

The Effect of Corporate Governance on the Extent of Environmental Reporting In the Nigerian Oil Industry

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Abstract

This paper seeks to examine the effect of corporate governance on environmental reporting. This study makes use of board size, board independence, and audit committee independence to proxy for corporate governance. The findings of the study show that board size, board independence, audit committee independence and managerial ownership concentration have positive and significant relationship with environmental reporting. Based on the findings, the recommendation is that companies that want to improve on their environmental reporting quality should pay closer attention to corporate governance mechanisms (in this case board size, independence and audit committee independence) and on ownership concentration within the companies.

Key Words: Environmental reporting, corporate governance, ownership concentration, Nigeria.

1. Introduction

The state of the world's environment and the impact of mankind on the ecology of the world have led to increased public concern and scrutiny of operations and performances of organisations; and while some developed countries have initiated mandatory disclosure requirements, most developing countries still rely heavily on voluntary initiatives of the reporting entities (Uwuigbe and Jafaru, 2012). There is sparse literature as regard the issue of environmental reporting disclosures in the oil and gas industry especially in Nigeria, while on the other hand, a lot of studies have been conducted on the impact of corporate governance on environmental reporting, most of which subdivide corporate governance based on board characteristics (board size, independence, and audit committee). To this end, this paper extends the body of existing literature by analyzing the effect of corporate governance on environmental reporting in the Nigerian oil industry.

Objective of the Study

This study will specifically attempt to achieve the following objectives:

- (i) To examine the effect of board size on environmental reporting
- (ii) To examine the impact of board independence on environmental reporting
- (iii) To examine the relationship between ownership concentration and environmental reporting.

Research Hypothesis

Hypothesis one

Ho: Board size has no significant effect on environmental reporting.

Hypothesis two

Ho: Board independence has no significant impact on environmental reporting.

Hypothesis three

Ho: Ownership concentration has no significant relationship with environmental reporting.

Scope of the Study

This study is empirical in nature and examines the effect of corporate governance on environmental reporting among oil and gas companies listed on the Nigerian stock exchange. In order to carry out the objectives listed in this study, annual reports for the year 2010-2013 was examined and this paper is limited to the following listed oil and gas companies : Beco, Conoil, Eternal, Forte oil, Mobil, MRS, Oando and Total.

2. Literature Review

Corporate Governance

Corporate governance is a concept that emerged following the growth of corporations in the 20th century, and in particular, following the stock market crash in 1929, which led scholars to argue for corporate governance mechanisms that would allow shareholders to keep companies in check (Wendel, 2014). A lot of scholars however attribute the considerable interest in corporate governance practices in modern corporations to the high profile collapse of a number of large firms in the US such as the Enron Corporation (Adodepe, 2014).

Corporate governance is simply defined as the acceptance by management of the alienable rights of shareholders as the true owners of the corporation and their role as the trustees on behalf of the shareholders (Dombin, 2013). A report by (World Bank, 2006) defines corporate governance as the structures and processes for the direction and control of companies; in order words, corporate governance concerns the relationship amongst the management, board of directors, controlling shareholders, minority shareholders and other stakeholders.

Dar, Naseem, Rehman and Nazi (2011) opines that corporate governance serves two major indispensable purpose which are (i)to enhance the performance of corporations by establishing and maintaining a corporate culture that motivates directors, managers and entrepreneurs to maximize the company's operational efficiency thereby ensuring returns on investment and long-term productivity. (ii)it ensures the conformance of corporations to laws, rules and practices which provide a mechanism to monitor directors' and managers' behaviour through corporate accountability that in turn safeguards the investor interest.

Arguden (2010) came up with a corporate governance model in which he states that the main principles of corporate governance are consistency, responsibility, accountability, fairness, transparency and effectiveness. He goes further to add that his model's backbone hinges on four main areas- the right people (i.e members of the board ought to be those that have competent skills, experiences and knowledge), the right team (i.e the board as a whole should consist of capable individuals), the right processes should be in place and there must be improvement in business results. Similarly, Ngwube (2013) conducted a study on the determinants for success of corporate governance in an organisation, some of which include a working board which will represent the interest of shareholders in truth and spirit, transparency in the organisation, sound whistle blowing system, balance in power, formal and periodic evaluation of the CEO, formal and periodic evaluation of directors, strong market institution, external regulation & monitoring, disclosure of compensation policies & practices, open and well implemented conflict of interest policy and condor between executives of a firm and staff. Based on these, Ngwube (2013) in his work concluded that the adoption of corporate governance principles in an organisation is a huge step toward creating safeguards against corruption and mismanagement.

Realising the need to align with international best practices, the Securities and Exchange Commission in 2002, in collaboration with the Corporate Affairs Commission set up a committee to identify weaknesses in the current corporate governance practices in Nigeria and came up with necessary recommendations that will improve corporate governance in Nigeria (Institute of Chartered Accountants Nigeria, 2007). The report of this committee which is known as the code of best practices on corporate governance in Nigeria, was approved by the boards of the SEC and the CAC, and is subdivided into three major parts – board of directors, shareholders and the audit committee. A lot of scholars classify these above elements as the mechanisms of corporate governance. For example, Vitez (2014), writes about board of directors, audit and balance of power as being the main mechanisms of corporate governance.

The issue of board of directors as a mechanism of corporate governance can be looked at from various perspectives. Ogbechie (2010), for instance, cites that board of directors could be subdivided into board size, board leadership, board composition, board independence, board diversity and board culture. Board size according to him refers to the total number of directors on the board of any corporate organisation; there is no universal ideal number of board sizes, however, there are many schools of thoughts on board size with corresponding justifications.

Proponents of large board size for instance, believe that it provides an increased pool of expertise because larger boards are likely to have more knowledge at their disposal. (Ogbechie, 2010), goes further to define board leadership structure as a situation where two individuals serve in the roles of the CEO and board chairman; a typical example of this can be seen in Exxon Mobil Nigeria where the same person is occupying the chairman as well as the position of the CEO (Mobil Nigeria Annual report, 2013). Board composition is commonly grouped into two groups- executive directors and non-executive directors (ICAN, 2007). Ogbechie (2010) classifies board composition into insider directors (i.e those directors that are managers and/or current officers in the firm) and outsider directors (i.e non-manager directors). He goes further to subdivide outside directors as affiliates (directors who are non-employees but have personal relationship with the company) and independent directors who are those that have neither personal nor business relationships with the company. Board independence on the other hand can be defined as the percentage of non-executive directors within the board (Aienciu, 2012).

The code of best practices of corporate governance stipulates that audit committee should be established with the key objective of raising the standard of corporate governance and should be composed of strong and independent persons (ICAN, 2007). The common number of the audit committee members as found in the course of this research is six. The bulk of annual reports examined indicate that audit committee members are often split between representatives of shareholders and directors (in a 50/50 ratio).

Ownership Concentration

Ownership structure of a firm is characterized by managerial ownership, block holder ownership and government ownership (Aras and Crowther, 2008). Block holder ownership represents the percentage of ordinary shares owned by substantial shareholders (5% or more); large block holder ownership therefore means that shares are controlled by a small group of people, hence ownership is concentrated (Juhmani, 2013). Governance mechanisms can be enhanced by block holders who have a strong incentive to closely monitor management, i.e their large shares makes it worthwhile for them to spend time, effort and expense closely to monitor their investments; however, block holders can also create entrenched position in which the majority shareholders abuse their position of dominant control to the detriment of the minority shareholders (Grant, Butler, Hung and Orr, 2012). Managerial ownership on the other hand, means a large proportion of shares are owned by the management of the company (Juhmani, 2013), while government ownership indicates that a greater proportion of a firm is owned by the government. Another form of ownership structure identified can be found in the empirical study conducted by Rouf and Harun (2011).

Environmental Reporting

(CIMA, 2012) defines environmental reporting as the public disclosure of information concerning an entity's environmental performance and it makes organisations appear more accountable for the economic, environmental and social consequences of their activities. Environmental reporting can also be defined as public disclosure by a firm of its environmental performance information, similar to the publication of its financial performance (Online Business Dictionary, 2010). Environmental reporting according to (Beredugo and Mefor, 2012), is very important as it enhances the quality of decision making, requiring firms to establish a standard and set reduction targets and the realisation of the importance of changing unsustainable consumption and production patterns alongside protecting and managing Nigerian national resources; the information contained in environmental reports are necessary for accountability, comparability and probity, hence when not made available could be held synonymously with being bias, not transparent, fraudulent and liable to risk which in turn could dissuade patronages from consumers, suppliers, investors and surrounding communities. There are positive indicators of environmental reporting practices in companies and business organisations in developing countries, however the practice is not serious enough, as there are no specialised activities in companies or factories to apply it or the planning of research to specifically target and define consumers, public or owners' needs, instead the practice is carried out in a random manner (Beredugo and Mefor, 2012). A study by Uwuiigbe and Jimoh (2012) supports this view that environmental reporting is not so serious in developing countries e.g Nigeria, this study indicated that most companies in Nigeria majorly disclose information related to products and consumers, employees and community involvement but contains very little quantifiable data which in itself is not sufficient.

A close look at the annual reports of the oil and gas companies in Nigeria indicated that, all the companies show one of environmental reporting or the other as part of the annual report, but the reports on environmental issues as shown by the annual reports are not elaborate and do not follow a particular standard or guideline.

Presently, there are no formal guidelines that require oil and gas companies in Nigeria to disclosure environmental issues; however, there is a Global Reporting Initiative which could serve as a guide to companies in the oil and gas sector.

Some of the contextual issues treated by this global reporting initiative include responding to growing energy demands, the use & management of land, the contribution to national economic & social development, environmental management, developing lower-carbon energy sources, relationship with government, climate protection & transformation of energy market, environmental protection including the use & disposal of water & chemicals, transparency of payments to government, security, health & safety etc. This initiative also stipulates that transparency in reporting can increase understanding, enabling better informed decision making around trade-offs in the industry between economic , social, environment and development objectives.

Corporate Governance, Ownership Concentration and Environmental Reporting

As earlier discussed, some of the mechanisms of corporate governance include board of directors, audit committee and shareholders. Within the context of the board of directors, several studies have been conducted on the effect of each of the characteristics (i.e size, independence, composition etc) on environmental reporting. A notable work is the one by (Ienciu, 2012) who in his study established that board size and independence are factors that explain the level of environmental reporting; and also adds that, to assure high level of transparency of environmental performance within a company, the board of directors should ensure a sufficient number independent members to exercise independent reasoning in order to solve potential conflicts of interest.

Oba and Fodio (2012), examined how board characteristics interact with the quality of environmental reporting and concluded that all the investigated board dynamics (size, independence, gender, composition and foreign directors) except for gender mix were ascertained to have significant impact on environmental reporting; their study also identified an inverse relationship between board size and environmental reporting.

Aside from the effect of board characteristics on environmental reporting, studies have also be conducted on the significance of audit committee on it; Mohiuddin and Karbhari (2010) established that audit committee as a mechanism of corporate governance impacts positively on the quality of a firm's financial reporting (for which environmental reporting is a part of). Another notable work on the relationship between corporate governance and environmental reporting is that of Habib and Istiaq (2008) who in their study reduced nine corporate governance variables to three- board & audit committee structure, independence and audit quality dimensions, and the study indicated that these variables as a function of corporate governance are a mechanism for providing high quality accounting information.

On the issue of ownership concentration, Juhmani (2013) in his study concluded that a high percentage of block holder ownership disclose less voluntary information than firms with a low block holder ownership. Managerial ownership concentration on the other hand, induces management entrenchment and also encourages low level of disclosures (Sufian and Zahan, 2013).

3. Methodology

This study basically investigates effect of corporate governance and ownership concentration on environmental reporting among oil and gas companies listed on the Nigerian stock exchange. Using simple random sampling techniques, a total of 14 listed firms have been selected for this study. This investigation has adopted the use of the corporate annual report of firms as its data source. This choice arises due to the fact that they are readily available, accessible and also provides a greater potential for comparability of results. The annual reports of the selected listed firms for the time period of 2010-2013 are used. A longitudinal data is used to account for individual heterogeneity of the sample companies. Binary logistic regression is adopted to examine the model of the study.

Model Specification

A multiple regression econometric model is specified in equation 2. By definition, a multiple regression econometric model is one that seeks to explain variation in the values of the dependent variable on the basis of changes in the independent variables. The assumption is that, the dependent variable is a linear function of the independent variables.

The functional form of the model is express as:

$$\text{ENVREP} = F(\text{OWNCON}, \text{BSIZE}, \text{BIND}) \dots \dots \dots (i)$$

The multiple regressions model with an error term (μ_t) is express in eqn(ii)

$$ENVREP = \beta_0 + \beta_1 BSIZE + \beta_2 BIND + \beta_3 OWNCEN + \mu_t \dots\dots\dots (ii)$$

Where:

β_0 = constant.

β_1, β_2 & β_3 = coefficients of the explanatory variables

μ_t = error term over cross section and time.

Operationalization of Variables

Table 1: Research Variables Definition/M Measurement

Variables	Acronyms	Operationalization
Dependent variable Environmental reporting	ENVREP	Environmental reporting will be measured using a dummy variable and assign a value of “1” if environmental issues are disclosed and “0” if otherwise.
Independent variables Board size	BSIZE	Total number of directors on the board of the organisation.
Board independence	BIND	% of the independent directors on the board of the company
Ownership concentration	OWNCON	The proportion of shares owned by the managers of the company.

Source: Orazalin, Makarov & Ospanova, 2014

4. Presentation and Analysis of Result

Table 1: Descriptive Statistics

	ENVREP	BSIZE	BIND	ONWCON
Mean	1	9	0.55	0.85
Median	1	9	0.58	0.94
Maximum	1	16	1	0.99
Minimum	1	5	0.06	0.08
Jarque-Bera	NA	4.25	1.79	57.87
Probability	NA	0.12	0.41	0
Observations	42	42	42	42

Source: Researchers’ Compilation (2015)

The results of the descriptive statistics of variables are reported in table 1 above. The results showed that the average environmental reporting (ENVREP) for the sampled period under consideration is 1. While the maximum and minimum ENVREP is respectively 1 and 1. This result is expected since the data on ENVREP is a dummy variable representing whether environmental activities were reported or not. So the expected statistical values are 1 for mean, minimum and maximum respectively. The value of board size (BSIZE) is another important variable in our study. The average value of BSIZE is 9. But it recorded minimum and maximum values of 5 and 16 respectively. The minimum and maximum values of audit committee independence (ACCIND) are 0.06% and 1% respectively. On the average, ACCIND is 0.55%. Our final variable under this consideration is ownership consideration (OWNCON) which has 0.85%, 0.99% and 0.08% for mean, maximum and minimum respectively. Aside the mean values, the Jarque Bera statistics and most of the associated probabilities indicated that the distribution of the variables assumes a normal shape.

Table 2: Correlation Matrix

Correlation t-Statistic Probability	ENVREP	BSIZE	BIND	ONWCON
ENVREP	1.000000 ----- -----			
BSIZE	0.201913 2.439306 0.0160	1.000000 ----- -----		
BIND	0.234471 2.853856 0.0050	0.161735 0.955653 0.3460	1.000000 ----- -----	
ONWCON	0.094544 1.123691 0.2631	-0.282988 -1.720416 0.0944	-0.086803 -0.508064 0.6147	1.000000 ----- -----

Source: Researchers' Compilation (2015)

In an attempt to explore the relationship between variables used in the study, we carried out correlation analysis using Pearson product moment correlation method. The table 2 above shows the relationship of how the variable relate to one another in the sampled data gathered from our sampled firms. The table shows that the co-efficient of correlation of a variable with respect to itself is 1.000. This indicates that there exists a perfect correlation between a variable with respect to itself. The result also showed that there exist a high positive relationship between board size (BSIZE) and board independence (BIND) with environmental reporting (ENVREP). This means that the strength of relationship between BSIZE and BIND with ENVREP are quite strong. But ownership concentration (OWNCON) had negative relationship with environmental reporting (ENVREP). The statistical implication of this is that BSIZE and BIND had significant relationships with ENVREP since they had p-values >0.05 but OWNCON had p-value < 0.05.

Table 3: Estimation of variables

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.000000	1.60E-15	6.26E+14	0.0000
BSIZE	2.50E-15	1.62E-15	1.546871	0.1147
BIND	1.68E-16	6.87E-16	0.245140	0.0183
ONWCON	5.83E-15	1.03E-15	5.654390	0.8079
R-squared	0.370827	Mean dependent var		16.63380
Adjusted R-squared	0.350627	S.D. dependent var		2.335295
S.E. of regression	2.275412	Akaike info criterion		4.509964
Sum squared resid	714.4950	Schwarz criterion		4.593227
Log likelihood	-316.2074	Hannan-Quinn criter.		4.543799
F-statistic	3.506374	Durbin-Watson stat		1.701912
Prob(F-statistic)	0.017144			

Source: Researchers' Compilation (2015)

From the pooled ordinary least square (OLS) regression result above on table 3, it was observed that the goodness of fit for the model is rather impressive. The results show that about 37 percent of the systematic variations in environmental reporting (ENVREP) are explained in the model. The model has a fairly good explanatory capacity. The F-value of 3.5 shows the overall significance of the entire model. The F-value in the result is significant at the 10 percent level.

The result reveals that board size (BSIZE) is statistically significant at 5%. Also, board independence (BIND) is statistically significant at 5% level. However, ownership concentration (OWNCON) is statistically insignificant. The sign of the coefficients of the variables are all positive. The Durbin Watson with a value of 1.7 indicates the absence of first order autocorrelation in the model.

Discussion on Findings

Considering the individual probability values of the explanatory variables, the findings made from the empirical analyses are: Board size (BSIZE) has significant and positive relationship with environmental reporting (ENVREP) in Nigeria. Since the probability value of BSIZE passes that significance test at the five percent level of significance hence, we accept the alternative hypothesis that board size has a significant effect on environmental reporting. What this means is that, board size is a significant determinant of environmental reporting. This goes to show that firms with large board of directors that have sustainable initiative will enhance environmental reporting. The findings of studies of Beredugo & Mefor (2012) and Uwuigbe & Jimoh (2012) support our finding in relation with board size.

Next board independence (BIND) has a significant and positive relationship with environmental reporting (ENVREP) in Nigeria. On account of the test of hypothesis on table 3 above, the probability value of BIND passes that significance test at five percent level. Therefore, we accept the alternative hypothesis that board independence has a significant positive impact on environmental reporting. What this outcome means is that independent directors influence environmental reporting among Nigeria firms. The studies of Oba & Fodio, (2012) and Johnmani (2013), also found a positive relationship between board independence and environmental reporting. The result also shows that ownership concentration (OWNCON) has insignificant and negative relationship with environmental reporting (ENVREP) in Nigeria. Following from our test of hypothesis (Table 3 above), the probability value of OWNCON fails that significance test at five percent level. Therefore, we accept the null hypothesis that ownership concentration does not have positive significant relationship with environmental reporting. What this means is that ownership concentration does not influence environmental reporting. The finding of this study in relation with ownership concentration is in line with that of Oba & Fodio (2012) but negates that of Ogbechie (2010)

5. Conclusion and Recommendation

This paper examines the effect of corporate governance on environmental reporting. Corporate governance here is examined from the perspective of board size, independence and audit committee independence. Also, the focus of ownership concentration as examined from the annual reports is on managerial ownership concentration.

The result of the analysis conducted reveals that audit committee independence, board size, board independence and ownership concentration have positive relationship with environmental reporting. This means that the higher the level of audit independence, board size and audit committee independence, the higher the of environmental reporting quality. These findings support the work of (Ienciu, 2012) who in his study established that board size and independence are factors that significantly explain the level of environmental reporting and another work by (Mohiuddin & Karbhari, 2010) which concluded that audit committee is a mechanism that improves financial reporting. The research findings also indicate that managerial ownership has a positive impact on environmental reporting. In addition to this, in the course of examining annual reports of oil and gas companies, it was discovered that a lot of the companies show very little on environmental reporting and there are no stringent guidelines for these reports.

Based on these findings, it is therefore recommended that, companies who want to improve their level of environmental reporting should pay closer attention to corporate governance mechanisms (board size, independence, and audit committee independence as a means of improving on the quality of environmental reporting. Also, regulatory bodies of financial reports in Nigeria should come up with a form of uniform and mandatory guideline for oil and gas companies to follow in environmental reporting.

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