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Impact of Environment Accounting disclosure on Financial Performance in Cement Companies in Nigeria from 2006-2017

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ABSTRACT

This study examined the impact of environmental accounting disclosure on financial performance in cement companies in Nigeria over the period 2006-2017. Specifically, the study sought to ascertain the impact of employee safety costs, charitable contribution costs and community development costs on the financial performance of cement companies in Nigeria. The study adopted *Ex-Post Facto* research design while data obtained from individual annual reports of cement companies were analyzed using panel data regression model. The study found that employee safety costs has negative and significant impact on the financial performance of cement companies in Nigeria; the level of charitable contribution costs has positive and significant impact on the financial performance of cement companies in Nigeria while the level of community development costs has positive and significant impact on the financial performance of cement companies in Nigeria. The implication of the finding is that companies with better environmental accounting disclosures have higher level of financial performance. The study concluded that environmental accounting disclosure contributes significantly to the profitability of cement companies in Nigeria. The study recommended that cement companies should adopt standard environmental accounting disclosure and adequate provisions for employee health and safety, charitable contributions and community development should be made in order to motivate workers and improve on the community/company social and economic relations for sustainable optimal productivity that will lead to enhanced financial performance.

Keywords: Financial performance, employee safety costs, charitable contribution costs and community development costs.

INTRODUCTION

Environmental accounting as frequently used within the environmental management literature relates to the provision of environmental performance related information to stakeholders both within and outside an organization. According to the United State Environmental Protection Agency (2014) an important function of environmental accounting is to bring environmental costs to the attention of corporate stakeholders who may be able and motivated to identify ways of reducing or avoiding those environmental costs while at the same time, improving environmental quality. Environmental costs are the costs incurred in order to comply with regulatory standards. Therefore, environmental costs relates to the costs which have been incurred in order to reduce or eliminate releases of hazardous substances and all other costs associated with corporate practices aimed at reducing environmental impacts of a companies' operation.

Furthermore, environmental accounting according to [1] can be expressed within the context of global environmental accounting, national environmental accounting and corporate environment accounting. In contrast to the global and national environmental accounting, corporate environmental accounting is further sub-divided into environmental management accounting and environmental reporting/disclosure. This study is focused on environmental accounting disclosure aspect of corporate environmental accounting and therefore seeks to reflect several social and environmental aspects upon which companies' activities have impact on employee-related issues, community involvement, environmental concerns and other ethical environmental issues.

International Federation of Accountants (2014) viewed environmental accounting disclosure as the information that is required to be disclosed by regulatory rule or because management considers it useful to outsiders or the enterprise and disclosed it voluntarily.Environmental accounting disclosure therefore refers to the process through which companies often disclose environmental information to their stakeholders to provide evidence that they are accountable for their activities and the resultant impact on the environment. Environmental accounting disclosure is an accounting system which focuses on reporting the cost of environmental liabilities and other significant environmental costs, thereby providing related environmental financial information to external stakeholders.

The environmental cost which companies are expected to disclose in the process of production are decomposed into employee safety costs, charitable contribution costs, waste management costs and community development costs [2]. Environmental accounting disclosure provides important information regarding companies' activities that are conducted in an ethical manner. The increase of media coverage on issue of climate change and global warming resulting from natural disaster or company's negligence of the environment has increased the awareness and relevance of accounting disclosure to organizational performance. The importance of environmental accounting disclosure has raised questions about transparency of disclosure and role of accounting information in generating financial information that is reliable and relevant to organizational performance.

Advocates of environmental accounting disclosure argue that companies have a wide range of responsibilities that extend beyond production of goods and services at a profit. Some argue that companies should actively and responsively participate in providing community developmental services and in taking care of the environment where they operate; Others contend that socially responsible actions have long-term advantages for Companies. Companies can improve their images and avoid unnecessary and costly regulation if they are perceived as socially responsible. The establishment of companies in any society is a welcome development because the environment is open to other economic activities indirectly and job creation directly as a result of the presence of the companies. Various forms of companies are scattered here and there in any environment that has resources both natural and other attractions. The companies include extractive, manufacturing and service industries. All these have their own negative impact depending on the nature of business undertaken by the company.

Organizational performance is an analysis of organizational performance as compared to goal and objective with the corporate organization. There are three types of primary outcome analyzed; financial performance, market performance, and stakeholder value performance, in some cases (production capacity performance). Achievement of a good environmental performance is not the ultimate goal of an organization. The hope is that, good environmental performance will increase organizational performance as proposed by [3], that industries today have become very concerned with environmental aspects because they believe it affects company financial report. Companies with good environment performance use proactive environmental strategy to have an urge to inform investors and stakeholders about their strategy through voluntary environmental information disclosure [4].

Dangote Cement Plc formerly known as Obajana Cement Plc was incorporated in 1992. It is the largest company traded on the Nigerian Stock Exchange and is engaged in the manufacture, preparation, import, packaging, and distribution of cement and related products across the African continent. Dangote Cement Plc is Nigeria's largest cement producer with three plants located in Obajan, Kogi State; Ibese, Ogun State and Gboko in Benue State. On the other hand The United Cement Company (UNICEM) Nigeria Ltd was founded in 2002 and is based in Calabar, Nigeria. It is the second largest manufacturer and supplier of cement products for general application, civil, and structural works in the south-south and south-east regions of Nigeria. This study therefore seeks to investigate the impact of environmental accounting disclosures on organizational performance in cement companies in Nigeria.

Statement of the Problem

Previous studies on environmental accounting disclosure in Nigeria have been exploration and descriptive and have mainly focused on discussing the phenomenon (its meaning and disclosure) without examining its economic and or financial implication.Thus there is a gap between the studies on environmental accounting disclosure and the impact of such disclosures on firms' financial performance in Nigeria.In the time past, corporate organizations have ranked business considerations based on profitability. Companies havealso recognized all indirect expenditure as overheads without paying attention to the environment. Conventional accounting practice has not recognized environmental accounting for materials, water, energy and other naturalresource usage. Also it have not provided for such practice and particularly for accounting for impact onexternalities.

Accordingly, little was recognized of the likely impact of environmental accounting disclosure on the performance of manufacturing companies in Nigeria. The increasing environmental attention and the fact that the manufacturing sectorhas a profound production impact on the environment demands urgent need to critically assess thedevelopment of environmental accounting and the disclosure practices of manufacturing companies in Nigeria.

Since current requirement for reporting on environmental issues is voluntary, it is observed from most financial statements of corporate organizations that it has engendered disclosures of information which totally exclude environmental issues. Environmental disclosures have become critically important to an informed public and financial stakeholders. Also, pertinent is the difficulty of evaluating environmental remediation for environmental degradation where environmental costs do exist.

Therefore the conventional approaches of cost accounting have become inadequate since conventional accounting practices have ignored important environmental costs and activities impacting consequences on the environment. Corporate neglect and avoidance of environmental costing leave gap in financial information reporting. There is no completeness and correctness of fair view to users of financial information, such as shareholders, environmental regulatory agencies, environmentalists and potential financial investors.

The basic causes of our environmental problems are complex and dynamic. In order to control environmental cost and the impact of the potential hazards presented by the operations of firms in the manufacturing industry, such firms usually strive to act socially responsible ways. Social responsibility typically involves costs that companies bear which have some effect on their financial performance. Economic theory suggests that social responsibility cost is negatively associated with profitability. As such, attempting to act in a way that is socially responsible impacts negatively atleast in the short run on the performance of the bank. The specific cost that is often identified in this regard includes those related to the provision of facilities that support the well-being of the firm's communities and pollution cost. The problem of this study is to establish the extent to which environmental accounting disclosure influence the performance of cement companies in Nigeria.

Objectives of the Study

The broad objective of this study is to investigate the impact of environmental accounting disclosures on financial performance in cement companies in Nigeria. Specifically the objectives of the study include:

1. To investigate the impact of accounting disclosure of employee safetycosts on financial performance of cement companies in Nigeria.
2. To examinethe effect ofaccounting disclosure of charitable contribution costs on the financial performance of cement companies in Nigeria.
3. To ascertain the effect of accounting disclosure of community development costs on financial performance of cement companies in Nigeria.

Research Questions

The following research questions were formulated to guide the study.

1. To what extent doesaccounting disclosure ofemployee safety costs affect financial performance of cement companies in Nigeria?
2. To what extent does accounting disclosure of charitable contribution costs affect financial performance of cement companies in Nigeria?
3. To what extent does accounting disclosure of community development cost affect financial performance of cement companies in Nigeria?

Research Hypotheses

The following hypotheses were stated in null form only.

Ho_1: Accounting disclosure of employee safety costs has no significant positive effect on financial performance of cement companies in Nigeria

Ho_2: Accountingdisclosure of charitable contribution costs have no significant positive effect on financial performance of cement companies in Nigeria.

Ho_3: Accounting disclosure of community development costs has no significant positive on financial performance of cement companies in Nigeria

REVIEW OF RELATED LITERATURE

Conceptual Review

Environmental Accounting Disclosure

Environmental accounting disclosure could be described as a practice of incorporating principles of environmental management and conservation into reporting practice and cost/benefit analysis. Environmental accounting allows a business to see the impact of ecologically sustainable practice in everything from their supply chain to facility expansion. It allow accountants to report on the economic impact of those decision to stakeholders so as to allow for proactive decision making about processes that simultaneously meet environmental regulations while adding to bottom line. It is a type of cost benefit analysis system, which relates to the monetary assessment of environmental costs associated with the development and operational activities and the economic benefits of good environmental management [5].

[6] viewed environmental accounting as a tool that can be used to determine less tangible and external costs for projects and activities, such as bio-diversity, human health and aesthetic values. It is also aimed at broader issues such as implementing sustainable business practice to conserve natural resources for

future generations. The term environmental accounting is frequently used within the accounting and environmental management literatures. It is a broader term that relates to the provision of environmental performance related information to stakeholders both within and outside an organization.

[7] defined environmental accounting as the management of environmental and economic performance through the development and implementation of appropriate environment-related accounting systems and practices. While this may include reporting and auditing in some companies, environmental accounting typically involves life cycle costing, full-cost accounting, benefits assessment, and strategic planning for environmental management. Finally, [8] defined environmental accounting disclosures as a sub-set of accounting that deals with activities, methods of recording, analyzing and reporting environmentally induced financial impact and ecological impact of a defined economic system.Environmental costs was decomposed into decomposed into employee safety costs, charitable contribution costs, waste management costs and community development costs [9].

Employee Safety Costs: Employee safety cost represent a company's expenditure on employee health and safety. Employees of cement companies in the course of their businesses operations are exposed to environmental pollution and other environmental health related challenges. As such, companies are required to make provision for health and safety of their employees. Provision for employee safety affects the net income of companies hence; employee safety costs as component of total costs is expected to have negative impact on the profitability of cement companies.

Charitable Contribution Costs: Corporate organizations are expected to take care of the host community where there company operates by providing social amenities from time to time. Charitable contributions costs refer to the company expenditure on charitable projects within and outside the host communities. Examples are company's expenditure on communities ravaged by war, expenditure on provision of facilities to internally displaced persons etc.

Community Development Costs: Community development costs are cost incurred by companies operating in the provision of development projects within and outside the host communities. Examples of community development cost include expenditure incurred by companies in building or renovation of school buildings, hospitals, roads, etc.

Profitability: Profitability was measured as return on assets (net income to total asset). This variable measures how well the company's assets are being used to generate profits.

Empirical Review

[10] examined the impact of environmental and social disclosure on the financial performance of quoted oil and gas companies in Nigeria. Time series data for five years were collected and analyzed using the ordinary least square regression technique. The study found that disclosure on employee health and safety and community development do not significantly affect financial performance while disclosure on waste management had a positive and significant effect on firm's financial performance. The study recommended that oil and gas companies should constantly review their waste management strategy to mitigate their impact on the environment, improve on employee health and safety as part of their mission and vision statement and ensure sustained development of their host communities to avoid hostility by stakeholder groups.

[11] investigated, environmental accounting disclosure and financial performance: A study of selected food and beverage companies in Nigeria from 2006-2015. Data for the study were collected through secondary source and analyzed using Pearson correlation statistic technique and multiple regression models. The study revealed that there is no significant relationship between environmental accounting

disclosure on return on equity of selected food and beverage companies in Nigeria. It also revealed that there is a negative relationship between environmental accounting disclosure and return on capital employed and net profit margin of selected food and beverage companies in Nigeria. The relevance of this study to cement companies in Nigeria is that they should adopt a uniform reporting and disclosure standards of environmental practices that will enhance control and measurement of performance. It will also enhance their competitiveness which would subsequently lead to higher corporate performance.

[12] examined the effect ofenvironmental accounting reporting disclosure on company profitability: a case study of listed manufacturing companies in Bangladesh. Environmental Accounting Reporting Disclosure Index (EARDI) was obtained using content analysis. The study found that only 41 of 166 companies are providing some sort of environmental disclosures in their annual reports and there is a significant positive relationship between company profitability and EARDI.

[13] examined the impact of environmental and social costs on performance of Nigerian manufacturing companies using secondary data sourced from ten (10) randomly selected companies. The study equally used t-test and SPSSVersion 20 for the data.The study found that environmental and social cost significantly affect Net profit margin, Earnings per share and Return on capital employed of manufacturing companies. The researchers recommended that government should ensure complete adherence of environmental laws by manufacturing companies in Nigeria.

[14] investigated corporate environmental disclosure in the Nigerian manufacturing industry: a study of selected firms. This method was chosen due to its ability to examine different types of communication tools, including coded information. The finding of the study was that, there is significant relationship in the level of corporate environmental accounting disclosure practice in the Nigerian manufacturing industries.

[15] studied corporate social responsibility and performance of selected firms in Nigeria. Product moment correlation was used for data analysis. Findings revealed a significant relationship between social responsibility cost and corporate profitability. The study concluded that social responsibility was vital to organizational performance.

[16] focused on the impact of environmental accounting on financial performance of corporate organization in Kisi County. The study adopted a stratified sampling design. Findings revealed that the perceived financial performance of the corporate organization in general was in good status as perceived by the employees.

[17] investigated the relationship between environmental accounting and profitability of selected firms listed in India. The data for the study were collected from annual reports and accounts of 14 randomly selected quoted companies in Bombay Stock Exchange in India. The data were analyzed using multiple regression models. The study showed that there is significant negative relationship between environmental accounting and return on capital employed and earnings per share. The study equally found that there is a significant positive relationship between environmental accounting and netprofit margin and dividend per share. Based on this it was recommended that government should give tax credit to organizations that comply with its environmental laws and that environmental reporting should be made compulsory in India so as to improve the performance of organizations and the nation as a whole.

[18] examined the impact of environmental accounting on corporate performance in Nigeria. The result of the study showed a significant negative relationship between environmental accounting and return on capital employed (ROCE) and (EPS) and a significant positive relationship between environmental account and net profit margin and dividend per share. The study

therefore recommends that government should encourage firms that comply with environmental laws.

[19] examined the influence of social responsibility cost on the profitability of Nigerian banks. In order to control environmental cost and the impact of the potential hazards presented by the operations of firms in the banking industry, the study made used of an exploratory research design and data were collected from five Nigerian banks through secondary sources and analyzed using the Ordinary Least Square (OLS) method. The study found that there is a negative influence between social cost and pollution cost on profitability. It was concluded that social responsibility cost is a liability of the banks and as such requires proper management. It was recommended that the Financial Reporting Council (FRC) of Nigeria should collaborate with other professional bodies, the academia and other stakeholders to produce a standard on social responsibility accounting and should ensure there is compliance and transparency in the process.

[20] investigated environmental friendly policies and their financial effects on corporate performance of selected oil and gas companies in Niger Delta region in Nigeria. To achieve this, two hypothesis were developed for the study, the study adopted a survey design. The study adopted judgmental sampling technique. The obtained data was analyzed using Pearson product moment coloration and the finding was that environmental friendliness, firms' corporate performance and profitability are found to be positively related to environmental accounting application.

[11] did a critical assessment of environmental issues and corporate social responsibility in Nigeria, by using Niger Delta region as a case study. The researchers used survey research method which involves primary source of data collection. The study revealed that CSR undertaken by oil corporations" activities in this region have had adverse effect on the environment and conclude that oil companies operating in the region has done little or nothing to improve the living standards of the host communities or prevent the degradation caused by oil exploration.

[14] carried out an empirical investigation on corporate environmental reputation. The study adopted a survey design and the instrument tagged corporate environmental accounting reputation are positively associated with firms environmental performance was used to examined the population of the study comprising of the firms in the region. The researcher adopted judgmental sampling technique for the study and the obtained data was analyzed using path analysis, the finding was that environmental accounting reputation are negatively associated to firms environmental performance.

Theoretical Framework

One of the popular theories of environmental accounting disclosure is the stakeholder theory propounded by Freeman (1984). Legitimacy theory assumes that there are a number of interested parties to be considered in the formulation of objectives and these extended widely to include not only shareholders and managers, but also other groups, such as workers, consumers, suppliers and local community. The implies that management objectives must be set to include the interest of all who are likely to be touched by the business activities of the firm.

Stakeholder theory looks at the relationship between an organization and the others in its internal and external environment, the theory, also look at how the business conduct its activities. A stakeholder is a person or group that can be affected or affect an organization, example include, customers, suppliers employees, stockholder, government, nonprofit groups, and local communities among many others. The basic proposition of the stakeholder theory is that the firm success depends upon the successful management of all the relationship that the firm has with its stakeholders.

Therefore, if any business has to work, it has to create value for the customers, suppliers, employees, communities, financiers, stockholders, banks and other people. The application of the stakeholder theory in this study will facilitate understanding of the disclosure of environmental accounting and social management into the business activities it will also help people think beyond the limit of financial accounting rather take care of the stakeholder who is a basic factor in every business or making a commitment to monitor stakeholder interest.The Relevance of stakeholder theory to this study is to create value to the stakeholder so that it can facilitate an understanding to the stakeholder on the disclosure of environmental accounting into business activities during their decision making process.

METHODOLOGY

Research Design

This study adopted the *Ex-Post Facto* research design because the study relied on historic accounting data. Panel data on research variables were generated on annual basis from secondary sources which are made up of the individual Cement Companies' annual reports and financial statements. Data were generated on the following variables: profitability (return on assets), employee safety costs, charitable contribution costs and community development cost. The period 2006 - 2017 chosen for the study was selected based on data availability and financial performance of the 4 selected cement companies.

Model Specification

The study used panel regression model. The baseline panel regression model is specified as follows:

$PRF_{it} = \alpha_i + \beta_1 ESC_{it} + \beta_2 CCC_{it} + \beta_3 CDC_{it} + \varepsilon_{it}$ --- 1

Where;

PRF_{it}=Financial performance (profitability) measured as return on assets (dependent variable).

ESC_{it}= Employee safety costs (explanatory variable).

CCC_{it}=Charitable contribution costs (explanatory variable).

CDC_{it}= Community development costs (explanatory variable).

α=intercept term or constant factor.

ε= Error term (incorporating omitted factors).

$\beta_1 \ldots \beta_3$ =Regression coefficients to be determined.

$_i$= index for individual bank (for the 4 sampled cement companies)

$_t$= time effects (year 2006 - 2017)

Based on the Hausman test conducted to select the model for the study, fixed effect panel regression model was selected. The study used fixed effect panel regression model. The new equation upon which the tests of hypotheses were based became:

$PRF_{it} = \alpha_i + \beta_1 ESC_{it} + \beta_2 CCC_{it} + \beta_3 CDC_{it} + \varepsilon_i$ --- 2

Where;

PRF_{it}=Financial performance (profitability) measured as return on assets (dependent variable).

ESC_{it}= Employee safety costs (explanatory variable).

CCC_{it}=Charitable contribution costs (explanatory variable).

CDC_{it}= Community development costs (explanatory variable).

α=intercept term or constant factor.

ε_{it}= Error term (incorporating omitted factors).

$\beta_1 \ldots \beta_3$ =Regression coefficients to be determined.

$_i$= index for individual cement companies (for the 4 sampled companies)

$_t$= time effects (year 2006 - 2017)

Results emanating from the fixed effect panel regression model (equation 2) were subsequently used to interpret the three research hypotheses.

Decision Rule 1: Accept the alternate hypothesis and reject the null hypothesis if the P-value is less than the chosen level of significance (0.05).**Decision Rule 2:**Accept the null hypothesis and reject the alternate hypothesis if the P-value is greater than the chosen level of significance (0.05).

RESULTS

Table 1: Descriptive Statistics Result

	PRF	ESC	CCC	CDC
Mean	0.260740	0.647338	0.771569	0.334489
Median	0.110800	0.150000	1.500000	0.558900
Maximum	1.881500	6.830000	8.90E+08	8.16E+08
Minimum	0.006300	0.020000	0.528200	0.020000
Std. Dev.	0.415779	1.825120.	2.14E+08	1.50E+08

Source: Author's Computation 2016 from E-view 9.0 Version

Table 1 above shows the descriptive statistical analysis between the dependent and independent variables. The mean is the average value of the series which is determined by dividing the total value of the series by the number of observations. The average percentage of profitability (PRF) across the selected cement companies within the period under review (2006-2017) stood at 26.07%. This indicates that the volume of profitability among the cement companies is low. Profitability measured as return on assets has minimum and maximum values of0.006300 and 1.881500.

The level of employee safety costs (ESC) averaged 64.73% over the study period. It implies that cement companies might have taken advantage of economies of scale of operation and improvement in information and technologyto reduce operating cost and enhance employee safety costs. The minimum and maximum values of operating cost are 0.020000 and 6.830000.

The volume of charitable contribution costs (CCC) stood at 77.156% on average and this shows that charitable contribution costs exert the highest level of influence on the profitability of cement companies in Nigeria. This suggests that cement companies in Nigeria spend greater part of their net income (profit) on charitable contributions to the host community and the society in general. Charitable contribution costs have the minimum value of 0.52820 and the highest maximum value of 8.90E+08.

The level of community development cost (CDC) stood at 33.449% on average and this shows that community development cost exert the least level of influence on the profitability of cement companies in Nigeria. This suggests that cement companies in Nigeria spend least part of their net income (return on assets) on community development. This might have explained the environmental challenges (environmental degradation, pollution and perhaps the agitation over resource control by the host communities) where cement companies carry out their environmental exploitation activities.

The standard deviation is a measure of spread or changes in a series of data. The standard deviation for profitability, employee safety costs, charitable contribution costs and community development costs are 0.415779, 1.825120, 2.14E+08 and 1.50E+08. The volume of employee safety costs and charitable contribution costs both have an upward growth in standard deviation. This shows that rising levels of employee safety costs and charitable contribution costs drives up company's expenditure on environment and safety relatedissues which might decrease the profitability of cement companies in Nigeria.

Correlation Test

The study used correlation test to ascertain the strength and magnitude of the relationship between the dependent and independent variables.

Table 2: Correlation Matrix

	PRF	ESC	CCC	CDC
PRF	1.000000			
ESC	0.072044	1.000000		
CCC	0.060052	0.855490	1.000000	
CDC	0.052526	0.591787	0.335688	1.000000

Source: Author's Computation 2016 from STATA 13.0 Version

The correlation test result in table 2 above indicates that employee safety cost (ESC) has positive relationship with profitability of cement companies in Nigeria. This is confirmed by the value of the coefficient estimate of 0.072044. This implies that employee safety cost has directrelationship with profitability of cement companies in Nigeria meaning that increase in the level of employee safety cost leads to the increase in profitability of cement companiesin Nigeria.

The correlation test result showed that charitable contribution costs (CCC) haspositive relationship with the profitability of cement companies in Nigeria. This is confirmed by the value of the coefficient estimate of 0.060052. This implies that charitable contribution costs have direct relationship with the profitability of cement companies in Nigeria indicating that increase in the level of the profitability of cement companies in Nigeria leads to the increase in charitable contribution costs.

The correlation test result showed that community development cost (CDC) has positive relationship with the profitability of cement companies in Nigeria. This is confirmed by the value of the coefficient estimate of 0.052526. This implies that community development cost has direct relationship with the profitability of cement companies in Nigeria indicating that increase in the level of the profitability of cement companies in Nigeria leads to the increase in community development cost.

Baseline Panel Regression Model Result

Table 3 below presents the baseline regression results using Pooled OLS, Fixed Effect Model (FEM) and Random Effect Model (REM).

Table 3: Baseline Panel Regression Results

Series	Pooled OLS (1)	FE OLS (2)	Random E. OLS (3)
C	3.733694	3.643117	**3.015138**
	[0.0005]**	[0.0008]**	**[0.0043]****
ESC	0.014135	-2.257302	**-3.403064**
	[0.9888]	[0.0046]**	**[0.0076]****
CCC	0.155394	3.118740	**2.547154**
	[0.8772]	[0.0031]**	**[0.0037]****
CDC	079412	2.341294	**2.370605**
	[0.9371]	[0.0003]**	**[0.0040]****
Observations	47	47	47
R-Squared	0.605346	0.681560	**0.603587**
F-Value	5.077031	23.59201	**2.051601**
	[0.002072]	[0.000715]	**[0.000015]**
Hausman Test =	**2.466146 P-**	**Value =**	**[0.4814]**

Sources: Researcher's computation from E-view (version 9.0)
** indicates 5% level of significance

The study applied the Hausman test. The Hausman test was used to select the model (fixed effect or random effect) that will be mostly appropriate for estimation. Hausman test null Hypothesis states that fixed effect model was appropriate while its alternative hypothesis states that random-effect model was appropriate. The selection of either fixed effect model or random effect model is based on the statistical significance of the P-value. From table 3, the Hausman test statistics P-value is [0.4814]. It implies that its P-value is insignificant because it is greater than 5% (0.05) chosen level of significance. Thus, the null hypothesis cannot be rejected. Therefore, it is concluded that fixed effect model was desirable for prediction.

Test of Research Hypotheses

Test of Hypothesis One

Ho_1: Accounting disclosure of employee safety costs has no significant impact on financial performance of cement companies in Nigeria

Based on the regression result presented in table 3 (Panel 2), the coefficient of employee safety costs (ESC) is -0.337209 while the P-value is [0.0046]. The parameter of ESC is negative and significant in measuring the profitability (PRF) as confirmed by its P-value. Since 5% (0.05) level of significance is greater than the P-value [0.0046], we accept the alternate hypothesis and conclude that the level of employee safety costs has significant impact on the financial performance (profitability) of cement companies in Nigeria. The study, accordingly reject the null hypothesis since the p–value is less than 0.05 at 5% level of significance.

Test of Hypothesis Two

Ho_2: Accounting disclosure of charitable contribution costs have no significant impact on financial performance of cement companies in Nigeria.

Based on the regression result presented in table 3 (Panel 2), the coefficient of charitable contribution costs (CCC) is 0.702311 whereas its P-value is [0.0031]. The parameter of CCC has positive and significant impact on profitability (PRF) as confirmed by its P-value. Since 5% (0.05) level of significance is greater than the P-value [0.0031], we accept the alternate hypothesis and conclude that the volume of charitable contribution costs has significant positive impact on the financial performance (profitability) of cement companies in Nigeria. The study, accordingly reject the null hypothesis since the p–value is less than 0.05 at 5% level of significance.

Test of Hypothesis Three

Ho_3: Accounting disclosure of community development costs has no significant positive on financial performance of cement companies in Nigeria

Based on the regression result presented in table 3, the coefficient ofcommunity development costs (CDC) is 0.385111 while the P-value is [0.0003]. The parameter of community development costs has negative and significant impact on profitability (PRF) as confirmed by its P-value. Since 5% (0.05) level of significance is greater than the P-value [0.0003], we accept the alternate hypothesis and conclude that the level of community development costs has significant positive impact on the financial performance (profitability) of cement companies in Nigeria. The study, accordingly reject the null hypothesis since the p–value is less than 0.05 at 5% level of significance.

SUMMARY OF FINDINGS

Below are the summary of the research findings:

1. The study found thatthe level of employee safety costs with coefficient value (-0.337209), t-value (-2.2573) and p-value (0.0046) has negative and significant impact on the profitability of cement companies in Nigeria.
2. The study found that the level of charitable contribution costs with coefficient value (0.702311), t-value (3.1187) and p-value (0.0031) has positive and significant impact on the profitability of cement companies in Nigeria.
3. The study found that the level of community development costs with coefficient value (0.385111), t-value (2.34129) and p-value (0.0003) has positive and significant impact on the profitability of cement companies in Nigeria.

CONCLUSION

The study investigated the impact of environmental accounting disclosures on organizational performance in cement companies in Nigeria over the period 2006 – 2017 using panel data generated from 4 cement companies in Nigeria. The following conclusions were drawn from the research findings emanating from the empirical results.

The study concluded that environmental accounting disclosure improves financial performance of selected cement companies in Nigeria. Companies with better environmental accounting disclosures had higher level of financial performance (Return on Assets).

The study equally concluded thatenvironmental accounting disclosure has significant impact on the profitability of cement companies in Nigeria. This shows that the disclosure of environmental accounting costs has positive and significant influence on the financial performance of cement companies in Nigeria. Therefore, the study concludes that environmental accounting disclosure contributes significantly to the profitability of cement companies in Nigeria.

RECOMMENDATIONS

Based on the research findings and the conclusions drawn thereof, the following recommendations were made:

1. That cement companies should continue to make adequate provisions for employee health and safety, charitable contributions and community development in order to motivate workers and improve on the

community/company social and economic relations for sustainable optimal productivity that will lead to enhanced financial performance.

2. Companies should adopt uniform reporting and disclosure standards of environmental practices for the purpose of control and measurement of performance.
3. Environmental accounting disclosures should be made mandatory on companies so as to give a true and fair view of corporate financial performance and position.

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