

THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

Environmental Accounting Practices and Environmental Capacity for Sustainable Economy

Enerson Johnson

Student, Department of Accounting, Babcock University, Nigeria

AdegbieFolajimi Festus

Head, Department of Accounting, Babcock University, Nigeria

Abstract:

Environmental accounting in the last few decades has become a global necessity and received wide recognition. The Accounting 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. Within this purview this study was set out to investigate the relationship that exists between environmental accounting practices and environmental capacity for a sustainable economy. Ex-post facto research design was adopted for this study. The population was total manufacturing industry with sample size of 5 selected purposively. The results show a significant and positive relationship between the two variables of study. The study found that economic sustainability and degree of economic disclosures had significant and positive effect on performance (Adj R² = 0.097, F- Stat = 2.56887, p < 0.05. The study concluded that economic sustainability as well as degree of economic disclosures has a significant effect on the performance of the sampled firms that thereby improving their sustainability and going concern status. The study recommended that the Federal Ministry of Environment and other regulatory agencies in Nigeria have a responsibility to develop guidelines that will allow for environmental accounting and corporate social responsibility to be incorporated in corporations' report and see to it that these guidelines are strictly adhered to.

Keywords: Degree of economic disclosure, economic sustainability, environmental accounting, globalization

1. Introduction

The environmental awareness and campaign for sustainable and economic development heightened the sensitivity of companies around the globe with regards to society and environment. This further generated the interest of the public, business organization and global community in the recent years. In the 1990s, it became a predominant issue being attended to by countries and businesses around the globe as varied interest emanated from within the businesses and outside the business parlance (Okoye&Ngwakwe, 2004).

Melegy (2019) in his study on environmental accounting and sustainability opined that there is a need to develop guidelines and models to improve the level of disclosure practices of companies which will improve sustainability of the economy through their annual reports. It was also affirmed that disclosures of financial and non - financial information will also enhance sustainability practices of corporate firms.

The clamor for environmental reporting is based on the premise that it would not only help shareholders to make economic decisions about the sustainability capacity of a firm but will enhance the performance of the firms and also increase their competitive advantage and create a long-term success and good reputation of the firms which is even a primary concern for present and future investors (Anazonwu, Egbunike, &Gunardi, 2018). These researchers also agree to the fact that the embrace of environmental accounting practices has in the last few decades acquired a pivotal importance which culminated in the addition of disclosures on environmental and social performance as part of a company's report/business strategy.

According to Ghosh (2020), "business activities could in uncontrolled circumstances produce unfortunate negative environmental and social impacts including air and water pollution, destruction of biodiversity and ecosystems, threats to human health and safety, violation of labor rights, displacement of livelihood". Thus, it becomes a necessity to see to it that the society exposed to all these threats receive adequate compensation.

Social and environmental accounting or corporate social responsibility reporting is the process of communicating the economic impact of the social and environmental actions of an organization to particular interest groups within society, and society at large (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 demanded to inform stakeholders on firm's social and environmental responsibilities.

The reality of the social and environmental damages evident in the societies from which corporations operate from have stirred up a quest for sustainability. This realization resulted in the creation of several 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 (Enahoro, 2009). Disclosure of social and environmental information is not regarded as best practice. However, any deviation may give a bad signal to the society and the market.

Environmental accounting emerged in the 1970s as a result of an increase in environmental awareness and concerns about social and environmental wellbeing (Khalid, Lord, & Dixon, 2012). The financial accounting part of environmental accounting is available through many reports (Weale, 1991).

Stakeholders in the environment have a perception that the resources used in the environment get depleted and are not restored to its original state through conservation cost and maintenance cost and as a result their values which they expect are not fully utilized. The pollution in the environment is another major concern to the stakeholders and the Accounting 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 objective of this study is to establish a relationship between accounting practices and capacity towards enhancing sustainability with specific objective to examine the relationship that exists between economic sustainability and the degree of economic disclosure on sustainability and there is no significant relationship between economic sustainability and the degree of economic disclosure on sustainability was tested.

2. Literature Review / Theoretical Framework

2.1. Conceptual Review

2.1.1. Historical Development of Environmental Accounting

Environmental accounting started through four phases. The first phase started from 1970 to 1980 (Vasile & Man, 2012). The second stage i.e., the maturation stage was from 1995 to 2001. Moreover, for developed countries the environmental accounting was discussed both ways: theoretically and practically (Vasile & Man, 2012). The studies from this period are starting to grow, this period being named the "cornerstone" of environmental accounting (Sethi, 2017).

2.1.2. Basic concept of Environmental Accounting

Environmental Accounting combines both national and corporate level environmental performance. Both financial and non-financial information are associated with it. From both the aspects of corporate and national level it works (Islam, 2019). Environmental accounting as a subsection of accounting that addresses activities, methods and systems as well as recording, analysis and reporting of environmentally persuaded financial impacts and ecological impacts (Burrutt, et al., 2002). In these aspects, monetary data encompass the material costs of product and non-product outputs, waste and emission control costs, prevention and other environmental management costs, research and development costs (Sumiani, Haslinda, & Lehman, 2007).

2.1.3. Sustainability Dimensions

According to Imeson and Sim (2010) and Kolk (2018), there are three basic dimensions to sustainability and these are economic, social and environmental dimensions

2.1.3.1. The Economic Dimension

The most significant area of concern in the drive towards sustainability is the impact that the product and services of a firm has on the sector as a whole. Not only are firms expected to meet customers need for value and quality, they are expected to provide fair compensation and working environment for their employees and create value for their shareholders. Overall, the operations of a firm should contribute to smooth running of the economy with minimal negative impacts (Imeson & Sim, 2010 & Kolk, 2018).

2.1.3.2. The Social Dimension

To meet social demands, a company is expected to work towards reducing the negative effects of its activities on the society while maximizing opportunities to make positive impact on the society. This can be achieved by engaging in ethical business practices, providing responsible services and, at the same time, creating job opportunities without any form of discrimination, providing basic needs of their operating community and other volunteer services, among others (Imeson & Sim, 2010 & Kolk, 2018).

2.1.3.3. The Environmental Dimension

Just like any other sector, sustainability for a firm requires a commitment towards reducing the negative impacts of their operations on the environment. This is done by avoiding some line of actions or trying to make good the negative effects of previous actions and also ensuring that their customers' activities are responsible towards the environment through their lending policies and assessments (Imeson & Sim, 2010 & Kolk, 2018).

2.1.4. Basic Concept of Sustainable Development

Sustainability refers to the capacity to endure. Three pillars of sustainability have been identified; such as environmental, social and economic (Atkinson, Dietz & Neumayer 2017; Heal, 2019 Endress, Roumasset & Zhou 2015;

Feenstra, 2018). Sustainable development is the utilization of resources to meet the economic, social and environmental needs of humans, such that the interest of the present and future generation is served. Sustainability is about ensuring long-term business success while contributing towards economic and social development, a healthy environment and a stable society. It is about being able to deliver positive impact to society while protecting the communities and environment in which the business operates.

Sustainability reporting is the process of not only reporting financial information but to also report non-financial information thereby providing reports that relate to financial, social, environmental and governance information which gives an adequate and complete reports to the stakeholders for the purpose of making decisions (Onyekwelu&Ugwu, 2017). Aswani and Swami (2017) defined a sustainability report as "a report prepared and published by an organization which includes important environmental, social and economic impacts caused by its operations which helps organizations communicate the relationship between their strategies and their commitment to sustainable development to the stakeholders.

Sustainability comes to be synonymous with other notions such as "social responsibility" or "environmental management" (Thornton, 2013). Sustainable development has been defined by the World Commission on Environment and Development as the development that meets the needs of the present without compromising the ability of the future generations to meet their own needs (Thornton, 2013). Sustainability emerges as planetary, morally engaged and as involving human arrangements (Stechemesser& Guenther, 2012). Sustainability itself relates to a state, a way of being (Staniskis&Stasiskiene, 2006). Any foreseeable sustainable state will be as a result of interactions between organizations, individuals, societies and states (Solomon & Thomson, 2009). It is possible to imagine a world wherein all, entities do not have to be sustainable in their own right (Schaltegger&Csutora, 2012).

2.2. Theoretical Review

This study reviewed three theories namely: The Risk Society theory, Stakeholder theory and Legitimacy theory but the study is hinged on the Stakeholder theory.

2.2.1. Risk Society Theory

Risk society theory was propounded by Ulrich Beck in 1944 which states that the activities of corporations sometimes pose a great threat(risk) to the society in which they operate from; it is therefore becomes necessary that corporations device a means of alleviating these risks, building trust and a relationship with stakeholders. In the works of Unerman and Dwyer (2004) and Solomon (2005), it was reported that "a society is 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 cited the works of Giddens (1990) and Lupton's (1999) where it was explained that "society was becoming characterized increasingly by a decline in trust in institutions and organizations in general".

2.2.2. Stakeholder Theory

Stakeholder theory was propounded by Freedman in 1984 which states that for corporations to continue to exist, it is of paramount importance to seek the support and approval of the stakeholders by carrying out operations that would guarantee this approval (Chan, 1996). The application and reliance on the stakeholder approach have been evident in several finance, accounting and management literatures including the works of 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) in their study asserted that due to the kind of decision stakeholders take and make, they have the right to some specific information which must be made available to them with the inclusion of information about the environment in which they operate. Stakeholders have power to control the resources of corporations and as such, it is only reasonable that they are adequately catered for. This power is not in any way a generic one (Deegan, 2000). Furthermore, the study explained that the power may come in form of command over the limited resources available at the company's disposal such as labour, media, capital (finances), corporate legislations on consumption of goods and services. With every growing stakeholder's control comes stakeholders' satisfaction (Ullman, 1985).

2.2.3. Legitimacy Theory

This theory was propounded by Davis (1973). Legitimacy theory implies that a corporation's activities must be legitimate in the eyes of society to allow it to continue. This theory argues that organizations operating in any society put in their possible best at ensuring that they do not operate against the laws guiding such society, that is; they seek to obey the laws of the society by operating in tandem with what is obtainable in that society (Gray, Kouhy and Lavers, 1995; Tilt, 1999; Suchman, 1995). It is highly important for companies to get the support of stakeholders as this guarantees the companies' perpetual existence. In contrast, a company that has lost its legitimacy would definitely cease to exist.

2.3. Empirical Review

Nwobu (2018) studied the relationship between corporate sustainability reporting and profitability and shareholders fund in Nigerian banks. The study examined the annual reports of eight (8) banks in Nigeria for the presence or absence of sustainability reporting following the recent Central Bank of Nigeria (CBN) reporting guidelines for financial institutions. A content analysis methodology was employed based on disclosure index. The results of the study showed

that sustainability reporting has received substantial attention over the past four (4) years in the Nigerian banking sector which will translate to sustainable development in the long run without compromising the needs of the users.

Kanchan and Sanjeev (2018) carried out a study on sustainability reporting of Indian companies. The study assessed the implementation of GRI framework by Indian companies especially Environmental and social aspects. The sample comprised of twenty (20) companies which were drawn from 4 industry sectors which include Automobile & Parts, Food and Beverages, personal & household goods and Conglomerates. Qualitative research techniques and descriptive statistics were used for analyzing the data. The results indicated the degree of sustainability disclosures by the companies and the popular issue being discussed and the comparative picture among different sectors taken under the study. The findings showed that both environment and social aspects are disclosed by most of the companies only that social aspect is disclosed more and also that conglomerates are better sustainability reporters.

Gnanaweera and Kunori (2018) studied corporate sustainability reporting and performance of Japanese companies. Eighty – five (85) Japanese companies listed on the Tokyo Stock Exchange was sampled from 2008 to 2014. The data was collected from CSR and annual integrated reports. Content analysis and regression analysis were used. The results showed that firms listed on TSE disclose some extent on environmental, social and economic information. The study found mixed results conforming to correlation and regression analysis which were similar to some studies like Nwobi (2018), Oyewo and Badejo (2014) that sustainability disclosure and performance have no strong association because of a weak positive significance.

Ebdane (2020) studied the impact of sustainability reporting on corporate performance in Philippine. The study focused on determining the effect of overall sustainability reporting and the individual performance indicators including economic, social and environmental disclosures to the performance of companies who submit sustainability reports. The study showed that sustainability disclosure as a whole affects performance measured by Return on Asset (ROA). However, when treated individually, economic, environmental, and social disclosures do not affect the company performance in terms of ROA which has an adverse effect on sustainable development that will bring about capacity building.

Developed countries were at the forefront in debating the attending issues notable to environmental accounting. Developing countries only joined recently in this debate after much had been achieved by the developed countries. The study by Porter and Linde (1995) discovered that statutory regulation is a factor that generates corporate innovation among firms in their bid to remain environmentally sustainable according to regulation. Johnston and Rock (2005) investigated how responsible the companies identified as potentially responsible parties under the Comprehensive Environmental Response were. Compensation and Liability Act (more commonly known as Superfund) appear to manipulate earnings to minimize their exposure to Superfund clean-up and transaction costs.

Turban and Greening (1997) examined the effect of corporate social performance on organizational attractiveness to prospective employees. It was reported in their study that there exists a relationship between qualified employee's attitude to work and the social responsibility habits of their potential employers. The implication of this is increased job satisfaction and productivity. This 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) in their study found no significant positive relationship between economic performance and corporate social and environmental investment. 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. From this study, it was discovered that there is value relevance on sampled companies that are environmental responsible. It was further discovered that the perpetual existence of an environmentally irresponsible company cannot be guaranteed as there may be reduction in their earnings from period till collapse/failure of such companies.

Clause and Richardson (2008) in their study on the effect of environmental investment on investment decisions opined that the impact of environmental information disclosure on investment allocation decisions cannot be overemphasized. It could be implied from the result of these findings that companies that are found wanting in discharging their stewardship function with regards to environmental accounting may experience price crash on their stock as a result of investors being attracted to environmentally responsible companies.

Murray (2010) studied companies' social and environmental activity: social disclosure, social performance and financial performance of the UK's largest companies. The result from the 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. Furthermore, the study confirmed that there is a strong Public Relation motivation in releasing social and environmental reports, which has little to do with improving performance.

In the study carried out by Enyi (2012) on environmental and social accounting as an alternative approach to conflict resolutions in a volatile and e-business environment, it was suggested that to put out the existing disagreement resulting from environmental threats between host communities and organizations, there is a need to apply palliative and preventive measures which could be made possible through environmental and social accounting aspects of corporate social responsibility.

However, Jones in 2010 developed a multi-layered theoretical model to underpin environmental accounting and reporting. These models included severe environmental dangers; corporate responsibility; new relationship between industry and environment; measure industry's impact, and disclose and report impact stakeholders. The acceptance of this model led the author to drawing some implications from it; the first being about the threats from the environment which requires the immediate attention of managers and accountants. Secondly, the conventional accounting no longer gives the full view about an entity since its focus is mainly accounting numbers while neglecting the effect of an entity's activity on the environment. Thirdly, there is a need to explore potential alternative monetary and non-monetary valuation systems

(Jones, 2010). The impact of environmental reporting on investment decisions has been studied by Holm and Rikhardson (2008). Environmental accounting helps to boost the oil and gas sector (Bose, 2006).

3. Methodology

The study adopted an *ex-post facto* research design. The population was manufacturing industries while a sample of 5 was purposively selected within a period of 10 years from 2010-2019. These sampled companies include: Dangote Cement, Lafarge Cement, Ashaka Cement, Total Oil and Conoil.

3.1. Model Specification

$$Y=f(X)$$

$$SP = e_1 + \beta_1 ECO + \mu_e \dots \dots \dots H0_1$$

$$SP = e_1 + \beta_2 DED + \mu_e \dots \dots \dots H0_2$$

Where Y = Sustainability Performance (dependent variable)

f = functional relationship

X = Environmental Accounting Practices and Capacity (independent variable)

x_1 = Economic Sustainability

x_2 = Degree of Economic Disclosure

e_1 = Constant

β_1, β_2 = Model Coefficient

μ_e = Error term

4. Results and Analysis

	ECO	DED	LSIZE	LEV
Mean	4.000000	7.800000	17.43818	0.209980
Median	4.000000	7.000000	18.06936	0.194872
Maximum	5.000000	12.00000	20.23903	0.490122
Minimum	2.000000	6.000000	12.88988	0.000000
Std. Dev.	0.903508	2.203893	2.073386	0.098949
Skewness	-0.838525	1.238698	-1.036213	0.448167
Kurtosis	3.125000	2.892945	2.759671	3.340132
Jarque-Bera	5.891927	12.81033	8.161323	1.723320
Probability	0.052551	0.001653	0.016896	0.422460
Sum	200.0000	390.0000	784.7181	9.449101
Sum Sq. Dev.	40.00000	238.0000	189.1529	0.430796
Observations	50	50	50	50

Table 1: Descriptive Analysis

The average economic sustainability is 4 with a corresponding minimum and maximum value of 2.000 and 5.0000. The degree of environmental disclosure is averaged 7.8 and ranges from 6.000 to 12.000. Firm size is averaged 17.44 with minimum and maximum values of 12.89 to 20.23. Leverage is averaged 21% and has a minimum value of 0.00 and maximum of 0.49. The variable with the highest standard deviation is degree of environmental disclosure while the one with the lowest is leverage.

	ECO	ENV	LSIZE	LEV
ECO	1.000000	0.328277	0.003858	-0.270783
ENV	0.328277	1.000000	-0.065145	-0.158402
LSIZE	0.003858	-0.065145	1.000000	0.061682
LEV	-0.270783	-0.158402	0.061682	1.000000

Table 2: Correlation Matrix

The table above shows the correlation analysis of the variables of the study. None of the variables has a correlation coefficient in excess of 80%. This is an indication absence of multicollinearity.

4.1. Test of Hypothesis Regression Analysis

Regressors	Pooled OLS Estimation			Fixed Effect			Random Effect		
	Coeff	t-stat	P-Val	Coeff	t-stat	p-val	Coeff	t-stat	p-val
C	3.041555	2.359134	1.116884	-54.513	0.152502	0.8796	3.041555	2.261228	0.0291
DED	0.140967	2.028456	0.141110	0.2755	1.724090	0.0930	0.140967	1.944273	0.0587
LSIZE	0.016332	0.257518	0.131123	2.9458	0.308533	0.7594	0.016332	0.246831	0.8063
LEV	-2.092169	-1.557736	-2.464249	0.1061	-1.428404	0.1616	-2.092169	-1.493088	0.1431
R-square	0.158226				0.173143		0.158226		
Adj.R-square	0.096632				0.016711		0.096632		
F-stat	2.568878				1.106826		2.568878		
Prob F-stat	0.067387				0.379380		0.067387		
Durbin Watson	1.648407		1.585433		1.710460		1.648407		

Table 3: Test of Hypothesis Regression Analysis
Source: Researchers' Computation (2020) Using E-Views 9

4.2. Interpretation of Results

From table 3 above, going by the result of the Random effect, the R^2 of 15% implies that almost 16% in the dependent variable is accounted for by the independent and control variables of the study. The Probability of F-statistics shows that the model as a whole is significant at 10% level of significance. The Durbin Watson value of 1.648407 shows absence of autocorrelation among the variables of the study. The effect of degree of environmental disclosure on economic suitability is significantly positive. This implies that the impact of the degree of environmental disclosure is highly felt on economic sustainability. This means that the degree of environmental disclosure significantly matters for economic sustainability of sampled companies. For the control variables, firm size has positive but highly insignificant effect on economic sustainability. This implies that firm size does not have effect on economic sustainability. However, leverage shows negative but insignificant effect on economic sustainability.

4.3. Discussion of Findings

Based on the objective when the degree of environmental disclosure and economic disclosure were regressed, they both have a positive relationship with economic stability of the sampled companies. The findings in this study reveal that the degree of environmental disclosure affects significantly on economic stability of the companies that were sampled. However, the results were in consonance and in tandem with the study of Enyi (2012) who studied the effect of sustainability and performance. The results of the study also agree with the works of Murray (2010) that environmental disclosure to a very large extent significantly affects the sustainability performance of companies both in the short run and long run.

5. Conclusion and Recommendations

The study concluded that economic sustainability as well as degree of economic disclosures has a significant effect on the performance of the sampled firms that thereby improving their sustainability and going concern status. The following recommendations were made:

The Federal Ministry of Environment and other regulatory agencies in Nigeria have a responsibility to develop guidelines that will allow for environmental accounting and corporate social responsibility to be incorporated in corporations' report and see to it that these guidelines are strictly adhered to.

The Financial Reporting Council of Nigeria should develop disclosure requirements that would accommodate the growing awareness in environmental accounting so as to enhance sustainable business practice. Also, Securities and Exchange Commission (SEC) and Nigerian Stock Exchange (NSE) should make it a statutory requirement for companies to establish environmental, social, health and safety committee so as to enhance sustainable development and general corporate social responsibility.

6. Contribution to Future Research

This study has contributed to the frontiers of knowledge on the effect of environmental accounting practices and environmental capacity for sustainability. The contributions are as follows:

To investors and the general public who might want to invest in companies to be conscious of the disclosure requirements as it relates to the environment in which the business operates.

To standard setters and regulators who are to ensure that the disclosure guidelines are strictly adhered to and sanctions melted appropriately to erring offenders.

To scholars and other researchers who can key into the result of this study by conducting similar studied in other industries or geographical jurisdictions to determine whether the results can be obtained in other industries so as to enhance generalization.

7. References

- i. Ahrens, H., & Kantelhardt, J. (2009). Accounting for farmers' production responses to environmental restrictions within landscape planning. *Land Use Policy*, 26(4), 925-934. doi: <http://dx.doi.org/10.1016/j.landusepol.2008.11.003>
- ii. Anazonwu, H. O., Egbunike, F. C., & Gunardi, A. (2018). Corporate Board Diversity and Sustainability Reporting: A Study of Selected Listed Manufacturing Firms in Nigeria. *Indonesian Journal of Sustainability Accounting and Management*, 2(1), 65-78.
- iii. Bose, S. (2006). Environmental Accounting and Reporting in Fossil Fuel Sector: A Survey on Bangladesh Oil, Gas and Mineral Corporation. *The Cost & Management*, 34(2), 53-67.
- iv. Burritt, R. L., Hahn, T., & Schaltegger, S. (2002). Towards a comprehensive framework for environmental management accounting e links between business actors and environmental management accounting tools. *Aust. Accounting Review*, 12(27), 39-50.
- v. Chan, N. (1996). A stakeholder theory perspective to Corporate Environmental Disclosures, *Journal of Contemporary Business*, 3, (3), 27-33.
- vi. Clause, H., & Richardson, P. (2008). "Experience and Novice Investors: Does Environmental Information influence investment Allocation Decisions". *European Accounting Review*, 22, 4-17.
- vii. Deegan, C. (2002). "The legitimizing effect of social and environmental disclosures - a theoretical foundation". *Accounting, Auditing and Accountability Journal*, 15(3), 282-311.
- viii. Deegan, C., & 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.
- ix. 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.
- x. 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.
- xi. Ghosh S. (2020) Reporting of CSR activities in India
- xii. Giddens, A. (1984). *Hermeneutics and Social Theory*: In Shapiro, G. and Sica, A. (eds.) *Hermeneutics*, Amherst: University of Massachusetts Press, 215 - 230.
- xiii. Gray, R. H., Owen, D.L., & Maunders, K.T. (1987). *Corporate Social Reporting: Accounting and accountability*. Hempstead: Prentice Hall Hemel.
- xiv. Gray, R., Kouhy, R., & 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.
- xv. Imeson, M., & Sim, A (2010). Sustainable banking: why helping communities and saving the planet is good for business. SAS White Paper Issued by SAS Institute Inc. World Headquarters.
- xvi. Johnston, D., & Rock, S. (2005). "Earnings management to minimize superfund clean up and transaction costs". *Contemporary Accounting Research*, 22(3), 617-642.
- xvii. Jones, M. J. (2010). Accounting for the environment: Towards a theoretical perspective for environmental accounting and reporting. *Accounting Forum*, Accounting Forum 34 (2010) (34), 123-138. doi: 10.1016/j.accfor.2010.03.001
- xviii. Khalid, F. M., Lord, A. P. B. R., & Dixon, D. K. (2012). Environmental Management Accounting Implementation In Environmentally Sensitive Industries In Malaysia. Paper presented at the Presented at 6th NZ Management Accounting Conference, Palmerston North, Malaysia.
- xix. Lars, H., & Henrik, N. (2005). "The Value Relevance of Environmental Performance". *European Accounting Review*, 14(1), 14.
- xx. Mackinlay, A. C. (1997). "Events studied in economics and finance". *Journal of Economic Literature*, 35, 13-39.
- xxi. Meley, M. (2019). Sustainability disclosure and quality of financial reporting: Empirical study of Saudi listed companies. Retrieved 13/06/2020 from <https://www.researchgate.net/publication/331329950>
- xxii. 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.
- xxiii. Okoye, A.E., & Ngwakwe, C.C. (2004). "Environmental Accounting: A convergence of antecedent divergence". *Accountancy; Management Companion*, edited by Ezejelue, A.C and Okoye, A.E, Nigeria; *Nigerian Accounting Association (NAA)*.
- xxiv. Porter, M. E., & Linde, C. (1995). "Toward a new conception of the environment-competitiveness relationship". *Journal of Economic Perspective*. 9(4), 97-118.
- xxv. Roberts, C. B. (1992). "Determinants of Corporate Social Responsibility Disclosure: An Application of Stakeholder Theory". *Accounting, Organizations and Society*, 17(6), 595-612.
- xxvi. Schaltegger, S., & Csutora, M. (2012). Carbon accounting for sustainability and management. Status quo and challenges. *Journal of Cleaner Production*, 36, 1-16. doi: <http://dx.doi.org/10.1016/j.jclepro.2012.06.024>
- xxvii. Solomon, J. F., & Thomson, I. (2009). Satanic Mills?: An illustration of Victorian external environmental accounting. *Accounting Forum*, 33(1), 74- 87. doi: <http://dx.doi.org/10.1016/j.accfor.2008.07.012>

- xxviii. 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.
- xxix. Staniskis, J. K., & Stasiskiene, Z. (2006). Environmental management accounting in Lithuania: exploratory study of current practices, opportunities and strategic intents. *Journal of Cleaner Production*, 14(14), 1252-1261. doi: <http://dx.doi.org/10.1016/j.jclepro.2005.08.009>
- xxx. Suchman, M. C. (1995). "Managing legitimacy: Strategic and institutional approaches". *Academy and of Management Review*, 20(3), 571-610.
- xxxi. Sumiani, Y., Haslinda, Y., & Lehman, G. (2007). Environmental reporting in a developing country: a case study on status and implementation in Malaysia. *Journal of Cleaner Production*, 15(10), 895-901. doi: <http://dx.doi.org/10.1016/j.jclepro.2006.01.012>
- xxxii. Tilt C.A (1999). The content and Disclosure of Australian Environmental Polices. Available at <http://www.socsci.flinders.edu.au/business/research/papers/99-4.htm>. accessed on July 17, 2013
- xxxiii. Thornton, D. B. (2013). Green accounting and green eyeshades twenty years later. *Critical Perspectives on Accounting*, 24(6), 438-442. doi: <http://dx.doi.org/10.1016/j.cpa.2013.02.004>
- xxxiv. 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.
- xxxv. 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.
- xxxvi. Unerman, J. and O. "Dwyer, B. (2004). "Theorizing CSR/CSD as a Hegemonic Risk Discourse". Paper presented at the International Congress on Social and Environmental Accounting, Dundee, September 1.
- xxxvii. Vasile, E., & Man, M. (2012). Current Dimension of Environmental Management Accounting. *Procedia -Social and Behavioral Sciences*, 62(0), 566-570. doi: <http://dx.doi.org/10.1016/j.sbspro.2012.09.094>
- xxxviii. Weale, M. (1991). Environmental multipliers from a system of physical resource accounting. *Structural Change and Economic Dynamics*, 2(2), 297-313. doi: [http://dx.doi.org/10.1016/S0954-349X\(05\)80004-9](http://dx.doi.org/10.1016/S0954-349X(05)80004-9)