



Determinants of Socio-Environmental Reporting of Quoted Companies in Nigeria

Adekanmi Aderemi Daniel¹, Adedoyin Ramat Adewumi², Adewole Joseph Adeyinka³

^{1,2}Department of Accounting, College of Management and Social Sciences, Oduduwa University, Nigeria.

³Department of Banking and Finance, College of Management and Social Sciences, Oduduwa University, Nigeria.

Abstract

The quest for sustainability has caused the corporate body to realize that the world is on the brink of a potential crisis from the combined effects of social and environmental damages. This study examined the determinants of socio-environmental accounting of listed firms in Nigeria. This was with a view to providing information on how socio-environmental accounting could be employed to enhance firms' sustainability. Secondary source of data collection was employed for the study. Purposive sampling technique was used to select a sample of 50 firms listed on the main board of the Nigerian Stock Exchange based on availability of their annual reports from 2005 to 2013. Both quantitative and qualitative data were sourced. Data collected were analysed with the aid of descriptive statistics such as; mean, median; and inferential statistics using ordinary least square regression analysis. The study found that firms size ($t=10.3263$; $p<0.05$) profitability ($t=7.6913$; $p<0.05$) and number of analysts analyzing the firms ($t=2.4684$; $p<0.05$) were the three major factors that had positive influence on socio-environmental reporting of listed firms in Nigeria. However, socio-environmental performance had significant ($t=-3.3508$; $p<0.05$) negative influence on socio-environmental reporting in Nigerian quoted companies. The study concluded that socio-environmental accounting could be employed to enhance sustainable business practice in quoted companies.

Keywords: Socio-Environmental Accounting; Firms' Sustainability; Nigeria.

1 Introduction

Corporate public reporting of financial statements dates back to the 1850s, (ACCA, 2004). At that time, reporting on social and environmental issues were not so embedded in the corporate financial report. The presentation of financial statement information by management only included financial accounting aspect of the entity. According to Rajapakse and Abeygunasekera (2006), the traditional approaches to accounting by corporate entities only focused on their economic operations, with their main activities affecting the economy through operations in the market.

However, the concept of social and environmental reporting was added by the corporate entities to their public reports from the mid-1980s (Campbell, 2009). Campbell, (2009) stated that this was the period when the concept of social and environmental accounting began and civil societies vehemently argued that there was a moral case for organizations to report and account for impact of their activities on social and natural environments. This was as a result of the quest for sustainability; to avert pending crises on natural capital; a desire to create, maintain or repair the entity's societal legitimacy (Uwuigbe and Olayinka, 2011); a responsibility of management complying with regulatory requirements and to legitimize various aspects of their respective organisations (Basamalah and Jermias, 2005); to attract investment funds and to comply with borrowing requirements as well as meeting community expectations (Deegan & Blomquist, 2006); to gain competitive advantage and to be socially responsible (Hasnas 1998); and to manage powerful stakeholder groups (Ullman, 1985).

Social and environmental accounting is the process of communicating the social and environmental effects of the organizations' economic actions to particular interest groups within society, and society at large. It is also commonly referred to as corporate social responsibility reporting (Deegan, 2007). It can also be defined as an environmental

management strategy to communicate with stakeholders, hence corporate social and environmental reporting (CSER). The critical role of accounting becomes complex when corporations are the means to inform stakeholders on firm social and environmental responsibilities. Accounting and reporting system is also challenged by various regulatory environment and globalization perspectives under multiplicity of social, legal, political and cultural values. Accordingly, companies need to strive to aim for both economic and societal goals. The issues of social and environmental accountability of this paper contributes to the wider literature on corporate governance, accountability, transparency and responsibility in that it provides a way to think about the role of environmental accounting in developing economics.

Meanwhile, the quest for sustainability has caused the corporate body to realize that the world is on the brink of a potential crisis as a result of social and environmental damages. This has caused the emergence of many global institutions such as the United Nations' Protocols and Agreement on Environment, the Kyoto Protocol to the United Nations Framework on Climate Change with some of its offshoot, the EU Directive on Environmental Issues. Establishing various rules and policies that guide human interaction with the natural environment. All these have sought to provide a legal foundation for environmental disclosures (Enahoro, 2009).

Several studies have been carried out on the existence and the contents of social and environmental disclosure (e.g. Belkoui & Karpik, 1989; Cahan, 1992; Cahan et al., 1997; Crumbley, 2003; Ness & Mirza, 1991; Deegan, 2007). The position is that financial information through financial numbers are a lagging indicator of where a firm has been and should not be substituted for non-financial numbers as leading indicators of where the firm is going.

Disclosure of social and environmental information though not mandatory is regarded as best practice. However, any deviation from the best practice may give a bad signal to the society and the market because it implies a poor management of corporate social responsibility and impacts of the firm on the natural environment. Firms that intend to build a good image need to prove her shelf to be socially responsible by ensure that best practices are observed.

In Nigeria, the implementation and acknowledgement of corporate social and environmental reporting is relatively new and it has become more popular in recent time. The concept has also made popular due to the notorious environmental incidents in Nigeria, such as, an attempt in 1997 by a foreign company, acting through an agent, to dump toxic waste in the Niger Delta region. This event shocked the Federal Government of Nigeria and highlighted the gap in Nigerian environmental regulation. This led to the promulgation of Decree no. 42 of 1988 by the then Military Government. Hence, the decree made it a criminal offence for anyone to carry or dump any harmful waste within the entire land mass and waters of the Federal Republic of Nigeria. Also, the birth of agencies such as the Federal Environmental Protection Agency (FEPA) in 1988 and the National Environmental Standards and Regulation Enforcement Agency (NESREA) in 2007 strengthen environmental regulations in Nigerian. (Collins, 2009)

With reporting being such a central issue, this paper takes the essential desirability of social and environmental reporting as a crucial element in any well-functioning democracy. Hence, disclosure of social and environmental information is regarded as a powerful tool to re-educate society and business organization towards more sustainable modes of behaviour. It is in this context that this paper seeks to explore what determine social and environmental reporting in Nigeria. However, prior studies such as Belkaoui and Karpic (1989), Hackston and Milne (1996) Cormier and Magnan (2010) and examined the determinants of social and environmental disclosure in developed countries. To the best of our knowledge, none of the previous studies in Nigeria have considered the determinants of social and environmental reporting on the quoted companies in Nigeria, hence, this study is aim at identify the determinants of socio-environmental reporting of quoted companies in Nigeria.

2 Literature Review

2.1 Underlying Theory

This study uses the stakeholder theory as a theoretical background to develop an empirical framework for examining social and environmental accounting of listed companies in Nigeria. Stakeholder theory stated that 'the corporations continued existence requires the support of the stakeholders and their approval must be sought and the activities of the corporation adjusted to gain that approval (Chan, 1996). Stakeholder approach has been applied and relied in many accounting, management and finance literatures including Ullman (1985), Roberts (1992) and Gray, Owen and Maunders, (1987). The more powerful the stakeholders, the more company must adapt. Social disclosure is thus seen as part of the dialogue between the company and its stakeholders' (Gray, Kouhy and Lavers, 1995).

Gray, Owen and Maunders (1987) assert that stakeholders have the right to specific information for certain decision and they should be provided relevant information including environmental information. Stakeholders have the ability to control or affect the resources of corporations. This elucidates their power through their level of control they have over the resources. Stakeholder-corporation power relationship is not generic across corporations (Deegan, 2000). He also argued that power may take the form of command over limited resources such as finances and labour, access to influential media, ability to legislate against corporations or ability to influence corporations' consumption of goods and

services. Thus, the more critical the stakeholders' control is, the more likely companies will satisfy stakeholders' demand (Ullman, 1985).

Legitimacy theory implies that a corporation's activities must be legitimate in the eyes of society to allow it to continue. Legitimacy theory argues that organizations seek to ensure that they operate within the bounds and norms of society (Gray, Kouhy and Lavers, 1995; Tilt, 1999; Suchman, 1995). Companies require the support of stakeholders for its continue existence. If the company loses its legitimacy, then it will cease to exist.

Risk society theory implies that corporate activities pose great risk to the society; hence organization should device risk management mechanism for reducing anxiety, nurturing trust and engaging with stakeholders. Unerman and O'Dwyer (2004) and Solomon (2005) portrayed 'a society faced with high consequence Social, Ethical and Environmental (SEE) risks'. Solomon (2005), views this as another lens view to explain voluntary social and environmental reporting (SER). He explains that Giddens' (1990) and Lupton's (1999) works explain that 'society was becoming characterized increasingly by a decline in trust in institutions and organizations in general'.

In a nutshell, the accountability role on the right to receive information and the duty to supply it can help mitigate the potential conflicts that exist between the society and the corporate bodies. This study aims at examining the determinants of social and environmental reporting as one of the most important internal control mechanisms in conflict resolution between corporate body and various stakeholders.

2.2 Prior Research

The issue of social and environmental accounting has been strongly debated in the context of developed countries. It is only recently that attention turned to the study of social and environmental accounting in emerging countries. Porter and Linde (1995) found legal regulation as a factor that engenders corporate innovation among firms in their bid to remain environmentally sustainable according to regulation.

Johnston and Rock (2005) investigate whether companies identified as potentially responsible parties under the Comprehensive Environmental Response, Compensation and Liability Act (more commonly known as Superfund) appear to manipulate earnings to minimise their exposure to Superfund clean-up and transaction costs.

Deegan and Blomquist (2006) explore the influence of an initiative of WWF-Australia on the environmental reporting practices of the Australian minerals industry. Buhr (2001) uses the highly politicized passage of the North American Free Trade Agreement (NAFTA) and its environmental side agreement as a venue to explore the nature of accountability and environmental disclosure.

Turban and Greening (1997) examined the effect of corporate social performance on organizational attractiveness to prospective employees. Their finding shows that qualified employees are influenced by the social responsibility habits of their potential employers. This finding has positive implications for job satisfaction and productivity and should serve as a warning to companies in the present competitive labour market wherein the quality of a company's employees forms a vital part of its value and competitive strategy as well. Mackinlay (1997) finds no strong relationship between economic performance and corporate social and environmental investment. While some companies may start reaping benefits within a short period, others may experience economic gain only after a long period.

Lars and Henrik (2005) investigated the effect of environmental information on the market value of listed companies in Sweden using a residual income valuation model. The results show that environmental responsibility as disclosed by sampled companies has value relevance, since it is expected to affect the future earnings of the listed companies. Their finding has implications for companies that pollute the environment – their future solvency may be eroded with gradual depletion in earnings.

Clause and Rikhardsson (2008) studied the effect of environmental investment on investment decisions. The results suggest that environmental information disclosure influences investment allocation decisions. This finding imply that companies that are apathetic to their environmental responsibility might experience eventual crashes on their stock price if their investors are rational in considering the future value of the firm based on its present state of environmental responsibility.

Murray (2010) studies companies' social and environmental activity: social disclosure, social performance and financial performance of the UK's largest companies, findings of this study revealed that social and environmental issues are of limited interest to markets except where they can be identified as relevant in terms of risk or governance. It also confirmed that there is a strong Public Relation motivation in releasing social and environmental reports, which has little to do with improving performance.

Cormier and Magnan (2010) studied the informational contribution of social and environmental disclosures for investors. They investigate whether social disclosure and environmental disclosure substitute or complement each other in reducing information asymmetry between managers and investors, taking into account a firm's environmental performance and governance attributes. They found that social disclosure and environmental disclosure substitute each other in reducing

stock market asymmetry. Their results also shown that reduction in share price volatility is higher for economic (hard) environmental disclosure than for generic (soft) environmental disclosure.

Correa-Ruiz and Moneva-Abadía (2011) studied special issue on social responsibility accounting and reporting in times of ‘sustainability Downturn/crisis’ it was found that economic downturn and crisis could be further eroding social and environmental concerns and values, the notion of sustainability crisis provides an interesting starting point to reflect on the role of Social and Environmental Accounting Research. Lack of humanity and values, short term economic approach, institutional capture and misunderstanding and misuse of democracy, have all served as catalysts of sustainability downturn and crisis.

Collins (2009) studied environmental responsibility and firm performance; it was found that sustainable practices of the ‘responsible’ firms are significantly related with firm performance. It was also found that, sustainable practices are inversely related with fines and penalties. It was concluded that, sustainability affects corporate performance and sustainability may be a possible tool for corporate conflict resolution as evidenced in the reduction of fines, penalties and compensations.

Faboyede (2011) examined environmental protection and sustainability reporting: It found that assurance about a company’s financial projections and nonfinancial information (customer satisfaction, employee retention, or environmental reporting) and the integrity of the information through XBRL enhance the effectiveness and efficiency of resource allocation, increase income and welfare, as well as achieve the objective of an environmentally sound management which encompasses increasing eco-efficiency, reducing environmental impact, and increasing company value added. It recommends that Nigeria and the developing countries should embrace the XBRL technology as they cannot afford to be left behind by the fast spreading current worldwide future reporting standard.

Enyi (2012) studied environmental and social accounting as an alternative approach to conflict resolutions in a volatile and e-business environment, it stated that though profits and improvements in world social welfare are the main reasons for industrialization, as governments and business owners are striving to solve one social problem or the other, these same solution processes scoop up other problems along the line which inadvertently breed conflicts and confrontations between the host communities and the owners and operators of the organizations attempting the solution. It was found that a lot could be done to douse the resulting conflagration and pacify those directly affected by applying palliative and preventive remedies using the process of environmental and social accounting aspects of corporate social responsibility (CSR) policies as a tool.

To the best of our knowledge, none of the previous studies in Nigeria have considered the determinants of social and environmental reporting on the quoted companies in Nigeria and this is the main emphasis of this study.

3 Methodology

3.1 Population and Sampling

From the total population of 75 manufacturing firms listed in the main board on the Nigerian Stock Exchange (NSE), a sample of 50 firms were purposively selected for analysis. The choice of manufacturing firms is base on the fact that their activities impact most on the environment. Companies, whose financial reports were not up to date or were delisted before December, 2013 were also excluded. As a result, the final sample set consists of 50 firms over a period of 9 years.

3.2 Data Collection Procedure

Secondary data were sourced for this study. Both qualitative and quantitative data were sourced from the Annual Reports of the selected quoted manufacturing companies in Nigeria. Data collected were analyzed using inferential statistics.

3.3 Model Specification

Cormier and Magnan (2010) empirical model will be employed in a modified form. The specific model adopted is stated as follow:

$$\text{SER}_{it} = \beta_0 + \beta_1 \text{FFT}_{it} + \beta_2 \text{SEP}_{it} + \beta_3 \text{AFL}_{it} + \beta_4 \text{LVG}_{it} + \beta_5 \text{PFT}_{it} + \beta_6 \text{FSZ}_{it} + \beta_7 \text{GVC}_{it} + \text{eit} \dots \dots \dots \text{equation 3.1}$$

Where:

- SER = Socio-environmental Reporting.
- FFT = Free Float.
- SEP = Socio-environmental Performance.
- AFL = Analyst Following.

LVG	=	Leverage.
PFT	=	Profitability.
FSZ	=	Firm Size.
GVC	=	Governance.
e	=	Error term.
t	=	Time period.
i	=	Cross section dimension and ranges from 1 to N
β_0	=	Intercept
$\beta_1 - \beta_7$	=	Coefficient for independent variables
$\beta_1, \beta_3, \beta_5, \beta_6$	> 0,	$\beta_2, \beta_7, < 0$ and β_4 ?

3.4 Measurement of Variables

Social and Environmental Reporting (SER): This is aggregate score of voluntary social and environmental reporting and is proxy of social and environmental accounting.

Free Float: Issued and fully paid share less share closely held.

Leverage: Long-term debt

Total assets

Profitability: Profit after tax

Analyst Following: Number of analysts monitoring the firm.

Firm Size: Total assets

Socio-environmental Performance: Community involvement, Product development and environment, employee health and safety, product safety, Socio-environmental protection.

Governance: Proportion of outside director to total director and separation office of Chairman and Chief Executive Officer.

4. Data Analysis

4.1 Unit-Root Estimations

Since panel data model is adopted in this study, there is a need to carry out unit-root test to determine the degree of stationary of the variables in the model. Evidenced from Table 4.1 almost suggest that all the variables included in our model are stationary at level, that is $I(0)$, except for the few of them that are integrated of order one, $I(1)$ and they are Governance, Socio-environmental Performance and Socio-environmental Reporting.

Table 4.1: Unit Root Tests

Variable	Augmented Dickey-Fuller (ADF)		Philip Perron (PP)	
	Level	First Difference	Level	First Difference
AFL	71.1246 ^b	104.117 [*]	37.8565 ^b	104.901 [*]
FFT	91.1709 ^{a*}		93.3230 ^{a*}	
FSZ	83.3297 ^{b**}		68.0951 ^b	106.667 ^{a*}
GVC	-1.91093 ^{b***}		94.0588 ^{b*}	
LVG	96.4712 ^{a*}		99.1510 ^{a*}	
PFT	85.8920 ^{a**}		77.3596 ^{a**}	
SEP	81.3722 ^{a*}		69.1324 ^{a**}	
SER	72.6912 ^{b***}		141.744 ^{a*}	

Source: Results obtained from data analysis using EViews statistical package

Note: Note: ^a Indicates a model with individual effects but without individual liner trend; ^b is the model with individual effect and individual linear trend as probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. *, **, *** imply that the series is stationary at 1%, 5% and 10% respectively.

4.2 Descriptive Statistics

Table 4.2 summarizes the basic statistics features of the data under consideration. The reported statistics include the mean, median, maximum, minimum and standard deviation. These provide historical background for the behavior of the data. A critical examination of the descriptive statistics for the dependent and explanatory variables reveals several issues. There seem to be evidence of significant variation as shown by the huge difference between the minimum and maximum values of some of the variables under consideration.

Generally, from the 400 observations as seen in table 4.2, the average socio-environmental reporting (SER) for the sample as a whole is 248000. This high value reflects the impact of a relatively small number of very large corporate conglomerates that control a large percentage of the Nigerian's public corporations. Most of these conglomerates maintain high socio-environmental reporting.

A review of the variables of influence shows that leverage (LVG) has a low mean at 0.16. This implies that the total liabilities of the firms reviewed on average amount to about 16 percent of total assets value. Examining the free float (FFT), the reported mean value of 1490000 for Nigerian firms is high. Based on this, it can be stated that quoted companies in Nigeria make available a large proportion of their equity for trading at the exchange. A review of analyst following (AFL) revealed that the reported mean is high at 322 indicating that a high percentage of market analysts are continually analyzing the information release to the public by the companies for informed investment decision. Meanwhile, a review of socio-environmental performance (SEP) shows a reported minimum value of 0 indicating that most Nigeria firms have a weak socio-environmental practice which could be as a result of low socio-environmental orientation and absence of mandatory disclosure in the annual report. An examination of profitability (PFT) shows that the reported mean is high at 2780000 indicating that most firms have profit making capability this could be as a result of the good business environment and viable business investment projects. Review of firm size (FSZ) shows that the reported mean is high at 2420000 indicating that Nigeria firms have a relative size in term of asset base. Examining the governance (GVC) variable the reported mean value is high at 0.68, indicating that Nigerian firms observe code of corporate governance.

Looking through the standard deviation (SD), which measures the level of variation of the variables from their mean value, reveals that the most volatile of the variables examined is socio-environmental performance with 103260. The least volatile, which is the most stable variable, is leverage with a S.D of 0.13, followed by governance 0.15, free float 1.67, firm size 3.42 profitability 5.72 and analyst following 61.90.

Table 4.2: Descriptive Statistics for Model 1

Variables	Obs	Mean	Median	Std. Dev.	Minimum	Maximum
AFL	400	321.617	286.50	61.8994	246.000	391.000
FFT	400	1490000	971000	1.6700	246663	7560000
FSZ	400	2420000	873000	3.4200	885150	2540000
GVC	400	0.6817	0.6667	0.1487	0.3333	1.0000
LVG	400	0.1639	0.1335	0.1287	0.0164	0.829647
PFT	400	2780000	724000	5.7200	-2950000	3840000
SEP	400	74574.22	42500	103260.5	0.0000	816000
SER	400	248000	71800	3.5400	57850	2400000

Source: Results obtained from data analysis using EViews statistical package.

4.3 Correlation Matrix

The result of correlation analysis of the relationship among the variables is reported in Table 4.4. Data in the table shown that, the relationship between AFL and FFT was positive (0.1123), this result shown that as more as more analyst are monitoring the firm, more shares were made available for public.

Surprisingly, the relationship between FSZ and PFT was high and positive (0.8096) which indicate that as the firm increase in size in term of assets it resulted in more profit to the firm. Meanwhile, the relationship between GVC and LVG was found to be negative (-0.0479), this result shown that increase in board size resulted in decrease leverage. Moreover, a positive (0.4062) association between SEP and SER was found this indicate increase socio-environmental performance resulted in increase socio-environmental reporting.

Table 4.3: Correlation Matrix

Variables	AFL	FFT	FSZ	GVC	LVG	PFT	SEP	SER
AFL	1							
FFT	0.1123	1						
FSZ	0.2191	0.5532	1					
GVC	0.0539	-0.2336	-0.0692	1				
LVG	0.0997	-0.0649	0.1864	-0.0479	1			
PFT	0.1648	0.5831	0.8096	-0.0739	0.1324	1		
SEP	0.1489	0.2722	0.5191	-0.0471	0.0566	0.4594	1	
SER	0.1654	0.5816	0.8225	-0.1856	0.1713	0.8203	0.4062	1

Source: Results obtained from data analysis using EViews statistical package

5. Results

5.1 Results of Regression and Descriptive Statistics

We used the panel data regression analysis to investigate the impact of explanatory variable on dependent variable. The result from the regression equation is shown in table 4.5. The equation in model 1 employs socio-environmental reporting as dependent variable while analyst following, social environmental performance, free float, leverage, profitability, governance and firm size are the independent variables. Meanwhile, the results given by the random effects

model were used as the Hausman test shown that it gives better results and consistent result with most prior studies. The variables are significant at ($p < 0.05$) otherwise not significant.

From the results in table 4.5, free float has positive but non-significant ($t=0.1044$, $p > 0.05$) influence on socio-environmental reporting this positive relationship conform to the a priori result ($\beta_2 FFT_t > 0$), socio-environmental performance has a negative and non-significant ($t=-3.3508$, $p > 0.05$) influence on SER, the negative relationship conform to the a priori ($\beta_4 SEP_t < 0$), analyst following has a positive and significant ($t=2.4684$, $p < 0.05$) influence on socio-environmental reporting this positive relationship conform to the a priori result ($\beta_3 AFL_t > 0$), leverage has positive but non-significant ($t=0.7123$, $p > 0.05$) influence on socio-environmental reporting meanwhile no directional prediction is made for this variable. Profitability has a positive and significant ($t=7.6913$, $p < 0.05$) influence on socio-environmental reporting the positive relationship conform to the a priori result ($\beta_5 PFT_t > 0$), firms size has a positive and significant ($t=10.9806$, $p < 0.05$) influence on socio-environmental reporting the positive relationship conform to the a priori result ($\beta_6 FSZ_t > 0$), governance has a negative and non-significant ($t=-1.087$, $p > 0.05$) influence on dependent variable, the positive relationship conform to the researcher expectation.

The adjusted R^2 is satisfactory; it indicates that about 69% of change in socio-environmental reporting is explained by the explanatory variables. The F-statistics of about 77 also suggest that the independent variables are jointly significant in explaining the performance of SER. Durbin-Watson (DW) statistics also indicate that the regression equations are significant. The Hausman test further indicates that the regression equation is free from the problem of autocorrelation. The implication of this is that the estimated equation can be relied upon in making valid inference about the influence of the explanatory variables on the market performance of Nigerian firms.

Table 5.1: Panel Models Regression Result for Model 1
Dependent Variable: Socio-Environmental Reporting (SER)

Independent Variables	Random Effects				Fixed Effects			
	Coefficient	Standard Error	t-Stat.	p-value	Coefficient	Standard Error	t-Stat.	p-value
Constant	6.59	5.45	1.2078	0.0673	6.88	4.65	1.4802	0.0751
FFT	0.0091	0.0879	0.1044	0.081	-0.1198	0.0976	-1.2273	0.0784
SEP	-2160.113*	644.6484	-3.3508	0.6125	-2149.977*	649.558	-3.309	0.8012
AFL	210250.2**	851752	2.4684	0.0021	2849831.0*	878012	3.2457	0.0314
LVG	3.92	5.5	0.7123	0.0714	2.93	5.62	0.5202	0.6532
PFT	0.1655*	0.0215	7.6913	0.0042	0.1524*	0.02205	6.9152	0.0024
FSZ	0.0422*	0.0038	10.9806	0.0324	0.0405*	0.00393	10.3263	0.0253
GVC	-6.13	5.64	-1.087	0.8612	-3.45	5.81	-0.5945	0.6753
Goodness of fit:	No. of Observation (240)				No. of Observation (240)			
	Adjusted R ² (0.69)				Adjusted R ² (0.96)			
	F-Statistic (76.671)*				F-Statistic (140.014)*			
	D. W. Statistic (0.989)				D. W. Statistic (0.905)			
	Hausman X ² test (15.636)**				Hausman X ² test (480.60)*			

Source: Results obtained from data analysis using EView statistical package

Note: *, **, *** indicates significant at 1%, 5% and 10% respectively.

6 Discussion

6.1 Discussion on the Findings

In line with a prior expectation earlier formulated and against which this study is anchored, in this section, we subject this proposition to empirical testing drawing from the results of our descriptive and inferential statistical analyses. Our decision rule is based on the direction of the relationship and the significances of the t-statistics. From the hypothesis social and environmental variables of influence are predicted not to have any significant influence on socio-environmental reporting. However, from the regression results in table 4.5, the Coefficient of the FFT as expected has a positive relationship with SER. This shows that ownership structure can determine the level of monitoring and, thereby, the extent of disclosure. This is consistent with finding of Hope (2003) and Roe (2003). This may provide support for risky society theory that, society was becoming characterized increasingly by a decline in trust in institutions and organizations in general, it was this decline in trust which was exaggerating the level of risk in society'; and that 'reducing perceived growth in society risk was rebuilding trust as a means of risk reduction. (Solomon, 2005).

Further to the researcher expectation the coefficient of SEP has a negative and significant relationship with socio-environmental reporting. Meanwhile, this finding is consistent with prior studies on legitimacy; theory Patten (2002a), Aerts and Cormier (2009) and Cormier and Magnan (2010). The coefficient of AFL is has a positive and significant relationship with socio-environmental reporting. This finding is consistent with the finding of previous studies such as Lang and Lundholm (1996). Furthermore, it may provide support for legitimacy theory that a corporation's activities must be legitimate in the eyes of society to allow it to continue; in the doomsday scenario, if the company loses its legitimacy, then it will cease to exist. It presupposes a relationship of understanding between different parties and reciprocal responsibilities. 'Organizations operate within certain bounds imposed by society in order to enjoy continued access to products and resource markets' (Campbell, Craven and Shrive, 2003).

Coefficient of leverage has a positive but non-significant relationship with socio-environmental reporting. This is consistent with Roberts (1992), Richardson and Welker (2001), Eljido-Ten (2004) and Clarkson, Li, Richardson and Vasvari (2008). This shows that socio-environmental reporting increase with increase in leverage. Furthermore, it may provide support for stakeholder theory that the corporations continued existence requires the support of the stakeholders and their approval must be sought and the activities of the corporation adjusted to gain that approval. The more powerful the stakeholders, the more company must adapt. Social disclosure is thus seen as part of the dialogue between the company and its stakeholders (Gray, Kouhy and Lavers, 1995).

Coefficient of the profitability as expected has highly significantly and positively related to socio-environmental reporting. This confirm that firms with superior earnings performance have a higher propensity to reveal their socio-environmental. This is in conformity with Mills and Gardner (1984), Cochran and Wood (1984), McGuire, Sundgren and Schneeweis (1988), Cormier and Magnan (2003) and Murray, Sinclair, Power and Gray (2006) that document that firms with consistently higher returns tend to have higher levels of total and voluntary social and environmental disclosure. Coefficient of firm size as expected has positive and significant relation with socio-environmental reporting. Firm that are bigger in size demonstrate a high positive level of socio-environmental reporting. This is consistent with prior evidence which shows a positive relation between the extent of corporate disclosure and firm size (Scott, 1994; Neu, Warsame and Pedwell, 1998 and Cormier and Magnan, 2010). Coefficient of governance has a significant and negative relation with socio-environmental reporting. This is in conformity with researcher expectation and prior study (Cormier and Magnan, 2010). We accept the alternative hypothesis that socio-environmental variables of influence have significant impact on socio-environmental reporting.

7 Conclusion

The context in which this study is placed is of supreme importance. It revolves around issues of moral choices and ethical behaviour. The world is facing an impending crisis brought about by climate change. What has to be emphasized is that the science has been clear for some time. There has being a very strong linkage of climate change with industrial activities. There is little dispute now, if we continue to 'business as usual', there will be, in the latter part of this century, massive destabilization of the global geo-political and economic system. Massive potential changes, economic downturns equal or greater to what was witnessed in the fiscal crisis of 2008-2009 are easy to foresee. It is likely because we can predict with some certainty that populations will rise, that sea levels will rise, that rainfall patterns will change, that deserts will increase in size, and therefore that the proportion of fertile land left to sustain this growing global population will diminish. This is likely to result in global economic destabilization.

This study concludes that most companies in Nigeria majorly disclose information related to socio-community development, products, consumers and employees. It was observed that the social and environmental reporting of these companies contains little quantifiable data. This provide further evidence that socio-environmental reporting in Nigeria is still very ad-hoc, general and self-laudatory in nature. This provides some preliminary evidence that socio-environmental reporting in Nigeria represent attempts by companies to improve their corporate image and present themselves as responsible corporate citizens. Conclusively, to guarantee firms sustainability and enhance eco-efficiency these findings

imply that some form of regulatory intervention is crucial as voluntary disclosure alone is not enough to result in a high quality and sufficient levels of socio-environmental reporting.

7.1 Limitation and Recommendation for Future Study

Based on the objectives of this study, the analysis was limited only to the regression analysis in order to understand the influence of socio-environmental factors namely; free float, socio-environmental performance, analyst following, leverage, profitability, firm size and governance. Therefore, this study recommends the introduction of primary data gathered by the use of questionnaire and interview on other variable such as origin of the company; mandatory disclosure; media influence, in order to better explain the variation in the influence of socio-environmental factors on the socio-environmental reporting among quoted companies. Also, the study only focused on manufacturing companies without consideration to other non-manufacturing companies such as companies in the financial sector. It is believe that study on companies in the financial sector with a view to validate and increase the generalization of the finding obtained in this study.

In line with the findings of this study, the following recommendations are made: there is need for stakeholder engagement which is a well accepted corporate practice that helps inform business decision making by taking into account potential impact on, and influence of, different groups of people. Engaging stakeholders in dialogue on the socio-environmental elements of the business helps accountants determine the materiality of the issues and whether they create risks to or opportunities for the sustainability of the business which should be disclosed. This process does not abrogate any decision making from the business owners. Understanding the needs and interests of stakeholder groups should also ensure that any reporting will meet those needs; statutory disclosure of social and environmental information is fast becoming the practice in the developed nations, the Federal Ministry of Environment and other regulatory agencies in Nigeria, should formulate statutory requirements for corporations to comply with. This will facilitate socio-environmental accounting and general corporate social responsibility to enhance society and environment; global, national and industry specific voluntary codes have been developed to encourage businesses to adhere to certain standards. The Financial Reporting Council of Nigeria should accommodate the growing awareness in social environmental accounting and formulate disclosure requirements; as part of activities toward ensuring sustainable business practice, both Securities and Exchange Commission (SEC) and Nigerian Stock Exchange (NSE) should mandate companies to establish environmental, social, health and safety committee. This will enhance socio-environmental accounting and general corporate social responsibility.

REFERENCES

- [1] ACCA (2004). Report Summary: The State of Corporate Environmental and Social Reporting in Malaysia 2004. Kuala Lumpur, ACCA Malaysia Sdn. Bhd.: 1 - 25.
- [2] ACCA (2004). Towards Transparency: *Progress on Global Sustainability Reporting*. London: Certified Accountants Education Trust.
- [3] ACCA, AccountAbility and KPMG (2009). Accounting Sustainability Briefing: *ACCAUK*.
- [4] ACCA, FAUNA & FLORA International and KPMG (2012). An evaluation of the relevance of biodiversity and ecosystem services to accountancy professionals and the private sector: *www.flogo-design.co.uk*.
- [5] Aerts, W. and Cormier, D. (2009). "Media Legitimacy and Corporate Environmental Communication". *Accounting, Organizations and Society*, 34 (1), 1-27.
- [6] Basamalah, A. S. and Jermiah, J. (2005). Social and Environmental Reporting and Auditing in Indonesia: Main Training organisational Legitimacy? *Gadjah Mada International Journal of Business*, 7(1), 109– 127.
- [7] Belkaoui, A. and Karpic, P. G. (1989). "Determinants of the Corporate Decision to Disclose Social Information". *Accounting, Auditing, and Accountability Journal*, 2 (1), 36-51.
- [8] Buhr, N. (2001). "Corporate silence: environmental disclosure and the North American free trade agreement". *Critical Perspective on Accounting*, 12 (3), 405-421.
- [9] Cahan, S. F. (1992). The effect of antitrust investigations on discretionary accruals: A refined test of the political-cost hypothesis. *The Accounting Review*, 67(1), 77-95.
- [10] Cahan, S. F., Chavis, B. M. and Elmendorf, R. G. (1997). Earnings management of chemical firms in response to political cost from environmental legislation. *Journal of Accounting, Auditing and Finance*, 12(1), 37-65.
- [11] Campbell, D., Craven, B. and Shrivess, P. (2003). "Voluntary social reporting in three FTSE sectors: a comment on perception and legitimacy". *Accounting, Auditing and Accountability Journal*, 18(4), 3-19.
- [12] Campbell, D. (2009). Risk and environmental auditing. *ACCA student accountant*.

- [13] Chan, N. (1996). A stakeholder theory perspective to Corporate Environmental Disclosures, *Journal of Contemporary Business*, vol. 3 No. 3, pp 27-33.
- [14] Clarkson, P., Li, Y., Richardson, G.D. and Vasvari, F.P. (2008). "Revisiting the Relation between Environmental Performance and Environmental Disclosure: An Empirical Analysis". *Accounting, Organizations and Society* 33, 303-327.
- [15] Clause, H. and Richardson, P., (2008). "Experience and Novice Investors: Does Environmental Information influence investment Allocation Decisions". *European Accounting Review*, 22, 4-17.
- [16] Cochran, P. and Wood, R. (1984). "Corporate Social Responsibility and Financial Performance". *Academy of Management Journal*, 7, 42-56.
- [17] Collins, C.N. (2009). "Environmental Responsibility and Firm Performance: Evidence from Nigeria". *International Journal of Human and Social Sciences*, 4 (6), 2-7.
- [18] Cormier, D. and Magnan, M. (2003). "Environmental Reporting Management: A European Perspective". *Journal of Accounting and Public Policy*, 22, 43-62.
- [19] Cormier, D. and Magnan, M. (2010). "The Informational Contribution of Social and Environmental Disclosures for Investors". *Accounting, Auditing & Accountability Journal*, 1 (6), 2-39.
- [20] Correa-Ruiz, C. And Moneva-Abadía, J. M. (2011). "Special Issue on Social Responsibility Accounting and Reporting in Times of 'Sustainability Downturn/Crisis'". *Revista de Contabilidad- Spanish Accounting Review*, 14, 3-21.
- [21] Crumbley, D. L. and Mitra, Santanu (2003). Earnings management and politically sensitive environments: another test of corporate response to political costs *Accounting and Financial Management Journal*, 22(3), 1-24.
- [22] Deegan, C. (2000). *Financial Accounting Theory*. Sydney, McGraw Hill Book Company.
- [23] Deegan, C. and Blomquist, C. (2006). "Stakeholder influence on corporate reporting: An exploration of the interaction between WWF-Australia and the Australian minerals industry". *Accounting, Organizations and Society*, 31 (4-5), 343-372.
- [24] Eljido-Ten, E. (2004). "Determinants of environmental disclosure in a developing country: an application of stakeholder theory". *Paper presented to the Fourth Asia Pacific Interdisciplinary Research in Accounting Conference (APIRA)*, Singapore, 4th-6th July.
- [25] Enahoro, J.A. (2009). Design and Bases of Environmental Accounting in Oil & Gas and Manufacturing Sectors in Nigeria. An Unpublished Ph.D Thesis submitted to the Department of Accounting, Covenant University Ota, Nigeria.
- [26] Enyi, P. E. (2012). "Environmental and Social Accounting as an Alternative Approach to Conflict Resolutions In A Volatile and E-Business Environment." *Journal of Sustainable Development and Environmental Protection*, 4 (2), 1-7.
- [27] Faboyede, O. S. (2011). "Environmental Protection and Sustainability Reporting: Extensible Business Reporting Language (XBRL) Interactive Data to the Rescue". *Journal of Sustainable Development and Environmental Protection*, 1 (2), 1-16.
- [28] Gray, R. H., Owen, D.L. and Maunders, K.T. (1987). *Corporate Social Reporting: Accounting and accountability*. Hemstead: Prentice Hall Hemel.
- [29] Gray, R., Kouhy, R. and Lavers, S. (1995). "Corporate social and environmental reporting, A review of the literature and a longitudinal study of UK Disclosures". *Accounting, Auditing and Accountability Journal*, 8(2), 47-77.
- [30] Gray, R., Kouhy, R. and Lavers, S. (1995). "Methodological themes – constructing a research database of social and environmental reporting by UK". *Accounting, Auditing and Accountability Journal*, 8 (2), 78-101.
- [31] Hasnas, J. (1998). The Normative Theories of Business Ethics: A Guide for the Perplexed. *Business Ethics Quarterly*, 8 (1), 19-42.
- [32] Hope, O.K. (2003). "Disclosure Practices, Enforcement of Accounting Standards and Analysts" Forecasts Accuracy: An International Study". *Journal of Accounting Research*, 41 (2), 273-272.
- [33] Johnston, D. and Rock, S. (2005). "Earnings management to minimize superfund clean up and transaction costs". *Contemporary Accounting Research*, 22 (3), 617-642.

- [34] KPMG (1996). International Survey of Corporate Responsibility Reporting 2006. *Amsterdam:KPMG International*.
- [35] Lang, M. and Lundholm, R. (1996). "Corporate Disclosure Policy and Analyst Behaviour". *The Accounting Review*, 71 (2), 467-492.
- [36] Lars, H. and Henrik, N. (2005). "The Value Relevance of Environmental Performance". *European Accounting Review*, 14 (1), 14.
- [37] Mackinlay, A. C. (1997). "Events studied in economics and finance". *Journal of Economic Literature*, 35, 13-39.
- [38] McGuire, J. B. and Sundgren, A. (1988). "Corporate Social Responsibility and Firm Financial Performance". *Academy of Management Journal*, 31(4), 854-872.
- [39] Mills, D. and Gardner, M. (1984). "Financial Profiles and the Disclosure of Expenditures for Socially Responsible Purposes". *Journal of Business Research*, December, 407-424.
- [40] Murray, A. (2010). Do Markets Value Companies' Social and Environmental Activity? An Inquiry into Associations among Social Disclosure, Social Performance and Financial Performance. An Unpublished Ph.D Thesis submitted to the Department of Accounting and Finance, University of Glasgow, UK.
- [41] Murray, A., Sinclair, D., Power, D. and Gray, R. H. (2006). "Do Financial Markets Care About Social and Environmental Disclosure? Further Evidence and Exploration from the U K". *Accounting, Auditing and Accountability Journal*, 19 (2), 228-255.
- [42] Ness, K. and Mirza, A. (1991). Corporate social disclosure: A note on a test of agency theory. *British Accounting Review*, 23, 211-217.
- [43] Neu, D., Warsame, H. and Pedwell, K. (1998). "Managing Public Impressions: Environmental Disclosures in Annual Reports". *Accounting, Organizations and Society*, 23 (3), 265-282.
- [44] [Patten, D.M., (2002a). "The Relation between Environmental Performance and Environmental Disclosure: A Research Note". *Accounting, Organizations and Society*, 27, 763-773.
- [45] Porter, M. E. and Linde, C. (1995). "Toward a new conception of the environment-competitiveness relationship". *Journal of Economic Perspective*. 9 (4), 97-118.
- [46] Rajapakse, B. and Abeygunasekera, A. W. J. C, (2006). Social Reporting Practices of Corporate Entities in Sri Lanka. *Retrieve from archive.cmb.ac.lk/research/bitstream/70130/1616/1/6.pdf*.
- [47] Richardson, A. J. and Welker, M. (2001). "Social Disclosure, Financial Disclosure and Cost of Capital". *Accounting, Organizations and Society*, 26(7/8), 597-616.
- [48] Roberts, C. B. (1992). "Determinants of Corporate Social Responsibility Disclosure: An Application of Stakeholder Theory". *Accounting, Organizations and Society*, 17 (6), 595-612.
- [49] Roe, M. J. (2003). *Political Determinants of Corporate Governance*. Oxford University Press: New York.
- [50] Scott, T. (1994). "Incentives and Disincentives for Financial Disclosure: Voluntary Disclosure of Defined Benefit Pension Plan Information by French Firms". *The Accounting Review*, 69 (1), 26-43.
- [51] Solomon, J. F. (2005). From the Erotic to the Corporate: A Giddensian View of Trust Between companies and their stakeholders. Working Papers, Cardiff Business School.
- [52] Suchman, M. C. (1995). "Managing legitimacy: Strategic and institutional approaches". *Academy and of Management Review*, 20(3), 571-610.
- [53] Tilt C.A (1999). The content and Disclosure of Australian Environmental Polices. *Available at http://www.socsci.flindeis.edu.au/business/research/papers/99-4.htm. accessed on July 17, 2013*.
- [54] Turban, D. B. and Greening, D.W. (1997). Corporate social performance and organizational attractiveness to prospective employees". *Academy of Management Journal*, 40 (3), 658-672.
- [55] Ullmann, A. E. (1985). "Data in Search of a Theory: A Critical Examination of the Relationship among Social Performance, Social Disclosure and Economic Performance of Us Firms". *Academy of Management Review*, 10 (3), 540-557.
- [56] Unerman, J. and O'Dwyer, B. (2004). "Theorising CSR/CSD as a Hegemonic Risk Discourse". *Paper presented at the International Congress on Social and Environmental Accounting, Dundee, September 1*.

- [57] Uwuigbe, U. and Olayinka M. U. (2011). Corporate Social and Environmental Disclosure in Nigeria: A Comparative Study of the Building Material and Brewery Industry. *International Journal of Business and Management*, 6(2).