2.836859 and a t-critical value of about tabulated value of about 2.306004133 with a two-tailed test. This outcome invariably shows that since the t-calculated result obtained is greater than the t-tabulated (i.e. 2.836859182 > 2.306004133) at 5% level of significance with a two–tailed test, the alternative hypothesis will be accepted at the expense of the null hypothesis. This portends the fact that the null hypothesis is rejected and the alternative hypothesis accepted. We can therefore state statistically that there is significant difference in the level of corporate social environmental disclosures between the selected industries with firms in the brewery industry parading a higher level of disclosure as depicted their mean values.

6. Conclusion and Recommendations

This study revealed that there is a significant difference in the level of corporate social environmental disclosures between the selected industries. The paper found that there are no mandatory requirements for companies to undergo environmental audit. The paper therefore concludes that corporate social environmental disclosures among the selected listed companies is basically very low and still at its embryonic stage and therefore needs more attention. These results further supports that provided in (Ngwakwe, 2009; Omofonmwan & Osa-Edoh, 2008; Osunbor, 1990). The paper therefore recommends that corporate social environmental disclosure themes and evidence must be established to provide foundation for improving environmental information disclosures among companies. More so, the paper calls for standard setting bodies to set policy guiding and principles in order to improve the financial and non-financial environmental disclosures of listed companies. The limitation of this research is that it only looked at ten (10) listed companies in two (2) major industries of the Nigerian economy; and in order to have a detailed understanding of the nature of variation of overall level of disclosure, it is necessary to undertake a study taking more listed companies and more industries into consideration.

References

Anderson, J. (1989). *Corporate Social Reporting* (New York /Quorum Books)

Azzone, G., Manzini, R., and Noci, G. (1996). Evolutionary Trend in Environmental Reporting. *Business Strategy and the Environment*, *5,* pp. 219-230

Carroll, A.B. (1989). *Business and Society: Ethics and Stakeholder Management.* Cincinnati: South Western Publishing Company

Cormier D., Magnan M., and Van Velthoven B. (2005). Environmental Disclosure Quality in Large German Companies: Economic Incentives, Public Pressures or Institutional Conditions? *European Accounting Review*, *Vol. 14*, No.1, pp. 3-39

Deegan, C. (1994). *An Analysis of the Incentives of Australian Firms to Provide Environmental Information within Their Annual Report*. Accounting Group Seminar in Churchlands Campus New South Wales

Deegan, C., and Rankin, M. (1996). Do Australia Companies Objectively Report Environmental News? An Analysis of Environmental Disclosures by Firms Successfully Prosecuted by the Environmental Protection Agency, *Accounting, Auditing and Accountability Journal*, *9(2),* pp. 50-67

Donaldson, T. (1982). *Corporations and Morality.* New Jearsy: Prentice-Hall Inc.

Fekrat, M.A., Inclan, C., and Petroni, D. (1996). Corporate Environmental Disclosures: Competitive Disclosure Hypothesis Using 1991 Annual Report Data. *The International Journal of Accounting*, *31(2),* pp. 175-195

Gray R. (2000). Current Developments and Trends in Social and Environmental Auditing, Reporting and Attestation: A Review and Comment. *International Journal of Auditing*, *Vol. 4*, 247-268

Gray, R., Kouhy, R., and Lavers, S. (1995). Corporate Social and Environmental Reporting: A review of the literature and a longitudinal Study of UK Disclosure. *Accounting, Auditing & Accountability, 8 (2)* 47-77

Guthrie J., and Parker L. (1989). Corporate Social Reporting: A Rebuttal of Legitimacy Theory. *Accounting and Business Research*, *Vol. 19*, No. 76, pp. 343-352

Guthrie J., and Parker L. (1990). Corporate Social Disclosure Practice: A Comparative International Analysis. *Advances in Public Interest Accounting*, Vol. 3, pp. 159-173.

Hackston, D., and Milne, M.J. (1996). Some Determinant of Social and Environmental Disclosure in New Zealand Companies. *Accounting, Auditing and Accountability Journal, 9(1),* pp. 77-108

Halme, M., and Huse, M. (1997). The Influence of Corporate Governance, Industry and Country Factors on Environmental Reporting. *Scandinavian Journal of Management*, *13(2),* 137-157

Hooghienstra, R. (2000). Corporate Communication Impression Management – New Perspectives Why Companies Engage in Corporate Social Reporting. *Journal of Business Ethics,* 27: 55-68

Krippendorf, K. (1980). *Content analysis: An Introduction to its Methodology*. New York Sage

Lindblom, C.K. (1994). *The Implications of Organizational Legitimacy for Corporate Social Performance and Disclosure*. Paper Presented at the Critical Perspective on Accounting Conference, New York.

Margolis, J. D., and Walsh, .J. P.K. (2003). Social Issues and Management: Our Lost Cause Found. *Journal of Management*, 29: 859-881

Meyer J.W., and Rowan B. (1977). Institutional Organisations: Formal Structure as Myth and Ceremony. *American Journal of Sociology*, *Vol. 83*, No. 2, pp. 340-363

Milne, M. J., and Adler, R. W. (1999). Exploring the Reliability of Social and Environmental Disclosures Content Analysis. *Accounting, Auditing and Accountability Journal*, 12(2), 237-256

Ng, L.W. (1985). *Social Responsibility Disclosures of Selected New Zealand Companies for 1981-1983*. Occasional Paper No. 54, Faculty of Business, Massey University

Ngwakwe, C. C. (2009). Environmental Responsibility and Firm Performance: Evidence from Nigeria. *International Journal of Humanities and Social Sciences,* 3:2

O'Donovan G. (1999). Managing Legitimacy through Increased Corporate Environmental Reporting: An Exploratory Study. *Interdisciplinary Environmental Review,* Vol. 1, No. 1, pp. 63-99

O'Donovan, G. (2002). Environmental Disclosures in the Annual Report: Extending the Applicability and Predictive Power of Legitimacy Theory. *Accounting, Auditing & Accountability Journal,* Vol. 15, No.3, pp.344-371.

Omofonmwan, I. S., and Osa-Edoh, G. I. (2008). The Challenges of Environmental Problems in Nigeria. *Journal of Human Ecology*, 23(1): 53-57

Osunbor, O. A. (1990). *Corporate Social Responsibility toward the environment.* Cited in Omotola, J. A. (ed); Environmental Laws in Nigeria including Compensation. Caxten Press (West Africa) Limited, Ibadan, pp.76-86

Pfeffer J., and Salancik G.R. (1978). *The External Control of Organizations: A Resource Dependence Perspective*. New York, NY, Harper and Row

Pfeffer J., and Salancik G.R. (2003). *The External Control of Organizations: A Resource Dependence Perspective.* California: Stanford University Press.

Roberts R. W. (1992). Determinants of Corporate Social Responsibility Disclosure: An Application of Stakeholder Theory. *Accounting, Organizations and Society*, *Vol. 17*, No. 6, pp. 595-612

Roberts R. W., and Mahoney L. (2004). Stakeholders Conceptions of the Corporation: Their Meaning and Influence in Accounting Research. *Business Ethics Quarterly,* Vol. 14, No. 3, pp. 399-431

Suchman M.C. (1995). Managing Legitimacy: Strategic and Institutional Approaches. *The Academy of Management Review, Vol. 20* (3), pp. 571-610

Walden, W. D., and B. N. Schwartz. (1997). Environmental Disclosures and Public Policy pressure. *Journal of Accounting and Public Policy, 16(2):* 125-154

Weber, R.P. (1985). *Basic Content Analysis. Sage University Paper Series on Quantitative Applications in the Social Sciences*, Series No. 07-049. Beverly Hills, CA: Sage Publications

Wilmshurst, T.D., and Frost, G.R. (2000). Corporate Environmental Reporting: A Test of Legitimacy Theory. *Accounting, Auditing and Accountability Journal*, *Vol.13* (1), pp. 10-26

Appendix

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Brewery	5	40.60	56.40	49.3200	7.07474	50.052
Building Material	5	22.40	48.80	33.8400	9.94123	98.828
Valid N (listwise)	5					

Source: Computed from Annual Report (2004-2008)

Table 2. T-Test: Two-Sample Assuming Equal Variances

	Brewery Industry	Building Material Industry
Mean	49.32	33.84
Variance	50.052	98.828
Observations	5	5
Pooled Variance	74.44	
Hypothesized Mean Difference	0	
Df	8	
t Stat	2.836859182	
P(T<=t) one-tail	0.010958812	
t Critical one-tail	1.859548033	
P(T<=t) two-tail	0.021917624	
t Critical two-tail	2.306004133	

Source: Computed from Annual Report (2004-2008)

Table 3. Selected Industries and Firms

S/N	Brewery Industry	Building Material
1	Jos International Breweries Plc,	Ashaka Cement Company Plc,
2	Nigerian Breweries Plc,	Benue Cement Company Plc (BCC),
3	Guinness Nigeria Plc	Lafarge West African Portland Cement Plc,
4	Champion Breweries Plc,	Cement Company of Northern (Nigeria) Plc,
5	International Breweries Plc.	Ceramic Manufacturers Nigeria Plc,

Table 4. Average Disclosures for Selected Firms

S/N	Brewery Industry	Building Material Industry
1	56.4	48.8
2	55	37.6
3	51.4	41.2
4	30.6	42.4
5	33.2	40.2
Total	246.6	169.2

Source: Computed from annual report (2004-2008)

Table 5. Content Categories of Environmental Disclosures

S/N	Theme	S/N	Evidence
1	Environment	12	Monetary Quantitative
2	Energy	13	Non-Monetary Quantitative
3	Products, services & customers	14	Declarative
4	Employee health & safety	15	Quantitative Monetary and Non-Monetary
5	Community involvement		
6	Research & Development		
7	Litigation /fines/lawsuit		
8	Environmental policies		
9	Sustainability		
10	External relations		
11	others		

Source: (Gray et al, 1995; Hackston and Milne, 1996; Milne and Adler, 1999; Tilt, 2000)

 ISSN 1833-3850 E-ISSN 1833-8119