Corporate Environmental Accounting Information Disclosure in the Nigeria Manufacturing Firms

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ABSTRACT
The study examined the influence of firm characteristics on the quality of Corporate Environmental Accounting Information Disclosure (CEAID) in the Nigeria manufacturing companies. Ex-post facto and content analysis research designs were adopted. The study collected panel data for seven year period covering 2008-2014 from the annual reports of 10 quoted selected manufacturing firms. The study applied the use of Weight Average Environmental Disclosure Index to measure the quality of CEAID based on financial disclosure. The pooled panel data least square regression model was used to estimate the influence of the independent variable on the dependent variables. The results strongly showed that firm financial performance has a significant impact on the quality of CEAID, but firm size had no impact on the quality of CEAID. The descriptive analysis showed that the highest quality of CEAID as examined using the Global Reporting Initiative and ISO 14301 environmental requirement is far below standard at 2.5%. The study concluded that voluntary CEAID alone would not enhance the quality of CEAID in the manufacturing firms in Nigeria.

Keywords: Environmental Accounting, Disclosure, Manufacturing firms, Content Analysis, Annual Report, Firms Performance, Firms Size.

INTRODUCTION
Civilisation has involved many countries in industrial activities such as refining, manufacturing mining and other activities many of which generate waste with potential constituents. The ultimate disposal of waste leads to environmental pollution in many parts of the world thereby constituting environmental problems. The magnitude of contamination of the environment has already reached an alarming level (Srinivas, 2014). According to Wabuyi (2009), the bad environmental behaviour may have an adverse impact on the business and its finances. Therefore environment risks such as of global warming, atmospheric, soil and water pollution (Dutta & Bose, 2008), cannot be ignored. It is because the success or failure of a company may be determined not only by the products or services it deals with but also by the complexity of its environment (Adediran & Alade 2013). Organisations are now expected to show their awareness of environmental issues, and that they are addressing the impact which their operations has on the environment and society in general (Uwuigbe and Jimoh, 2012) by accounting and reporting them. According to Srinivasa, (2014), the importance of environmental accounting and reporting is expanding because of expansion in environmental problems, economic, communal and technological development. As a result of environmental issues most developed countries have initiated mandatory disclosure of environmentally related matters (Uwuigbe and Jimoh, 2012).

Most of the research carried out in this developed countries have shown that firm size, and financial performance which is amongst the company primary characteristic has an influence on the quality of Corporate Environmental Disclosure. However, in developing countries (Nigeria Inclusive) CEAID still rely heavily on voluntary initiation of reporting institutions (Onyali et al. 2014).Therefore; it is inconclusive if such firm characteristics would also influence the quality of CEAID in Nigeria Manufacturing Firms and if voluntarily initiation alone would produce high quality of CEAID. Corporate Environmental Accounting Information disclosure (CEAID) entails the financial and non-financial disclosure of social and environmental aspects upon which manufacturing firms activities have an impact on its environment. There is a dearth of literature on Corporate Environmental Accounting Information Disclosure in Nigeria. Also, no study has examined if firm size and financial performance influences the quality of corporate environmental accounting information disclosure specifically in the manufacturing firms in Nigeria using Global Reporting Initiative and International Standardization for Organization 14301 as a guide in accessing the quality of CEAID. This gap in the literature is what the study seeks to fill.

In Nigeria, the increasing environmental issues of which manufacturing industries tend to have a profound impact on the environment calls for examination of the quality of environmental accounting information voluntarily provided in their annual reports to creating awareness among the stakeholder. Therefore, the primary objective of this study was to examine if certain firm characteristic influence the quality of CEAID. The study specifically seeks to determine; (i) the influence of firms' size on the quality of CEAID (ii) the impact of financial performance on the quality of CEAID in the selected manufacturing companies in Nigeria.

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REVIEW OF RELATED LITERATURE

Conceptual framework of Environmental Accounting
The vast extent of environmental accounting and its focus on both external and internal users provides a basis to divide it into environmental, financial accounting and environmental management accounting. Environmental, financial accounting provides general-purpose financial information on the organisation, for external users such as creditors, customers, potential investors and shareholders. Environmental management accounting is a set of methods and techniques which can be used to collect and provide information for administration in the area of the business's mutual relationship with the environment (Debnath, Bose & Dhalla, 2011). According to Bassey, Sunday and Okon, (2013), Environmental Accounting is designed to provide information for the assessment of company's behaviour towards its environment and the economic consequence of such action. Therefore the system of environmental accounting provides both Financial Information in monetary units, and non-financial information in physical units (Panigrahi, 2015).

Environmental accounting is therefore said to cover all information relating to the environment. It includes environment-related expenditure, environmental benefits of products and details regarding sustainable operations (Irish, 2000). Yakhou & Dorweiler, (2004) specified that Environmental accounting covers the whole accounting field.

Reports generated by environment accounting serve both the internal and external uses of information. The information also helps management take pricing decisions, control overheads and in capital budgeting. It provides information that is of concern to the public and the financial community (Bereldugo and Mefor, 2012). According to United Nations Expert Working Group (2000), environmental accounting involves the identification, collection, analysis and use of two types of information for decision making:

I. Physical Information on the use, flow of energy, water, material and so on

II. Monetary information on environmental-related expenses, income including savings.

In the real sense, environmental accounting requires that the existing accounting system should be adjusted to incorporate a more integrated environmental accounting practice that links both the conventional, physical and monetary information system (Uwuigbe, 2011).

In an effort to protect the environment relevant costs ought to be identified, measured and reported. According to Hansen and Mowen (2000) as cited in Enarho (2009) environmental costs are costs attributable to the creating, discovering, treating and preventing environmental degradation (Quizlet, 2016). Ideally, environmental cost includes all costs about organisational activities that impact the environment (Deegan, 2002)

Environmental accounting aids in ensuring that every corporate culture embodies environmental sustainability. According to Irish (2000), Companies are expected to engage in environmental accounting and reporting so as to reassure the stakeholders of their:

- Commitment to environmental responsibilities,
- compliance with national environmental laws and guidelines,
- Compliance with requirements of financial reporting,
- Demonstration of environmental concerns and
- Communication of the same to a broad range of stakeholders (Bereldugo and Mefor, 2012).

Environmental accounting is therefore said to cover all information relating to the environment whether positive or negative.

Reasons for Reporting of Environmental Activities by Entities
Investors see social and environmental information as critical in making investment decisions and hence demand adequate disclosure of such information (Yekinni, 2008). Not only that the ethical investment movement formed by ethical investors require firms to develop an environmentally friendly attitude towards their host communities. Therefore, by
upholding a friendly image, companies may be successful in attracting fund from green individuals and groups (Bassey et al. 2013).

Environmental accounting and reporting enhance the quality of decision-making. It enables companies to establish targets for the reduction of the leading environmental indicators such as greenhouse gas emissions, energy usage, resource usage (Beredugo and Mefor, 2012). Through environmental accounting and reporting companies realise the necessity for changing unsustainable consumptions, unfavourable productions patterns thereby protecting and managing available natural resources. This accounting information is necessary for accountability, comparability and probity. Unavailability of such information could be tantamount to being bias, non transparent, fraudulent and liable to risk. The condition could dissuade patrons from consumers, suppliers, investors, surrounding communities and possible sanction from the government who is becoming conscious of organisation's contribution to sustainable development (Beredugo & Mefor, 2012). Environmental accountability includes heightened public scrutiny of both the entity’s environmental performance and its public disclosure of that performance. These elements of corporate environmental responsibility jointly impact the company’s profitability and the value of its common equity (Al-Tuwaijr, Christensen & Hughes, 2004).

Environmental Reporting is critical because they provide environmental performance information and influence capital markets (Villiers and Staden, 2011 as cited in Omar, 2014). Companies can increase their image of being known to the outside world through environmental accounting and reporting. Such companies are said to be enlightened. (Pramanik et al..2007). According to Behram (2015) companies disclose environmental information in their annual report, in other to enhance their visibility and send specific signals and messages to indicate that the businesses are aware of environmental issues.

Companies may benefit from providing more details to the public through a reduction in their cost of capital and an increase in the pure cash flows accruing to their shareholders, consequently increasing their values (Omaime & Claire, 2010). Environmental reporting benefits the companies in the sense that it reveals social and ecological values of the companies, thereby decreasing the pressure from the pressure group, build corporate image and show the companies' social responsibility (O'Donovan, 2002 as cited in Sharifah,2010). More of the benefits of Environmental Accounting and Reporting include avoidance of any penalty or fines payable as a result of environmental offences as prescribed by Environmental Protection Agency in the countries where such legislation exists (Adediran & Alade, 2013), it acts as an internal agent of change. It helps companies to illuminate weaknesses, opportunities and set a new goal (Sharifah, Bakhtair, Hasimah, Noor & Abd-Rahman, 2011).

According to Ali and Kowsar (2013) Environmental Accounting and Reporting provides insight on environmental impacts and associated financial effects. This knowledge will help in realising organisational accountability, increasing environmental transparency, and ensuring effective and efficient management of natural resources which link environmental accounting with financial accounting (Srinivas, 2014). Sometimes some critical issues arising between the entity and its stakeholders are settled through environmental reports. The environmental management system provides the quantitative data on environmental performance for inclusion in environmental reporting. By this, the report informs the interested parties about the achievements made by managers and encourages and motivates the employees to strive for greater achievements (Uwuigbe, 2012).

Environmental Laws in Nigeria

Environmental laws are established to mitigate the threatening environmental problems which emanate from human activities in the quest for economic growth and development (Hakeem & Joseph, 2014). The need for environmental control arises from the fact that it brings improved health and living conditions (Adelagan, 2004).

Nigeria enacted Environmental related Acts and Decree before the inception of Nigerian independence under different context by her colonial master- Great Britain. These laws were scattered and uncoordinated as there was no fully organised institution to coordinate and discharge environmental related duties. In the 1950s, the Criminal Code Act and Noxious Act were enacted to control odour and noise pollutions against neighbours. Later, the Public Health Acts were passed aimed at vitiating the indiscriminate disposal of waste into the surrounding environment- especially water bodies and its specific health goal were to reduce the spread of

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contagious diseases. At the late 1960s and early 1970s, some Acts such as Water Courses Act of 1969, and Refining Act of 1974 were enacted to control oil pollution of land and navigable waters, and the fishing methods. There were some other laws and acts of Government relating to environmental protection. They include; the mineral act of 1969, 1973 and 1984, oil in navigable water Decree of 1968, associated Gas injection Act of 1969 and Chad Basin development act of 1973 to mention but a few. These laws and acts were promulgated to address specific and identified environmental problems. They were narrow in scope and spatially restricted.

In 1979, the then Nigerian constitution stipulated the need for environmental hygiene, cleanliness, and refuge management of which the local government councils were delegated to supervise the activities. This government made the law towards planning and beautification of the surrounding environment. However, there are some other laws directed towards environmental conservation and protection that were made by different sectors or ministries in Nigeria before the creation of environmental institution (Onyali et al. 2014).

The first legal document that made mention of environmental impacts and mitigation was the Fourth National Development Plan (1981-1985). This report urged the public and private industries to produce the environmental impact assessment (EIA) of their projects and to acquire facilities for environmental assessments.

It was not until December 1988 that the Federal Government passed Decree 58 as amended by Decree 59 of 1992 which gave birth to Federal Environmental Protection Agency (FEPA) (Now Ministry of Environment) empowered to control all issues relating to Nigeria Environment, its resources, exploitation, and management. It has the mandate to protect the Nigerian environment and also to design environmental guidelines, standards and criteria, and also to implementing and prosecute defaulters of environmental standards.

Despite the legal backing and funding, which FEPA enjoys from the federal government, the level of success so far recorded is a far cry from her set objectives and goals. It is because the rate of environmental degradation is growing worse than what it was before the establishment of FEPA (Omofoomwan & Osadah, 2008). The regulatory failure is caused principally by the problem of designing best practices that will secure effective and efficient enforcement and compliance with international and municipal environmental laws (Oludayo, 2012).

2.1.9 Manufacturing Firm and Its Environment

Manufacturing companies are sensitive environmental businesses that have a profound impact on the environment in the course of carrying out its activities* (Enarho, 2009). According to *Sharifah and Baktiar (2011) companies regarded as highly environmentally sensitive are involved in the following operations; mining, chemicals, transportation, oil and gas, wood and timber, utilities, agriculture, construction of properties, and manufacturing. The manufacturing and related industries occupy a critical position in the economic life of a nation. These industries supply a vast range of products which find their ways into a broad spectrum of human activity. Many of these commodities, when present in the environment are potentially hazardous, some being explosive, flammable, toxic and other corrosives (Beredugo, 2014). The waste products from these industries were discharged directly into the environment. As industries multiplied, so do the waste products of combustion and manufacturing processes, creating environmental problems of disposal of nuclear and other hazardous substances. The scope of environmental pollution also increased to accommodate new ones such as atmospheric pollution, acidic rain, water and marine pollution, soil contamination, noise pollution, climate change and deforestation (Oludayo, 2012). If the industry is environmentally sensitive, the organisation would be more favourable towards sensitive environmental accounting (Frost & Wilmshurst, 2000). The primary reasons for starting a business are for profit making and expansion (Firm Size). Therefore it is expected that if an environmentally sensitive organisation has achieved the above objectives, it should be able to take up adequate environmental responsibility about the environment which was affected by its daily activities.

Firm Characteristics
The greater visibility of an industry sector may drive disclosure as companies seek to avoid undue Pressure and criticism from social activists (Lu and Abeysekera, 2014). Environmental Sensitive industries such as manufacturing, mining, oil and gas industries and so on are expected to show the stakeholders that they are aware and are doing something to reduce or resolve their environmental impact.

Firm characteristics are the distinguishing attributes of business the first includes. Two firm characteristics are considered in this study, namely firm size and performance in terms of profitability.

**Firm Size**

According to Pamela and Christopher (n.d), Larger companies are more complex organisations faced with a more diverse range of stakeholder demands, and social responsibility disclosures may represent an efficient means of addressing their needs. Thus, size is considered as one of the possible confounding factors to a firm's decision to disclose environmental information.

Large corporations in sensitive industries are more subject to public exposure, and often they would face more legitimate issues than smaller companies (Watts and Zimmerman, 1978 as cited in Omar, 2014). The literature suggests that larger firms are more likely to come under public scrutiny and are expected to have more influence on the environment practices of the general business climate. Therefore, large companies with higher societal existence may have taken more legitimacy and may have a higher reputation and involvement of social responsibility than smaller firms (Omar 2014).

**Profitability**

Highly profitable firms are seemingly more credible to the public, which raises societal expectations of accountability. These businesses were found to be quicker in resolving social and environmental issues that they encounter (Cormier and Magnan, 1999 as cited in Ying Jian Lu and Indra 2014). Failure to comply with their legitimacy will threaten companies’ performances and survival. Therefore, more profitable companies are expected to disclose more voluntary social and environmental information than non-profitable companies.

**Legitimacy Theory**

This theory supports the notion that company alter their reporting policies to show that their operations are consistent with the social priorities and expectations of the society (Deegan & Gordon 1996 as cited in Deegan & Unerman, 2006). Legitimacy theory also establishes an incentive for corporate environment reporting, streaming from the existence of a general social contract between companies and society (Mathews, 2000). According to Junru (2013), the argument that over the years, the increased environmental disclosures and reporting witnessed was as a result of pressures from stakeholders was founded on the legitimacy theory. Companies use the legitimacy perspective to disclose voluntarily environmental information which shows that they are conforming to the expectations and values of the society within which they operate (Uwuigbe, 2011). By communicating environmental information the company makes itself look legitimate in the public pressure on the business (Daniel, 2013), they need to legitimise their existence to society. Legitimacy theory, therefore, posits that by providing sufficient social and environmental disclosures, the entity hopes to improve its overall public image and ultimately justify its continued existence (Elijido-Ten, 2004).

Under this theory, CSED (communication medium) can be used as a tool by the companies to communicate information about their operations and activities (practices) to meet the society expectations to maintain its license to operate in the society (Waris & Muhammed, 2013). According to Uwuigbe and Jimoh (2012), Legitimacy theory relates to the level and types of corporate social disclosure in the annual report which directly relates to management's perceptions of the concerns of the community. This theory typically suggests that firms use declarations to manage their image with a legitimacy crisis when an adverse change exists in the public perception of the enterprise (Steve, n.d)

The legitimacy theory believes that the management provides information to make the company look good in the eyes of stakeholders, but this information may be suitable for making sound investment decisions (Martin &
Bikki, 2010). Legitimacy theory, on the other hand, emphasises why corporations disclose environmental information to the society (O’ Donovan, 2000).

2.2.2 Stakeholders Theory

The fundamental proposition of the stakeholder theory is that the outcome of the efficient management of the company and stakeholders relationships the determinant of firm's success.(Elijido-Ten, 2004). In this case, the stakeholders are identified by the organisation of concern by a perceived strategic need to manage particular relationships to achieve their aims (Uwuigbe, 2011).

A basis for stakeholder theory is that companies are so large and their impact on society so persuasive that they should discharge on accountability to many more sectors of society than solely to shareholders. Not only are shareholders affected by companies but they, in turn, affect enterprises in the same way (Jill, 2007).

There are two branches of stakeholder theory: a normative (ethical) branch of stakeholder theory and managerial branch of stakeholder theory (Waris & Muhammed, 2013). The policy perspective of stakeholder theory equally treats all the stakeholders of the company and does not take into account the power of each stakeholder (Deegan & Jeffry 2006 as cited in Waris & Muhammed, 2013). The normative perspective of stakeholder theory asks the managers to work for the benefits of all the stakeholders (Deegan & Unerman, 2006).

As far as, the managerial perspective of stakeholder theory is concerned, it takes into account the interests of a limited number of interested parties, who have significant power to influence the organisation. The power of the company depends on the nature of (critical) resources held by the stakeholders (Waris & Muhammed, 2013). The theory supports the idea that the behaviour of various stakeholder groups is what encourages management match corporate needs with their surroundings (Nassr, 2004). The managerial branch of stakeholder theory provides a framework in which to analyse CSED in an organisation centred way. The success of appropriately managing stakeholders through the discharge of accountability using CSED is arguably some form of organisational legitimacy (Van Der Laan, 2010).

Prior Research on the Quality of CEAID in other Countries

Sharifah, (2010) in his study examined the Quantity and Quality of Environmental Reporting practice of 243 listed companies in Malaysia. A content analysis approach was used to determine the quantity and quality of the environmental information disclosure in annual reports. He concluded that there is a positive and significant relationship between the amount and quality of environmental reporting and company size and environmental sensitivity.

Lu and Abeysekera, (2014) in their study "Stakeholder Power, Corporate Characteristics, Social and Environmental Disclosure; China" reviewed the annual reports of 100 firms listed on Chinese Stock Exchange for the period 2008. They used disclosure index to measure the quantity of environmental information, the weight disclosure index of 5 exposure types to measure quality and ordinary least square regression to analyse the data. They found out that size and financial performance had a significant positive relationship with the quality and quantity of social and environmental disclosure in China.

Prior Research on CEAID Carried out in Nigeria

Uwuigbe and Olayinka (2011) in their study "Corporate Social and Environmental Disclosure in Nigeria".They investigate the level of corporate social, environmental disclosure among listed companies in the bakery and building material industry in Nigeria. They studied ten firms’ corporate annual reports for the periods 2004-2008. While the content analysis technique and Disclosure Index (Kinder Hydenber Domini) was used to measure the level of Corporate Social and Environmental Disclosure (Camelia et al., 2011) and the student t-test statistics was used to analyse the data. They paper as part of its findings revealed that there is a significant difference in the level of corporate social, environmental disclosures between the selected industries.
Uwuigbe and Jimoh (2012) in their study "Corporate Environmental Disclosure in Nigeria", studied five industrial product manufacturing companies for the year 2011, with the use of content analysis, used some sentences to measure the level of disclosure and the use of ANOVA to analyse the data. Their finding was that the disclosure practice amongst the manufacturing firms in the Nigerian Industries is significantly related.

Onayali et al., (2014) assessed the disclosure practices of Environmental Information by three Nigerian Manufacturing Companies (Industrial Product), with the use of content analysis, questionnaire and t-test statistical tool. The authors measured and determined if the corporate environmental information practice among the selected manufacturing firms has improved. Their findings were that financial disclosures dominate corporate environmental disclosures in company's annual reports, and the selected construction companies are more interested in reporting on corporate social responsibility issues rather than an outright declarative environmental disclosure statement. The analysis results provided further evidence that Corporate Environmental Disclosure practice among the three selected manufacturing firms is general and self-laudatory.

**Justification Of The Study**

From the literature review, it can be said that there is a dearth of the research on the influence of firm characteristic on the quality of CEAID. The few research carried out around the study topic relate to developed countries, and the few research carried out in Nigeria on Corporate Environmental Disclosure tend to place emphasis on the Level of CEAID and not on the quality. To the best of researchers knowledge there is dearth of literature on the examination on the effect of firm characteristic on the quality of corporate environmental accounting information disclosure specifically in the manufacturing sector in Nigeria.

Hence, the study specifically examined the quality of corporate environmental information disclosure in the Nigeria manufacturing industries using GRI and ISO 14031 disclosure requirement as a guide. The study also determines if factors such as firms' size and companies' financial performance influence the quality of CEAID in Nigeria manufacturing firms. The following hypotheses were formulated to guide the study:

1. Firms' size has no influence on the quality of corporate environmental accounting information disclosure in the Nigeria manufacturing companies.
2. Firms' financial performance has no impact on the quality of corporate environmental accounting information disclosure in the selected Nigeria manufacturing companies.

**Research Methodology**

The study adopted the content analysis and ex-post facto research designs. Judgmental sampling technique was used to select ten quoted manufacturing industries based on their size, nature of the product and those also enlisted in Forbes. The researchers obtained the annual reports for the period 2008-2014 of the selected manufacturing firms from the Nigeria Stock Exchange for the purpose of the study. The study used the GRI and ISO 14031 social and environmental disclosure index as a guide to establish 20 expected environmental information disclosure items. The weighted Environmental Disclosure Index was used to measure the quality of CEAID, of which assigned the highest quality (+3) to financial disclosures related to the environmental items, (+2) to quantitative disclosure, (+1) to qualitative disclosure and 0 to no evidence of disclosure. But for the purpose of this study, the highest quality considered was financial disclosure. That is the quality of disclosure would be based on whether it is financial disclosure (+3) or not (0). Two (2) hypotheses were formulated based on the objectives of the study and tested. The Dependent variables were the quality of CEAID, while the independent variables were firm's size and financial performance.

The study employed the use of Pooled Panel Least Square Regression Analysis to test the hypothesis.

**Model Specification**

\[
QCEAID = \beta_0 + \beta_1 TAT_{it} + \beta_2 ROA_{it} + \ell_1
\]

\[QCEAID = \text{Quality of corporate environmental accounting information disclosure for firm } i \text{ at period } t;\]
\( \beta_0 = \text{Constant or Intercept} \)

\( TA_i = \text{The Natural Logarithm of Total Asset owned by i firm i at period t} \)

\( ROA_i = \text{The proxy for performance is return on total assets also defined as the profit before interest and tax divided by total assets as at the end of the fiscal year under consideration (Uwuigbe, 2015)} \)

\( t = \text{Time dimension of the Variables} \)

\( e_i = \text{Error} \)

\( i = \text{Cross-Sectional} \)

### 4.0 RESULT AND DISCUSSION OF FINDINGS

**Figure 4.1 Graph of the Quality of Corporate Environmental Accounting Information Disclosure over time**

Source: Manufacturing Firms Annual Report (2008-2014)

The above chart shows that the disclosure in financial form is small and tends to be in the range of 0……1, and non-financial disclosure dominated the quality of CEAID.

Above, it can be seen that based on the standard the quality of disclosure reduced as the highest percentage is 2.5 which is far from the average of 50%. It can, therefore, be said based on the descriptive analysis that the manufacturing firms in Nigeria disclosure of Corporate Environmental accounting information in the manufacturing companies in Nigeria are more of Non-financial which is descriptive in nature than financial disclosure which is monetary in nature. This is consistent with the empirical findings (Elijido-Ten, 2004; Shil and Igbal, 2005; Charles et al.2010) that Environmental disclosure by firms are more in Qualitative forms(non-financial).

### 4.2 Test of Hypothesis

**Hypothesis One**

\( H_1: \) Firms' size has no influence on the quality of corporate environmental accounting information disclosure in the Nigeria manufacturing companies.
Table 4.2.1 Result of Data Pooled Analysis for Hypothesis One

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>2.773214</td>
<td>2.842790</td>
<td>0.975525</td>
<td>0.3328</td>
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<tr>
<td>LOGTA</td>
<td>0.150698</td>
<td>0.115085</td>
<td>1.309447</td>
<td>0.1948</td>
</tr>
</tbody>
</table>

R-squared: 0.504595  Mean dependent var: 0.942857
Adjusted R-squared: 0.510251  S.D. dependent var: 1.402748
S.E. of regression: 1.395540  Akaike info criterion: 3.532595
Sum squared resid: 132.4321  Schwarz criterion: 3.596837
Log likelihood: 121.6408  Hannan-Quinn criteria: 3.558113
F-statistic: 1.714653  Durbin-Watson stat: 1.514680
Prob (F-statistic): 0.194790

Source: E view result

Decision Rules

Decision Rule 1: Accept null hypothesis if P-Value is greater than 0.05 and reject the null hypothesis if P-value is less than 0.05.

Decision Rule 2: Accept alternative hypothesis if P-Value is less than 0.05 and reject alternative hypothesis at P-value greater than 0.05.

Result and Discussion

Based on the Result in Table 4.2.1.3 it can be seen that firm size positively influenced the quality of CEAID (r=0.1506980, t=0.1948). However, the positive impact lacks statistical significance. Hence, we reject the alternative hypothesis and conclude that firm size does not affect the quality of CEAID in the Nigeria manufacturing companies. It supports the fact that a company being large does not necessarily mean that CEAID is of high quality. Our Descriptive Statistic reflects that the quality of CEAID is reduced in standard, as the selected manufacturing firms rarely disclosure financial information except in a particular area, which is only in community involvement. The result of our Pooled Panel Data Regression Result showed that firm size has no significant influence on the level of corporate environmental accounting information disclosure.

Hypothesis Two

$H_2$: Firms' financial performance has no impact on the quality of corporate environmental accounting information disclosure in the selected Nigeria manufacturing companies.

Table 4.2.2 Result for the Pooled Panel Data Regression Analysis for Hypothesis Two
Dependent Variable: QCEAID  
Method: Panel Least Squares  
Date: 01/30/16   Time: 12:55  
Sample: 2008 2014  
Periods included: 7  
Cross-sections included: 10  
Total panel (balanced) observations: 70

<table>
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<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
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<td>3.919768</td>
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<td>ROA</td>
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<td>1.138852</td>
<td>-0.306720</td>
<td>0.0000</td>
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<tr>
<td>R-squared</td>
<td>0.911382</td>
<td>Mean dependent var</td>
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<tr>
<td>Adjusted R-squared</td>
<td>0.903304</td>
<td>S.D. dependent var</td>
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<tr>
<td>S.E. of regression</td>
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<td>Akaike info criterion</td>
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<td>Sum squared resid</td>
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<td>Schwarz criterion</td>
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<td>Hannan-Quinn criteria.</td>
<td>3.581633</td>
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<td>F-statistic</td>
<td>87.94077</td>
<td>Durbin-Watson stat</td>
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<tr>
<td>Prob(F-statistic)</td>
<td>0.000004</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: E-view result

**Decision Rule 1:** Accept null hypothesis if P-Value is greater than 0.05 and reject the null hypothesis if P-value is less than 0.05.

**Decision Rule 2:** Accept alternative hypothesis if P-Value is less than 0.05 and reject alternative hypothesis at P-value greater than 0.05.

**Discussion on Findings**

Based on Table 4.2.1.4 above the probability of t-stat is 0.0000 is less than 0.05 while the r=0.349309 so, we accept the alternative hypothesis and reject the null hypothesis. Our conclusion is that financial performance has a positive and statistically significant influence on the quality CEAID for the period under investigation. Hence we accept the alternative hypothesis and reject the null hypothesis. It is evidence that firm financial performance explains the little financial disclosure in the area of community involvement by these manufacturing companies.

Nevertheless, the pooled panel data regression result showed that companies' financial performance has a positive and significant influence on the quality of CEAID. Although the quality is poor based on the standard, Companies' financial results to an extent explains the voluntary financial disclosure in the aspect of community development.

**Conclusion**

From the study, it can be said that to an extent manufacturing firms do disclose Corporate Environmental Accounting Information in their annual reports, and there are certain factors which influence their voluntary disclosure of such environmental information. From the descriptive static, it shows that the quality of CEAID is below standard, and most Nigeria manufacturing firms rarely disclose financial information except in the area of community development. The results provide further evidence that the quality CEAID in Nigeria is still very ad-hoc, general and self-laudatory in nature. Therefore the researcher concluded that voluntary CEAID alone would not lead to higher quality of CEAID in the Nigeria manufacturing firms.

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