Effect Of Eco-Friendly Costs On Net Revenue Of Cement Producing Firms

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Abstract: The study evaluated the effect of eco-friendly cost on net revenue of quoted cement producing firms. Eco-friendly cost is incurred as an obligatory cost by organizations towards the welfare of the societies and the environment in which they carry out their operations. However, the purpose of this study was to ascertain how this cost affects the net revenue of the firms that incurred it. The study applied ex-post facto research design and data were collected from the secondary sources. The data were analyzed using the ordinary least square regression method. The findings revealed that sustainability cost and abatement costs do not significantly affect the net revenue of the studied firms. Nevertheless, the eco-friendly cost is as vital as all other costs of the firms further down the consideration and should be properly managed and ignore by managers of the respective organizations. Thus, it was suggested that the stakeholders have a duty to set a standard on environmental cost book-keeping to ensure that this cost is adequately disclosed whenever it is incurred and it should also be ensured that there is amenability besides limpidity in the procedure.

Keywords: Accounting, Cement producing, Compliance, Eco-friendly, Net revenue, Abatement cost, waste management cost

1. INTRODUCTION

Eco-friendly cost accounting involves a status quo in which the environment is considered as one of the prime interested parties of any business organization, especially the one whose activities directly impact the environment and or ecosystem. The environment here refers to the people, society, and the natural habitat. Environmental accounting or financial reporting with regards to the environment and society could be seen as the element of the bailiff-ship accounting concept, and the accounting bailiffs-ship and transparency concepts provide the links which bond financial accounting and eco-friendly environmental accounting in a never-ending series of meaningful enrichment. This idea could be interpreted to mean that administrators of corporate institutions ought to be accountable towards the general public as bailiffs of the communal properties under their care. Societal bailiffs-ship implies a responsibility to unveil facts which will allow knowledgeable decisions to be made about the eminence of the societal administration of these resources, which could be seen as the running of properties for the advantage of society. Eco-friendly/environmental and sustainability extend the argument about financial reporting which is being pored over, by widening the perspective in which the problem of financial reporting should be considered alongside environmental accounting or environmental impact assessment reporting. Formerly, business establishments have appraised business considerations based on net revenue and earnings per share they also recognized all indirect expenditures as overheads without giving consideration to the environment and societal cost.

The societal and environmental costs accounting were never recognized and unknown except for materials, water, energy, and other natural resources treatment. Moreover, conventional accounting has not provided for such practice and particularly for accounting for environmental and/or eco-friendly cost exposure and its impact on externalities. Currently, the environment is considered as an area in which corporate societal goals may be found and harnessed [34]. The basis of the report of the commission was an eco-friendly improvement which will satisfy the present needs and requirements, and also not sacrificing the possibility of the future in meeting its own needs and necessities. This report stressed the need to account for the use of environmental resources and constituents which may damage the environment. An operative form of counteractive is pollution averter ideologies that incorporate environmental value into the cost of goods produced or services rendered by the organizations. Cumulative anxieties about the environment, and in particular sustainability and eco-friendly policies, have stimulated lawgiving at the inland and global echelons. In Nigeria, the Environmental Protection Act of 1990 takes the first step towards a disorganized setting into the practice of pollution averter ideologies. Designed for the accounting function, a legal obligation is imposed to minimize waste production utilizing what is called the preeminent obtainable tools necessitating avoidable value identifier standard. The cost accountants that are onward intellectual must be vigorously engaged in the practice of running the environment with the essential expertise and efficiencies. The basic financial accounting model may be an obstruction to variation as it engages and accounts for only the fact that emanates from a price engendered dealings. For there to be a generated price, the property’s rights must be transferred. Although the management accountants play a vital and active part in the procedures for recording and enlargement of an all-encompassing environment, considerable effort is required in the direction of advancing further comprehensive recording structures including arithmetical besides non-arithmetical arrangements [13, 18, 19, 25]. It has been perceived by Asuquo [8] that the policies of the governments of both the developing and developed economies assure partially the problems of many environments in consonance with the critical roles and functions of corporations to the attainment of developing basic ecological sustainability. The fundamental factor responsible for this problem is the fact that the enterprises are responsible for the environmental problem. The majority of these corporations are found to have all the technological means, institutional influence, and absolute financial resources to facilitate adequate and complete solutions; yet their responses are passive, and inadequate societal statistics are made available to users as a guide in investment decision making. The available information that the corporations provide is below what is required by the users, and this also has generated what is known as the “expectation gap”. Asuquo [8] further noted that the organizations on incurring these
costs fail to disclose it as part of their expense on the grounds that, this cost is not significant. The basic cause and consequences of our environmental problems are complex and dynamic. However, there is a possibility for deep emphasis on social and intangible quantitative costs of environmental activities which is absent in our financial statements.

2. LITERATURE REVIEWS
Peter and Van [26] explained that environmental/eco-friendly concepts contain a group of environmental, behavior, ethical and societal necessities, and pointers. It is basically about community services and public welfare attainment, and guaranteed that there is a sense of balance that exists between businesses’ elementary stand-in-goals and purposes that are communal interest-related, with societal and well-being indemnification wide-ranging, social and cultural activities support and charitable donations. Environmental reporting is seen as a system of evidence and statistics setting up premeditated to simplify and ensure environmental accountability. Essentially, the business is responsible for this act and it also kept in check statistics in reports, exceptional periodicals, billboards that are communally oriented or even annual reports. In the collected works of societal and environmental reporting, there have been many advanced philosophies that pursue to hold out solutions to the problems of why the disclosure of societal, environmental maintenance evidence by firms is not prescribed in any established regulation [23]. Gray [14] & Ojile [21] stressed that when the resources critical to the firm are controlled by the stakeholders, the firm is most often than not respond in a manner that meets the expectations of the stakeholders on facts. The stakeholders are identified by the organizations to the level by which the organization views its activities with the needs of each group as being managed for the sake of the organization’s interests. The more important the stakeholders are to the organization, the more effort to be expended in the management of the said relationship.

The commitment of information is seen as a critical factor by the organization in the management of stakeholders to receive approval and support or to get disapproval and distract their opponents. However, whereas the model has accountability based on management’s perception of the importance of a particular stakeholder, the need for information is vital but less powerful groups and individuals may often be overlooked. However, empirical researchers on the application of stakeholder theory are rare. The stakeholder theory has been found to be more popular and relevant due largely to the fact that many authors have taken into consideration, the activities of the organization as it affected the hunger for accountability by the external environment than the organization focusing only on its shareholders. Evidently, it has been established that economic value is shared whenever people are gathered voluntarily for the sole aim of improving the position of everybody else. Others are including information dissemination from the top management to the bottom staff, the working environment, inter-personal relationships, and so on are fundamental factors to be considered. There was also an extension of the stakeholder theory known as “enlightened stakeholder theory” formulated to seem better in the explanations of the corporate governance role, in that, employers, customers, banks, government, creditors, and the society is being considered as important stakeholders [29]. As argued by Asuquo [8] the societal, environmental maintenance and sustainability accounting has recently been beheld as a vital issue as an industrial growth the result which has ushered in prosperity as well as societal and environmental problems. For the effective functioning of an organization, there is a great need for public accountability. Social accounting is viewed as an accounting aspect that analyzes records and measures the organization and the society in both non-numerical and numerical terms. Social and sustainability accounting could be defined as a group of events responsible with an organization’s social and environmental performance measurement and their contributive function for environmental maintenance; also the provision of basic social services beneficial to the immediate communities indirectly or directly and making available to the community, the reports of such efforts for the establishments’ societal enactment result to be evaluated by the communities [29, 30]. Adekunle [1], Arrow [5] & Asthana [6] explained the four basic aspects that have been identified concerning societal, environmental maintenance, and sustainability enactments. They include interactions between the community and the organizations; investment in the development of human capital; contribution to natural resources and environmental development and product quality upgrade. The community: This is concerned with several activities targeted at meeting public benefits like training students in the university, improving healthcare operations, making employment opportunities available for the disabled persons, providing welfare services for the society and setting up of pre-school playgroups for the children in the society. Also, human resources intricate the businesses’ influence on their employees, that is, treating them as human resources. Here, the general working conditions for the workers are greatly improved to include the free provision of medical services, safe working environment. This is viewed to reflect an internal part of social accounting. Natural resources and the environment: this focuses on the social objectives of reducing or eliminating the negative effect of the operations of the organization on the environment. These objectives or operations are programmed to protect and preserve the natural and environmental resources within. This is one of the critical parts of social accounting because of the environmental damages caused by the soil, noise pollution, air, and water [28]. Societal, environmental maintenance and sustainability reporting were designed to primarily serve as a significant assessment of and useful resource on reporting the measurability of the enterprises’ business activities that are socially and environmentally impactful. The ensuing qualitative structures could be common in the eco-friendly or environmental records; it should include its objective statement, which aids in the basic assessment of the collection of data and the motive for adoption of the certain means of presentation; the report should be such that focuses on the presentation of social and sustainability as its objective; User’s needs should be the basis for the provision of facts and the presentation of such evidence must be done in the lowest simplest form, free from manipulation and easy to understand by people that are non-technical. Several organizations globally have constantly employed their annual reports is the means of accounting for societal and environmental maintenance and sustainability [4, 32]. Asuquo, Dada & Onyeogaziri [9], Harrington [16], Greenwood [15] & Palmer [24] opined that the reports when presented serve as a vehicle for environment acclaims. This is because the environmental policy of the organization serves as a critical factor that enhances the intensification of the corporate doppelgänger of the organization. The majority of the information reported in the social and sustainability accounting is mostly non-financial as found in the disclosure section of the annual report and not reported as the major aspect of the financial report. Visual aid and snapshots are used by most corporations to exhibit communal schemes like public ventures that the corporations have implemented during the
financial period in consideration. With the huge pressure mounted on the business organizations on the subject of discharging of their corporate responsibility to the environments in which they operate from since the early century, the world has gradually become captivated with societal and environmental sustainability disclosure. Several developmental processes have been put in place globally to aid reporting processes. However, substantial procedures have not been identified [11, 17]. Alexander & Briton [3], Porter & Van [27] pointed out that the interface level between the reporting corporations and other resource-based firms, like power generation, wave supply, and treatment, oil, and gas, forestry and plantation or environment has been found to have improved or increased focus on environmental issues. Most industries that are manufacturing-based would likely join the issues of occupational safety and health with environmental issues whereas the industries that deal with constructions would base their issues on safety regulations and quality assurance. The organization would use data on environmental performance as impact indicators of the environment, presenting their progress yearly and targets and objectives for the environment are very few. When reports are prepared by companies, two critical areas of considerations are environmental accomplishments and management. Comparatively a small number of firms made available on their annual published reports, the commitment and context of their organization, and engagement by their interested parties. Just a few of these companies care to include their negative information acknowledgment or financial information on the environment. Innumerable leftover constituents and human waste are generated by social activities into our environments and natural habitats. The occurrence is termed as environmental pollution which has been defined as an unwanted change in biological, physical or chemical features of the land, air or water which may be harmful to the lives of humans and other living things, living conditions, cultural assets, and industrial process or led to raw material wastages. Pollutants' entry brought about ecosystem disturbances which resulted keen on a series of adverse reactions often very complex in natural surroundings. The dilapidation of the environs can lead to many problems subject to the form and flora of the environment that is impacted by the sort of pollutants carrying the problem. Consequent to the type and nature of the affected environment, the pollution may be of the following three types: Soil pollution; air pollution, and water pollution. However, such a classification does not provide any other information except for the type of habitat being involved. Pollutants are often found to contaminate more than one type of environment and in such cases; the discussion tends to overlap [30]. Onwioduokit [22], Obajimi [20], NEP Act [19] & Sada [32] recognized the nature of pollutant as well as the type of habitat intricate in pollution; environmental pollution possibly will be categorized into the ensuing two groups: Pollution of land and water which the land and water resources. Pollution of the earth’s atmosphere: This includes gases, vapors, and fine particles that outflow into the air. They contaminate the midair all over the place and several ones in interaction with the environment only when they are incapable to go high up in the air. Ayeni [7], Asthana [6] & Adewumi [2] averred that inactive bundles of pollutants in the environment make the environment unfriendly. The pollutants are principally physical, biological, and chemical elements that have sensitive impact water in its natural form. These pollutants are the singular cause of augmented adulteration of water in many cities in Nigeria. Again, dense wastes have been found to also flood the waterways. On the issue of land pollution, it is viewed as a waste of land or unwanted resource occurrence. Waste or unwanted products or materials on the land are the most common pollutants. The increasing incidence of solid waste is as a result of urbanization advent. Industrial development and urbanization growth and improper management of waste control contributed to the new dimension of Nigerian land pollution. Most often than not, a particular input is responsible for the pollution, and therefore, if this input is substituted, pollution is likely to be reduced. Pollution in another instance can be reduced via production process changes equipment installation that arrests all the pollutants before they intensify. If the primary channels pollution reduction is the substitution of input or changing of processes or treatment at end-of-conduit use and being a retroactive investigation, then the estimation would use historical data on the relationship between the estimated or observed radiations and costs of production. Concerning the problems of the examination of probable cost wherever the main ways of controlling and managing pollution are not the replacement of production factors, the only way most times is costs valuation in form of inquiring the reduction technology engineers. To alleviate the climate change threat, they have been recently an improved effort on reducing the costs of carbon-dioxide emissions. As paralleled to the erstwhile exploration of abatement, this investigation is directly linked to reducing the use of specific polluting inputs: natural gas and oil, coal, and fossil fuels [10, 31, 33].

3. METHODOLOGY

3.1 Study Plan: After the event, a stratagem was used for the exploration. It is an empirical systematic inquiry that does not give the scientist the power to manipulate the independent variables since they are inherently not manipulated. At the time of the investigation, the social and sustainability activities of the various companies had already taken place. The stratagem also helped the researchers establish, describe, and explain existing phenomena and draw generalization on the explored universe based on the data collected from a sample population.

3.2 The elements used for investigation: In the exploration, the total elements examined consist of twenty-one cement producing firms registered by the capital market of Nigeria.

3.3 Procedures adopted: Sample dimensions for the investigation was drawn from a list of twenty-one cement producing companies from the NSE. The companies studied were seven in number. The sample size was determined using scientific sampling technique to select those companies that have the required data on abatement cost, waste management cost and eco-friendly/environmental cost.

3.4 Methods of fact-gathering: Information was gathered basically from a secondary source. The researchers obtained secondary facts from the financial reports of the selected sample firms, journals, magazines, Nigerian Stock Exchange fact-book, the internet, CBN bulletin [12], and textbooks. The management reports of the sample firms also formed the major source of data used by the researchers. Data were collected principally through a desk review of the financial and management reports of the firms. The financial reports for the 2019 accounting year of the sampled firms were used in the exploration.

3.5 Scope and limitations of the study: Coverage of the study population was constrained by cost and other hindrances often faced by researchers. As such, only seven of the relevant companies were selected using a simple random sampling technique. Another significant constraint was in the shortage of
relevant material and statistical data. Unwillingness to make known in-depth facts on societal expenditures by the staff of these companies who were the study respondents also posed a serious risk to the study.

3.6 Prototypical arrangement: The prototypical quantified in the research is as given below:

\[ NR = f (EC); EC = WMC, PAC, SC \]

The statistical model becomes:

\[ NR = f (WMC, AC, SC) \]

Where

\[ NR = \text{Net Revenue} \]

\[ WDC = \text{Waste Disposal Cost} \]

\[ AC = \text{Abatement Cost} \]

\[ EC = \text{Sustainability/Replenishing cost} \]

\[ B_0 = \text{Stable term} \]

\[ B_1 - B_4 = \text{Parameter intercepts of the variables} \]

\[ U = \text{Stochastic error term; } B_0, B_1, B_2, B_3 \leq 0 \]

4. RESULTS AND DISCUSSION OF FINDINGS

4.1 Results

1. \( H_0: \) Waste management cost does not significantly affect net revenue.

\[ H_A: \] Waste management cost does significantly affect net revenue.

2. \( H_0: \) Abatement cost does not significantly affect net revenue.

\[ H_A: \] Abatement cost does significantly affect net revenue.

3. \( H_0: \) Sustainability cost does not significantly affect net revenue.

\[ H_A: \] Sustainability cost does not significantly affect net revenue.

### TABLE 1

<table>
<thead>
<tr>
<th>Prototype</th>
<th>Unrelated measurements</th>
<th>Uniform measurements</th>
<th>T indicator</th>
<th>Substantial*</th>
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</table>
H₃: Sustainability cost does not significantly affect net revenue.

<table>
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<th>Prototype</th>
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<tr>
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<td>4.855</td>
<td>.005</td>
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<td>SC</td>
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<td>1.337</td>
<td>.239</td>
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</tbody>
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**TABLE 3** Regression Result On The Effect Of Sustainability/Replenishment Cost (SC/RC) On Net Revenue

**4.2 Discussion of findings**

The processes involved in the study were diligently followed to the end to establish the cause-effect relationship between eco-friendly and net revenue of cement producing companies in Nigeria. The use of facts and figures from the Factbook published by the Nigerian Stock exchange which consisted of the corporations’ annual eco-friendly/environmental cost and net revenue. This helped the researchers to come up with a decision and conclusion on the influence of environmental/eco-friendly and sustainability costs on corporations’ net revenue. This study had formulated three hypotheses which were all tested. The findings of this study brought about the conclusion that waste management, pollution abatement, and sustainability/replenishment costs did not have a significant effect on net revenue the considered cement corporations in the short run.

5. CONCLUSIONS

The findings of this study brought about the conclusion that waste management cost does not have a significant effect on net revenue; firms that observed and ensured proper waste management practices are more or less likely to incur lower penalties and fines for environmental infractions. In the long run, such firms save on sustainability/replenishment costs because the environment has been positively impacted due to the firms’ eco-friendly policies. Pollution abatement increases the operating cost for a firm, and therefore its corporate performance is adversely impacted.

6. ACKNOWLEDGMENTS

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REFERENCES


