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Corporate Environmental disclosure and performance in Nigerian listed firms: The legitimacy theory.

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Abstract

The voluntary environmental disclosures by corporate organisations acts as a major tool in disseminating environmental information to fulfil firms' responsibility towards its numerous stakeholders and in conveying corporate environmental awareness. The level of environmental disclosure in Nigerian firms is however low and its relationship with environmental performance remains inconclusive. This study uses the legitimacy theory to reinvestigate this phenomena. The argument underlying the legitimacy theory is that firms can effectively operate better if they are operating within the framework of the societal norms and values. Companies disclose environmental information voluntarily to legitimise their activities, that is, to obtain the society's impression of being socially responsible. The sample consist of 176 firms as listed on the Nigerian Stock Exchange (NSE). The data was collected from annual reports of listed firms. The results indicate that environmental performance has no influence on firms to disclose environmental issues. The findings of this study will facilitate the review of CSR reporting framework so as to provide a clearer guidance to firms to prepare objective nonbiased voluntary environmental information.

Keywords: Corporate Environmental disclosure, Nigerian listed firms, legitimacy theory.

INTRODUCTION

Environmental issues have dominated our daily debates and are evolving very fast. Business organisations especially the multinationals are considered as a major source of environmental problems because of their carbon emission and waste disposal practices. This consequently results in depletion of the ozone layer and global warming (Dryzek, 2013). Before now, companies paid little or no attention to the environmental degradation caused by their activities. However, we are in a new era of sustainability where people now recognize the importance of clean water and clean air. Business organisations these days are under increasing pressure from both government and non-governmental organizations to be environmentally friendly (Bebbinton, et al., 2014). The increasing demands by various stakeholders for environmental responsibility makes it increasingly vital for firms to strengthen their environmental information disclosure practices (Hopwood, 2009).

This development gave rise to the environmental accounting movement. And it has in the most recent past been coherently argued that there is a moral cause for businesses to report on their impacts on the natural environment so as to demonstrate responsiveness to all sources of concerns from various stakeholders (Uwuigbe, 2011). Corporate environmental disclosure simply refers to self-reporting of firm's environmental impact information to stakeholders. The information is communicated to the stakeholders through various medium such as stand-alone report, environmental reports, brochure documentaries, annual reports and others (Gray & Bebbington, 2001).

Environmental information disclosure reflects a firm's environmental commitment to its various stakeholders and it contains vital environmental information concerning corporate environmental performance and activities. Environmental reporting assist existing and potential investors to re-evaluate their investment decision making (Hood & Nicholl, 2002) and on whether to expand their business investment portfolio (Jaffer & Buniamin, 2004). Stakeholders need environmental information about the companies environmental protection activities, sustainable development and are expected to be informed of the companies activities, performance and their interaction with the environment and the society at large (Latridis, 2013).

Firms benefits from environmental reporting since it legitimises the companies social values, builds the firm image, decreases pressure from government and non-governmental organisation and show the company as socially responsible (O'Donovan, 2002). Again, environmental reporting plays a significant role in educating and involving both employees and the society on environmental issues (Hood & Nicholl, 2002). In addition, environmental reporting contributes to increase in productivity and regulatory compliance (Latridis, 2013).

In spite of the heightened interest and pressure from various stakeholders, corporate environmental disclosure in Nigeria is still at its lowest ebb. Poor environmental disclosure practices in Nigeria listed firms are highly common and the environmental annual reports are incapable of meeting the heterogeneous demands of various stakeholders. The study set its theoretical grounds on the legitimacy theory. The legitimacy theory opines that environmental disclosure by firms is borne out of political and social pressure (Gray et al., 2001). So the company that have worse environment are pressurized to change the public perception by increasing the level of environmental disclosures.

Literature Review

Over the past three decades, corporate environmental disclosure have attracted substantial academic interest (O'Donovan & Gibson, 2000). Environmental information is vital because if further provides information to potential investors to make investment decision (Jaffer & Buniamin, 2004). It also demonstrates a company's commitment towards environmental issues and the impact of its operation towards the environment (Parker, 1986). The relationship between environmental performance and environmental disclosure is inconclusive both theoretically and empirically. Prior studies shows inconclusive and mixed results (Li et al., 2017). Some studies show negative relationship (Cho et al., 2012; De Villers & Van Staden, 2011), while others explained a positive relationship (Giannarakis et al, 2017; Lu & Taylor, 2017) and others studies did not find any relationship (Lieu et al., 2011; Wiseman, 1982).

Prior studies have investigated the extent and nature of environmental disclosure and performance, Ingram and Frazer (1980) in a study of 40 US companies in order to measure environmental disclosures, used corporate environmental performance (CED) rating as a proxy for environmental performance and applied content analysis technique, and found no significant relationship between environmental disclosure and environmental performance. Patten (2002) opined that firms with poor environmental performance disclose more environmental information than firms with superior environmental performance. Similarly, Sutantoputra, Lindoff & Johnson (2012) in the study sample of 200 Australian listed companies found that firms with greater impact on the environment disclose more about their environmental activities.

On the contrary, Clarkson et al., (2011) in a study of 51 Australian firms, discovered a positive relationship between environmental performance and environmental disclosures. More recently, Meng et al., (2014) using a sample of 553 listed firms in China in measuring the relationship between environmental performance and environmental disclosure. They utilized the content analysis method to measure environmental disclosure and environmental performance through index, based on five measures. They discovered a non-linear relationship between environmental disclosure and environmental performance. They suggested that firms with greater impact on the environment disclose more information about their environmental activities than average performers.

Several studies have been conducted on the relationships between environmental performance and environmental disclosure, majority of this studies is carried out in developed countries like the US, UK, Australia, China. There is paucity of such studies in developing countries in general and Nigeria in particular. The paucity of research work on environmental performance data in developing countries as compared to developed countries like US,UK China are among the main reason for lack of research in a developing country like Nigeria. This paper is an attempt to fill this gap by examining the relationship between corporate environmental disclosure and environmental performance in a Nigerian context.

Theoretical Framework

Since environmental information disclosure is made voluntarily rather than mandatorily, other disclosure motives than jurisdictional enforcement are likely to be key drivers. Literatures suggest several prominent theoretical frameworks that may provide useful explanations in voluntary disclosure such as stakeholder theory (Guthrie et al., 2006), agency theory (Chow & Wong-Boren, 1987), decision usefulness theory (Whitting & Miller, 2008). This study considers the legitimacy theory in the light of environmental disclosure.

The argument underlying the legitimacy theory is that there is a relationship between the organisation and the society in which it operates (Chang, 2007). It is a fact that organizations consume the resources of the society and the society appraises them on the usefulness and legitimacy of their operations. Pfeffer and Salancik (1978) argued that legitimacy is conferred on the firm when both the internal and external stakeholders endorse and supports an organisations goal and activities. Therefore, to be perceived as legitimate, firms tend to undertake activities that are congruent with societal acceptable social norms and values.

The disclosure of environmental information could also be used to demonstrate that an organisation is acting responsibly with the sole aim of influencing the perception of the society (Chang, 2007). The disclosure might also be made to show that the firm is conforming to societal expectations (Deegan, Rankin & Tobin, 2002). Legitimacy theory opines that whenever managers discover that the disclosure of information is crucial to the survival of the firm, the managers should adopt a strategy to ensure the continued disclosure of that information to maintain or gain legitimacy (Deegan, 2002).

Research Methodology

To analyse the quality of environmental disclosure themes in non-financial firms, this study adopted the secondary data collection method. The financial sector is omitted because their operation has less impact on the environment (Wilmshurst & Frost, 2000). Furthermore, the financial sectors are governed by different rules and practice that may influence their reporting practices. Content analysis was used in analysing the content of corporate annual reports of the selected firms. Content analysis has been extensively used in examining corporate environmental disclosure practices (Rupley et al., 2012). Data collection using content analysis are regarded as both qualitative and quantitative in nature. The qualitative data however, can be easily translated into quantitative data by following systematic counting procedure (Marshall & Rossman, 2010). Therefore, this study adopted the content analysis because it is the most suitable method to explore environmental information through annual reports (Buniamin & Sharifah, 2010).

Sample from secondary data was obtained from the annual reports of companies listed on the Nigerian stock exchange in 2016. This period was considered because of the increased awareness of corporate environmental disclosure during this era. Judgemental sampling was used in selecting the companies. The sample comprises of both low and high profile companies consisting of several industries with different levels of industrial sensitivity. The sample selection is based on the following criteria. First, this study focuses on non-financial companies with available annual reports. Therefore, all financial companies are excluded. Second, companies must have complete CSR. Therefore, any company that is distressed or delisted within the period is excluded.

Measure of variable

Dependent variable: the dependent variable of the study is corporate environmental disclosure quality, measured using content analysis of annual reports of Nigerian listed companies. Consistent with Haji (2013) the corporate environmental disclosure quality is measured through content analysis using a detailed scoring scheme from the checklist used by Hackson and Milne (1996) and Hannifa and Cooke (2005).Minor changes were introduced to make it suitable for the Nigerian environment. A firm is coded zero (0) if information on environmental issue is disclosed and coded one (1) if information is disclosed. The scoring index consist of the following classification;

Environmental policy (EP)

Raw material conservation and recycling (RMCR)

Environmental protection program (EPP)

Awards for environmental protection (AEP)

Support for private/public action designed to protect the environment (PPA)

Independent variable: the independent variable in this study is corporate environmental performance. The data for the corporate environmental performance were collected from annual reports of sampled listed Nigerian firms.

The detail of the measurement is as follows:

Score (0) when a company received no written warning by the Federal ministry of Environment (FME) for non-compliance with environmental regulations in certain aspects of its operation. These companies are considered as good environmental performance companies.

Score (1) when a company received a written warning by the FME for non-compliance with environmental regulations in certain aspects of its operation.

Score (2) when a company is charged in court after not doing anything to improve its environmental performance.

Some companies have received written warnings or have court cases more than once during the study period. The measurement of environmental performance takes note of companies that do not have any records of non-compliance with the environmental regulations. Therefore, in calculating the environmental performance score, this study also take into account the severity of the environmental problems caused by a company (Romlah 2005) as follows:

Total environmental performance score = [numbers of written warnings * 1] + [numbers of court cases * 2]

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Control variables: This research considers firms size, profitability and leverage as control variables because this variables have been documented in prior studies to have significantly influence the level of environmental information disclosures. Prior studies reveals that larger firms are likely to disclose more information because they have financial resources to afford heavy investments in CSR activities (Vurro & Perrini, 2011). Additionally, larger firms are also subjected to more public, media and regulatory scrutiny, and thus are likely to disclose more information in order to make them look responsibly (Frooq et al., 2015). Prior studies have found that firm size is significantly associated with voluntary disclosure (Barako et al., 2006; Boesso et al., 2013) and particularly environmental disclosure (Cormier et al., 2011; Rupley et al., 2012).

There are several measures of company size as evidenced in different literatures, such as total sales, turnover, capital employed, total number of employees, total assets, market capitalization and shareholders' equity. Based on prior literatures, total assets is the most widely accepted measures of a firm size (Rupley et al., 2012). This study measures firm size as the logarithm of total assets (Cormier & Morgan, 2003). The use of logarithm is to cushion the effect of heteroscedasticity.

Highly profitable firms provide quality disclosures in their effort to present their greater managerial power that contributes to the environmental protection and stakeholder's welfare (Mangos & Lewis, 1995). Profitable firms are also more likely to disclose information to show their contribution to the society (Ho & Taylor, 2011). The generally acceptable measurement of profitability is return on assets (ROA) (Peters & Romi, 2011). Similarly, this study measures profitability as the natural logarithm of return on assets.

Firms with high leverage tend to disclose more information, as it gives guarantee to the creditors that management and shareholders are less likely to deny their claims (Ferguson et al., 2003; Naser et al ., 2002). It shows a firm's ability to meet up with its responsibilities. The monitoring demands for information increase while company's debt rises (Leftwich et al., 1981), and thus managers being more forthcoming to provide the contracting request for more information, suggesting better environmental performance with higher leverage. According to Cooke and Terry (1996) firms with higher levels of debt tend to disclose in order to assure capital investors that they will honour and respect their debt agreement. The common measurement of leverage based on prior studies is the ratio of debt to asset (Peters & Romi, 2011). Therefore, this study measures leverage as the ratio of total debt to total assets. The following model is developed to help achieve the research objectives.

$$CEDISQ_{it} = \beta_0 + \beta_1 CEPF_{it} + \beta_2 SIZE_{it} + \beta_3 PROF_{it} + \beta_4 LEVE_{it} + \varepsilon_{it}$$

Where;

CEDISQ=corporate environmental disclosure quality

CEPF= Corporate Environmental performance

SIZE= Logarithm of total assets

LEVERAGE = ratio of debt to assets

ε_{it} = Error term

β_0= intercept

ANALYSIS AND RESULTS: Table 1 below shows the descriptive statistics for dependent and independent variables of the sampled companies for the year 2016. The mean and maximum score for corporate environmental disclosure is 13.098 and 54.714 respectively with a minimum score of 1.328

Descriptive statistic information

	Minimum	Maximum	Mean	Std. Deviation
ROA	-46.910	57.470	3.63	7.500
LEV	0.000	0.883	0.272	0.096
CEP	0.000	17.000	0.344	1.470
SIZE	10.124	18.321	13.256	1.583
CEDISQ	1.000	38.000	8.869	4.933
CEDISQ 100	1.328	55.614	14.088	8.376

ROA = return on assets; LEV = ratio of debt to assets; CEP = corporate environmental performance; SIZE = logarithm of total assets; CEDIQ = corporate environmental disclosure quality.

Table 2 below, shows the Pearson correlation matrix results of all the independent variables. The result from table 2 shows that ROA has significant negative relationship with leverage while on the other hand, a positive relationship exist between leverage and firm size. Results also indicate that there is no multicollinearity problem among the independent variables because none of the associations are having a coefficient correlation greater 0.80 (Cooper & Schindler, 2003).

Table 2: Pearson correlation

	ROA	LEV	CEP	SIZE
ROA	1			
LEV	-.153**	1		
	.002			
CEP	.002	0.023	1	
	.854	.448		
SIZE	0.71	.171**	.163**	1
	.033	.000	.000	

ROA= return on assets; LEV=ratio of debt to assets; CEP= corporate environmental performance; SIZE= logarithm of total assets.

Regression Analysis: The regression analysis is shown in table 3. The environmental disclosure variables is regressed with the environmental performance variables including all the control variables, the results indicate that the relationship between corporate environmental disclosure and corporate environmental performance is not significant. This insignificant results indicates that corporate environmental performance of firms has no influence on the level of corporate environmental disclosure. This results agrees with the findings by Freedman and Wasley (1990). Theoretically, this findings is consistent with the legitimacy theory especially regarding the corporate environmental reporting in which the purpose of the reportage is to positively influence the perception of the society of being socially responsible.

As presented in table 2 above, additional analysis was also carried out using the data of the financial performance as a moderating variable. This is because firms that are financially viable are most likely to disclose more information because they have the financial resources to afford heavy investments in environmental reporting, since disclosure itself involves a lot of cost.

Table 3: Regression Analysis

	Model 1	Model 2
(Constant)	-11.213 (-3.546)***	-11.722 (-2.650)***
Environmental performance	0.0008	0.412 (0.824)
Return on Assets	0.134 (3.681)***	0.246 (3.771)***
Leverage	4.849 (1.600)***	4.769 (1.562)***
Ln Size	1.627 (6.133)***	1.661 (6.203)***
CEP*ROA	_	-.448 (-0.857)
Adjusted R^2	19.700	17.700
F	17.254	14.360
Sig	0.000	0.000

Significant at (1% ***), (5% **) and (10% *)

The result as shown in module 2 (Table 3) indicates that financial performance (ROA) cannot moderate the insignificance and negative relationship between corporate environmental performances with corporate environmental disclosure. Therefore, this study concludes that environmental performance does not have significant relationship with environmental disclosure quality.

From the study, it can be observed that firm size, leverage and firm performance have significant relationship with environmental disclosure quality. The positive coefficient of size show that large firms to disclose higher environmental information. This findings agrees with prior studies by Cormierr et al., 2011 and Rupley et al., 2012. Firms with very high level of leverage are generally considered to be risky. This firms disclose more environmental information to reduce information asymmetry (Ho & Taylor, 2011). Parsa and Deng (2008) found a positive relationship between level of leverage and environmental information disclosures because large firms have financial might to provide information to the public (Mangos & Lens, 1995).

Conclusion

This study investigates the relationship between environmental performance and environmental disclosure quality of sampled firms listed on the Nigerian stock exchange for the year 2016. Environmental disclosure quality is measured through the content analysis using a detailed checklist developed by Hanifa and Cook (2005) and Hackson and Milne (1996), and environmental performance is measured based on the degree of a firm's compliance with environmental regulations.

The results from the study indicates that the quality of environmental disclosure is still low in Nigeria when compared to the disclosures by firms in developed countries. This is because there is no mandatory requirements for companies to report environmental information in their annual reports. Based on the results of this study, companies' actual performance is not related to environmental disclosure quality. This findings is in tandem with the legitimacy theory which suggest that the purpose of the disclosure is to portray it as a responsible company with the sole aim of influencing the society's perception about it. Also, since the disclosure is voluntary, firms can decide on what information to disclose and what information to withhold, using these reports, firms can opportunistically disclose information that are only favourable to them (Merkl- Davies et al., 2011).

The result of this study enumerates the importance of having guidelines on voluntary disclosure practices, especially on the environmental aspect. It is therefore recommended that environmental regulatory bodies like National Environmental Standards and Regulations Enforcement Agency (NASREA) and Federal Ministry of Environment (FME) establish a framework that will form the basis of environmental reporting in Nigeria. A collaboration on the part of the Nigerian government and regulatory bodies should be targeted towards encouraging companies to adopt environmental friendly practices so as to enhance the quality of environmental disclosure in Nigeria. From the stakeholders' perspective, a more objective and non-bias environmental reports will greatly assist them in making better and informed economic decision about the firm.

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