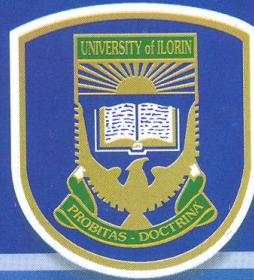
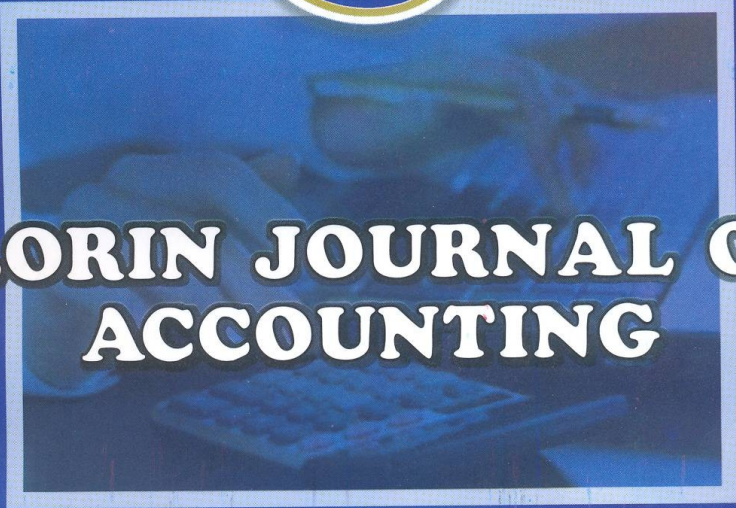


ISSN: 2408-5375

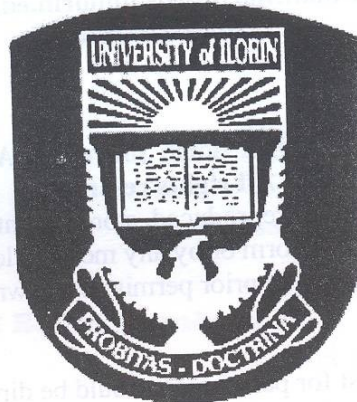


VOL. 2, NUMBER 1, 2015



ILORIN JOURNAL OF ACCOUNTING

A JOURNAL OF DEPARTMENT OF ACCOUNTING
FACULTY OF MANAGEMENT SCIENCES, UNIVERSITY OF ILORIN



ILORIN JOURNAL OF ACCOUNTING

**Published by the Department of Accounting,
University of Ilorin, Ilorin Nigeria**

Vol.2, Number 1, 2015

ISSN: 2408 - 5375

IJA: Ilorin Journal of Accounting

Published by
Department of Accounting,
University of Ilorin, Ilorin Nigeria
Email: ijaeditor@unilorin.edu.ng
08101109856

Copyright 2015: Ilorin Journal of Accounting
All rights reserved

No part of this journal may be reproduced, stored or introduced into any retrieval system, or transmitted in any form or by any means: electronics, photocopy, record, or otherwise, without the prior permission in writing from the copyright owner.

Request for permission should be directed to:
Department of Accounting,
University of Ilorin, Ilorin Nigeria
email: ijaeditor@unilorin.edu.ng
08101109856

Printed by
Haytee Press and Publishing Company
No. 2, Mejidadi St., Oja-lya
Ilorin, Nigeria
tayo_haytee@yahoo.com
08033604983, 08038282074

EDITORIAL BOARD

Editorial Office

Prof. T.O Asaolu

Obafemi Awolowo University, Nigeria

-Editor in Chief

Dr. A.S. Kasum

University of Ilorin, Nigeria

-Editor

Dr. T.O. Fagbemi

University of Ilorin, Nigeria

-Asst. Editor

Dr. R. T. Salman

University of Ilorin, Nigeria

-Secretary

Resident Editorial Board Members

Dr. S. B. Oludoyi

University of Ilorin, Nigeria

Dr. O. F. Osemene

University of Ilorin, Nigeria

Dr. T. A. Olaniyi

University of Ilorin, Nigeria

Dr. K. A. Yahaya

University of Ilorin, Nigeria

Dr. M. Sanni

Kwara State University, Nigeria

National Editorial Board Members

Prof. M. Liman

Bayero University, Nigeria

Prof. E. C. Nwude

University of Nigeria, Nigeria

Dr. S. B Adeyemi

University of Lagos, Nigeria

Dr. F. Iyoha

Covenant University, Nigeria

Dr. A. O. Oladipupo

University of Benin, Nigeria

International Editorial Board Members

Prof. K.T. Caliyurt

Trakya University, Turkey

Dr. S. K. Herath

Clark Atlanta University, USA

Dr. A. Sy

Marits College, USA

Dr. M. M. Rahim

Queensland University of Tech, Australia

Dr. S. G. Lauwo

University of Essex, UK

TABLE OF CONTENTS

Environmental Accounting Information and the Performance of Quoted Companies in Nigeria ABOGUN, Segun , FAGBEMI, Teinitope Olamide, FADIPE, Tolulope Gideon.....	1
Determinants of Accounting Construct of Profit ILABOYA, Ofuan James, ADERIN, Adeyemi.....	19
Effectiveness of Microfinance Institutions at Enhancing the Growth of Small and Medium Scale Enterprises in Ilorin Metropolis, Kwara State, Nigeria ABU – KASUM, Hamidat Adebisi, ABDULLAHI, Ibrahim Bello, KASUM, Abubakar Sadiq	32
Determinants of Segment Disclosures by listed Companies in Nigeria ODIA, James O.	46
Budget Approval Timing and Level of Implementation in Nigeria: Issues and Agenda for Research OKPALA, Kenneth Enoch	63
Disclosure of Human Capital Components in Nigeria: An Evaluation of Lev's (2001) Value Chain Score Board PETER, Okoeguale Ibadin , OKUN, Omokhudu	87
Mergers and Aquisitions and Firm Attributes: Evidence from the Financial Sector ONIGBINDE, Isaac Oladepo.....	113
An Analysis of the Determinants of Voluntary Structural Capital Disclosure by Public Listed Nigerian Companies SALMAN, Ramat Titilayo, YAHAYA, Khadijat Adenola , SANNNI, Mubaraq	130
Ethical Compliance amongst Accountants and Auditors in Public Sector in Nigeria OLADIPUPO, Adesina Olugoke, ERIKI, Peter Omon	159

ENVIRONMENTAL ACCOUNTING INFORMATION AND THE PERFORMANCE OF QUOTED COMPANIES IN NIGERIA

ABOGUN, Segun

Department of Accounting University of Ilorin, Ilorin. Nigeria.

E-mail: segunstc@yahoo.com

FAGBEMI, Temitope Olamide

Department of Accounting University of Ilorin, Ilorin. Nigeria.

FADIPE, Tolulope Gideon

Department of Accounting University of Ilorin, Ilorin. Nigeria.

Abstract

This study provides an insight on companies' attitude to its environment. The objective of this study is to investigate relationship between the disclosure of environmental information and performance of quoted companies in Nigeria. The data were collected from Audited Annual Financial Report and Accounts of thirty-six randomly selected quoted companies in Nigeria. The data were analysed using simple regression analysis. The findings of the result show that there is significant negative relationship between environmental accounting and Return on Capital Employed (ROCE) and Asset Turnover; and a significant positive relationship between environmental accounting and Net Profit Margin and Earnings per Share (EPS). Based on these findings, it was recommended that corporate organisations whose operations have impact on their environment should develop Operating Plan and Standard which focus on their impact on the environment.

Keywords: Environmental accounting, Performance, Environmental cost, Environmental liabilities

1. INTRODUCTION

The earth is a rich heritage which harbours different generation of human beings and the current trend of

civilisation have resulted into various activities which degrades it. These activities are often in the form of wastes and their disposal which leads to pollution. In many parts of the world, the magnitude of pollution of the

environment has reached an alarming level (Alok, Nikhil & Bhangban, 2007). Well known tragedies like the mercury (chemical) poisoning in Mima mate (Japan), massive oil spill by Terry Canyon accident causing a serious pollution to air, land, and other natural resources were highly degraded (Abdul, Nikhil & Bhagban, 2007). Similarly, the chemical poisoning havoc rendered by a pesticide factory at Bhopal (India) on December 1984 which killed over 3000 people, blinded several people and affected over 150,000 people (Abdul et al, 2007). All these incidences have led to the increased awareness in recent times about the interaction between firms and the environment in which they function (Adediran and Atu, 2010). This awareness has been as a result of the concern about factors such as resources scarcity, resources depletion, environmental degradation and the effect of the operation of firms which has brought imbalances in the environmental system (Adediran & Atu, 2010). This has therefore raised global concern for sustainable development and also for firms to be environmentally sensitive (Asaolu & Osemene, 2009; Collins, 2009). Therefore, it became a necessity for accounting to achieve new goals such as measuring and evaluating environmental impacts of investments and organisations. This new goals are of great value as they enable users of accounting information to take different

decisions that are economically sound. A sound systematic approach of environmental accounting system must be integrated with other management system to be implemented so as to ensure that environmental issues are properly taken care of (Environmental Protection Agency, 1995). However, environmental accounting is more than determining the cost of production in a conventional way but it includes considering the environmental implication of production in determining the total cost of production (Environmental Protection Agency, 1995). The interrelationship between accounting, the environment, management information; decision making and accountability is being examined (Environmental Protection Agency, 1995). Environmental Accounting in Nigeria is an existing concept that studies the impact of production activities of companies on the physical environment (Adediran & Alade, 2013). It is therefore necessary for Nigerian companies to join the universal move towards environmental accounting (Shehu, 2011). The disclosure of environmental information is one of the key elements in an environmental report. This is because it enables those parties utilising this information to get an understanding of the company's stance on environmental conservation and how it specifically deals with environmental

issues. This paper, therefore, contributes from West African countries' perspective to the global literature on environmental accounting in annual reports and also provides a basis for corporate decision making as well as determining the effect of environmental accounting on the performance of quoted companies in Nigeria. However, should companies continue with environmental accounting in a challenging business environment when there might be an unfavourable economic return? It is of importance to examine the relevance of environmental accounting practices to sustainability and performance of companies. The products or services of a company do not only determine its success or failure but also, the intricacy of its environment. The questions raised in this study are:

- i. What is the relevance of environmental disclosure to return on capital employed?
- ii. Is there any relationship between environmental disclosure and net profit margin?
- iii. To what extent does environmental disclosure affect asset turnover?
- iv. Does environmental disclosure affect earnings per share?

The study hypothesised that:

H₀₁: Environmental accounting information does not

significantly affect return on capital employed.

H₀₂: There is no positive connection between environmental accounting information and net profit margin.

H₀₃: A significant relationship does not exist between environmental disclosure and asset turnover.

H₀₄: Environmental disclosure does not influence earnings per share.

The remaining part of this study is divided into four sections. The next reviews literatures while the third section describes the research methods. The fourth and fifth sections were used for presentation of results and conclusions respectively.

2. Review of Related Literature

2.1 Conceptual Framework

Environmental accounting is a field of accounting that covers information relating to the environment such as environment related expenses and revenue (Irish, 2000). It also includes environmental benefits of products and information regarding the continual existence of companies (Irish, 2000). Environmental accounting is an inclusive field of accounting which provides information for both internal use, that is, providing environmental information relevant for management

use in area of pricing, regulating expenditure and budgeting; and external use which involves disclosing environmental information of public interest to the public and to the financial community (Yahkou & Dorweiler, 2003).

According to Environmental Protection Agency (1995), Environmental Accounting is defined as "the identification and measurement of the costs of environmental materials and activities and using this information for environmental management decisions". The purpose is to recognise and seek to mitigate the negative environmental effects of activities and systems.

Howes (2002) defined environmental accounting as: 'the generation, analysis and use of monetarised environmentally related information in order to improve corporate environmental and economic performance'. In the opinion of Howes, environmental accounting does not only focus on internal and external environmental accounting but makes the link between environmental and financial performance more visible. It assists in getting environmental sustainability integrated within an organisation's culture and operations.

According to Environmental Protection Agency (1995), the approaches to

environmental accounting are monetary approach and physical approach.

Physical Approach: In order to assess cost correctly, an organisation must collect not only monetary data, but also non-monetary data on materials used, personnel hours, and other cost drivers. It places particular emphasis on the material-related cost drivers, because material purchase costs are major cost drivers in many organisations and the use of energy, water and materials, as well as the generation of waste and chemical emission are directly related to many of the environmental impacts of organisations. In contrast to monetary approach, it focuses on company's impacts on its environment and is expressed in terms of physical units, such as tons.

Monetary Approach: This approach addresses the environmental aspects of corporate activities expressed in the monetary units; it generates monetary information for management use such as payment of fines for breaking environmental laws and investment in capital projects. This approach does not only provide the basis for most management decision but also addresses the issues of how to identify, track and treat costs incurred as a result of the corporation's impact on the environment. Monetary approach contributes to strategic and operational planning, acts as a control and an accountability device and provides the

main systematic source of information for decisions about how to achieve desired corporate goals. However, those costs are often hidden by poor material tracking data and inaccurate overhead allocation.

The uses of environmental accounting according to Environmental Protection Agency (1995) arise in three distinct levels, namely:

Managerial Accounting: This is internal use by corporate organisations, division, facility, project or system. Managerial or management accounting here refers to the use of a set of cost and performance data about environmental costs, decisions and operations.

Corporate Financial Accounting Reporting: Corporate financial reporting is generally, regulated by the Securities Exchange Commission (SEC) and the Generally Accepted Accounting Principles (GAAP). Environmental accounting in this context refers to the estimation and reporting to the public and regulatory agencies of environmental liabilities and financial material environmental costs.

National Accounts: The focus is the nation's macro-economic measures of the National Income Accounts in which economic indicators such as Gross Domestic Product are measured. In this context environmental accounting can refer to consumption of the nation's natural resources in physical and monetary form. The example of a

country that harvests its forest resources unsustainably will have its national income show high national income a few years from natural resources, but will not reflect the destruction of its productive forest assets. This is an interesting area of environmental accounting upon which there is ongoing effort at the United Nations in the System for Integrated Economic and Environmental Accounting, an option to the current system of national account.

According to Ranayamatian & Dirz (1996), 'environmental accounting shows the necessity of measuring the environmental performance costs and analysing it objectively, so that it can lead to the rationalisation of administrative decisions, so the mere measurement of environmental costs is considered useless unless it results in better decision making'.

The natural resources and environment account systems assist competent authorities of the country in preparing the plan for long-term usage of their natural resources that is explored for future development. The provision of accounting data for the operations and environmental activities can make a country determine the funds needed to achieve optimal management of the environment (Akabom, 2012). Moreso, environmental accounting, when well handled and implemented, can be of great benefit to individuals

and companies. Some of the benefits according to Enahoro (2009) include:

- i. It brings about increased turnover for companies due to enhanced company and product image.
- ii. Environmental accounting can make a company's share more attractive to investors due to enhanced product image and environmental risk rating.
- iii. It enables companies to have better access and terms from lending institutions due to favourable environmental risk incidents.

Environmental Regulation in Nigeria

Environmental regulation in Nigeria existed as window dressing before 1998. However, this changed as a result of an attempt in 1997 by a foreign company, acting through an agent, to dump toxic waste in the Niger Delta region. This event shocked the Federal Government of Nigeria and highlighted the porous nature of environmental regulation in the country. This gave rise to the promulgation of Decree No. 42 of 1988 by the former Federal Military Government of Nigeria. This decree made it a criminal offence for anyone to carry or dump any harmful waste within the entire land mass and waters of the Federal Republic of Nigeria.

The episode gave rise to the need for an agency to oversee environmental

protection; hence decree No. 58 of 1988 gave birth to the Federal Environmental Protection Agency (FEPA). The Decree was later amended in 1992 by Decree No. 59 of 1992, granting FEPA the responsibility for protection of the environment, biological diversity, conservation and environmental technology and research.

Various standards have also been put in place to preserve the environment. Such standards are in the area of water quality, effluent limitation, air quality, atmospheric protection, ozone layer protection, noise levels and the control of hazardous substances. These represent the efforts made by successive administrations to ameliorate the environmental problems of the country. However, on May 29, 1999 the civilian government under President Olusegun Obasanjo, added an impetus to the struggle against environmental menaces by giving the environment a greater priority. To this effect, it created, for the first time in the history of Nigeria, the Ministry of Environment in June 1999. The former regulatory agency, FEPA, was absorbed by the Ministry of Environment which took over all its function.

2.2 Theoretical Framework

Resource dependence theory concerns itself with the strategy organisations adopt in drawing resources from the environment. This is because organisations are mutually dependent on

their environment (Uwuigbe, 2011). This theory is of the opinion that companies derived their raw materials from their environment or from nature, therefore, it will be necessary for companies to protect these raw materials at all cost so as to make them available at all time and this can be done through giving consideration to the environment they are being derived from. Any results from the use of resources consequently affect the environment and in turn affect the company (Uwuigbe, 2011).

ElKington (1997) reiterated via his triple bottom line approach theory, that capitalism must satisfy legitimate demands for economic performance. With this, ElKington (1997) echoes Adam Smith's theory of the firm - that the firm has one and only one goal - to satisfy the desires of shareholders by making profits. However, profit may not be attainable if the environment in which the business operates is neglected. A corporation which accommodates the triple bottom line approach (social, economical and environmental performance) is contributing to sustainable development. Hart (1997) added that the achievement of sustainability would require a blending of product design and pollution prevention.

The Ecocentric theory by Pepper (1986) and Dobson (1990) stresses the importance of companies to produce a

balanced report that contains the impact of its activities on the environment. A balanced report will contain how the business has related with its environment but many businesses lack the proper approach to environmental management. It also emphasises the need for environmentally friendly products and environmental protection production process.

2.3 Empirical framework

The International Federation of Accountants (IFAC) observed that environmental pressure is forcing many organisations to look for new, creative and cost-efficient ways to manage and minimize environmental impacts. Organisations have come to recognise the potential monetary rewards of improved environmental performance. They discovered that enhancing efficiency in the use of environmental resources brings not only environmental improvements but also significant monetary savings as waste treatment decreases.

Hamid (2002) conducted a research on the measurement, evaluation and disclosure of environmental performance in financial statements or in its attachments. It observes that measuring environmental performance depends on accounting systems but also needs more data other than the conventional accounting data. Monetizing environmental issues may

not be totally accurate, but economists and accountants have to give best estimates according to the current level of knowledge and techniques used.

Prior studies both within and outside Nigeria such as Orlitzky (2009), Roman, Hayibor, and Agle (2006), Ruf, Muralidhar, Brown, Janney and Paul (2010), Simpson and Kohers (2002), Tsoutsoura (2004) and Waddock and Graves (2011) investigated the association between environmental expenditure and firms performance. Various authors, accounting associations and researchers have addressed the environmental expenditure issues and concluded (based on different objectives) that environmental expenditure accounting and disclosures are important to both internal and external users.

A number of studies have been undertaken in different countries to examine corporate environmental performance from different perspectives. As observed by (Guthrie and Parker, 1989; Hogner, 1982; and Tinker and Neimark, 1987), a number of researchers have noted a substantial increase in environmental disclosures in annual reports in the last four decades. Owolabi (2006) investigated the extent of incorporation of environmental costs into oil and gas accounting in Nigeria. Based on response from stakeholders, his study revealed a high level of awareness of environmental issues and a

positive attitude towards environmental cost and liability.

Long term costs can be reduced as more efficient environmental practices are implemented, reductions are made in the use and waste of other resources and more efficient disposal and removal of waste production was established and discussed by Laitner (2002). Babakri, Bennett, Raos and Franchetti (2004), provide further quantitative evidence of benefits of recycling practices following the implementation of environmental concerned production process such as benefits or savings from recycling product materials or packaging.

Robbins (2012) study pointed out the environmental issues and problems within industrial companies strategies in the European countries and in the USA. The study emphasised on the expansion of the disclosure of environmental information and whether such disclosure is as a result of environmental damage. The study went further to explore the expected financial impact, or environmental events, its impact on the financial position and future business outcomes. The study concludes on the need for commitment to environmental laws and the disposal of industrial waste and others which may be a reason for environmental pollution.

3. Research Methodology

The target population for this study consists of quoted companies in Nigeria. For the purpose of this study, 36 quoted manufacturing companies whose activities have impact on their environment were selected using the simple random technique. The research design used in this study is the descriptive survey method; this is in line with Olayiwola (2007), who asserted that descriptive research is concerned with the collection and analysis of data for the purpose of describing, evaluating or comparing current or prevailing practices, events or occurrences. This assertion is in agreement with the position earlier taken by Bello and Ajayi (2000) who asserted that descriptive survey research focuses on collection and analysis of data on prevailing circumstances. Survey

research design fits into the current study; it involves the use of a representative sample from the population, because the study population is too large to collect data from each and every element. Similarly, this study fits into survey research design because it has to do with a prevailing current trend in the society and any data generated from the sample can be generalised on the study population.

The instrument used for data collection was the annual reports and accounts of selected quoted companies from 2003 to 2012. Two variables were identified and examined. These are environmental accounting and performance. In order to measure the performance of quoted companies, accounting ratios such as return on capital employed, net profit margin, asset turnover, and earnings per share were used.

3.1 Model Specification

The simple regression model for the purpose of this study was as follow;

Model 1:

$$ROCE_{it} = \beta_0 + \beta_1 EA_{it} + \varepsilon_{it}$$

Model 2:

$$NPM_{it} = \alpha_0 + \alpha_1 EA_{it} + \mu_{it}$$

Model 3:

$$AT_{it} = \lambda_0 + \lambda_1 EA_{it} + \sigma_{it}$$

Model 4:

$$EPS_{it} = \psi_0 + \psi_1 EA_{it} + \delta_{it}$$

Where:

ROCE = Return on Capital Employed

NPM = Net Profit Margin

AT = Asset Turnover

EPS = Earnings per Share

EA = Environmental Accounting

 $\beta, \alpha, \lambda, \psi$ = Co-efficient of Regressors $\varepsilon, \mu, \sigma, \delta$ = Error Term

4. Result of Data Analysis

4.1 Hypotheses Testing

Table 1 reveals that the calculated p-value of 0.076 is greater than 0.05 but less than 0.1 which means that the test is significant at ten (10%) hence, the null hypothesis was rejected. Also, R which is 0.094 (9.4%) indicates that environmental accounting and return on capital employed are positively correlated, that is they move in the same direction but the correlation is low. R^2

which is the coefficient of determination is 0.009 and this implies that 0.9% variability in return on capital employed is explained by a unit change in independent variable. Therefore, environmental accounting disclosure does not significantly affect the return on capital employed by selected quoted companies.

Table 1
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.094 ^a	.009	.006	94.68930

Source: SPSS Output

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.930	13.391		-.293	.769
	EA	25.657	14.431	.094	1.778	.076

Source: SPSS Output

This study also hypothesised that:

H_{02} : There is no positive connection between

environmental
accounting information
and net profit margin.

Table 2 reveals that the calculated p-value of 0.014 is less than 0.05, therefore, the null hypothesis was rejected and as a result, the alternative hypothesis was accepted. Also, R which is 0.130 (13%) indicates that environmental accounting and return on capital employed are

Coefficient

positively correlated, that is, they move in the same direction but the correlation is low. R^2 which is the coefficient of determination is 0.017 which implies that 1.7% variability in net profit margin is explained by a unit change in environmental accounting. Therefore, environmental accounting disclosure affects net profit margin of selected quoted companies.

Table 2
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.130 ^a	.017	.014	41.98169

Source: SPSS Output

Model					
1		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
	(Constant)	-10.065	5.937		.091
	EA	15.841	6.398	.130	.014

Dependent Variable: NPM

Moreso, it was hypothesised that:

H_{03} : A significant relationship does not exist between

environmental accounting information and asset turnover.

Table 3 shows that the calculated p-value of 0.984 is greater than 0.05,

therefore the null hypothesis was not rejected. Also, R which is 0.001 (0.1%) indicates that environmental accounting and asset turnover are positively correlated, that is, they move in the same direction but the correlation is low. R^2 which is the coefficient of

determination is 0.000001 and this implies that 0.0001% variability in asset turnover. Therefore, environmental accounting information does not significantly affect asset turnover of selected quoted companies.

Table 3

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.001 ^a	.000	-.003	16.00499

Source: SPSS Output

Dependent Variable: Asset Turnover

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.602	2.263		2.475	.014
	EA	.049	2.439	.001	.020	.984

Source: SPSS Output

Dependent Variable: Asset Turnover

It was also hypothesised that:

H₀₄: Environmental disclosure does not influence earnings per share.

Table 4 shows that the calculated p-value of 0.007 is less than 0.05, therefore, the null hypothesis was rejected and as a result the alternative hypothesis was accepted. R which is 0.141(14.1%)

indicates that environmental accounting and asset turnover are positively correlated, that is, they move in the same direction but the correlation is low. R^2 which is the coefficient of determination is 0.020 and this implies that 2% variability in asset turnover is explained by a unit change in environmental accounting. Therefore,

environmental disclosure affects companies.
earnings per share of selected quoted

Table 4
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.141 ^a	.020	.017	586.48013

Source: SPSS Output

Dependent Variable: Earnings per Share

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	14.159	82.941		.171	.865
	EA	240.477	89.380	.141	2.691	.007

Source: SPSS Output

Dependent Variable: EPS

4.2 Model Analysis

The model estimation from the data analysis is as follows:

$$\text{Model 1: } y_{it} = -3.930 + 25.657_{it} \\ (13.391) \quad (14.431)$$

Table 5
ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	28342.654	1	28342.654	3.161	.076 ^a
	Residual	3209850.533	358	8966.063		
	Total	3238193.187	359			

ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	28342.654	1	28342.654	3.161	.076 ^a
	Residual	3209850.533	358	8966.063		
	Total	3238193.187	359			

Source: SPSS Output

Dependent Variable: ROCE

From Table 5, the F-Statistics for the model which is 3.161 indicate that the global fitness of the model is low.

$$\text{Model 2: } y_{it} = -10.065 + 15.841_{it} \\ (5.937) \quad (6.398)$$

Table 6

ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	10804.438	1	10804.438	6.130	.014 ^a
	Residual	630961.382	358	1762.462		
	Total	641765.819	359			

Source: SPSS Output

Dependent Variable: NPM

From Table 6, the F-Statistics for the model which is 6.130 indicate that the global fitness of the model is low.

$$\text{Model 3: } y_{it} = 5.602 + 0.049_{it} \\ (2.263) \quad (2.439)$$

Table 7

ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.105	1	.105	.000	.984 ^a

Residual	91705.184	358	256.160		
Total	91705.288	359			

Source: SPSS Output

Dependent: Asset Turnover

From Table 7, the F-Statistics for the model which is 0.00 indicate that the global fitness of the model is very low.

$$\text{Model 4: } y_{it} = 14.159 + 240.477_{it} \\ (82.941) \quad (89.380)$$

Table 8

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2489873.314	1	2489873.314	7.239	.007 ^a
	Residual	1.231E8	358	343958.947		
	Total	1.256E8	359			

Source: SPSS Output

Dependent Variable: EPS

From Table 8, the F-Statistics for the model which is 7.239 indicate that the global fitness of the model is low.

4.3 Interpretation of results

Regression results revealed that environmental accounting information improves net profit margin and earnings per share as they are positively related. In other word, the integration of environmental information into the accounting structure of a firm positively affects its net profit and thereby its earnings per share. Therefore from the

result, it is found that environmental information disclosure impacts on firm performance. The result of this research work is thus supported by Adam Smith's theory of firm which emphasises the importance of satisfying shareholders, and in order for this to be done, companies must make profits and distribute dividend to its shareholders. This result is also consistent with one of the findings of Owolabi (2006) who documented that there is an evidence of strong relationship between revenue and environmental generic variable. Moreso,

the finding is in line with the work of Adediran and Alade (2013). Their study reveals that a significant positive relationship exists between Environmental Accounting and Net Profit Margin and Dividend Per Share of corporate firms though our study does not investigate the impact of Dividend Per Share. However, our study is not in agreement with their findings on the significance of ROCE. Contrary to our findings, their result shows that there is significant negative relationship between environmental accounting and Return on Capital Employed (ROCE). The study does not provide evidence of significant relationship between Asset Turnover and Environmental accounting information.

5. Conclusion

The study concludes that the Net Profit Margin, Return on Capital Employed, and Earnings Per Share of companies will improve as more information on environmental activities are disclosed in the annual report. The study also concludes that there is no evidence of significant relationship between Asset Turnover and Environmental accounting information. The NPM, ROCE, AT, and EPS are the indicators used to measure firm performance amongst which only Asset Turnover (AT) did not significantly relate with environmental accounting information. Therefore, we conclude that environmental accounting

has impact on the performance of firms in Nigeria.

It is recommended that corporate organisations whose operations have impact on their environment should develop Operating Plan and Standard which focus on their impact on the environment. Consequently, efforts should be made towards continuous disclosure of environmental activities of their firms. Environmental audit of their activities and operating facilities should be put in place. There should be continued evaluation of new technologies to reduce negative environmental impacts, and that government agencies should give tax credit to organisations that comply with its environmental laws which will encourage environmental reporting.

REFERENCES

- Abdul, K. P., Nikhil, C. S., and Bhagban, D. A., (2007). Environmental Accounting and Reporting with special reference to India. *Indian Journal of Accounting*, 2(3), 45 –66. Retrieved on October, March 24, 2014 from <http://mpira.ub.uni-muenchen.de/7712/.pdf>
- Adediran, S. A., and Alade, P. O., (2013). The Impact of Environmental Accounting on Corporate Performance in Nigeria. *European Journal of Business and Management*, 5(23), 55 – 67.

- Retrieved on November 27, 2013 from
<http://www.iitse.org/journals/index.php/RJFA/article/download/2633/2648>
- Adediran, S. O., and Atu, O. A., (2010). Corporate Environmental Responsibility as a Means of Alleviating Niger Delta Crises. *Academic Scholarship Journal*, 2(1), 75 – 90. Retrieved on November 27, 2013 from <http://www.iitse.org/journals/index.php/RJFA/download/35735/86495>
- Akabom, I. A., (2012), Environmental Friendly Policies and their Financial Effects on Corporate Performance of Selected Oil and Gas Companies in Niger Delta Region of Nigeria. *American International Journal of Contemporary Research*, 2(1), 168 – 173.
- Ashaolu, T.O. & Osemene, O.F. (2009): An Assessment of Environmental Financial Accounting Issues in the operation of Oil and Gas Industry in Nigeria. *Lapai International Journal of Management and Social Sciences*. 2(2); pp 256-271, published by the Faculty of Management and Social Sciences, Ibrahim Badamasi Babangida University, Lapai, Niger State.
- Bello, R., and Ajayi, O. O. S., (2000). Research Methods and Statistical Analyses. Haytee Press and Publishing Company Limited, Ilorin
- Chen. J. C. (2009), The Accuracy of financial report projections of future environmental capital expenditures. American Accounting Association Conference. New York
- Dorwayiler, Y. (2002) "Dimensionality of environmental accounting". *Journal of Accounting and Research* 9(4)
- Enahoro, J.A (2009): Design and Bases of Environmental Accounting in Oil & Gas and Manufacturing Sectors in Nigeria; Covenant University, Ota, Nigeria; Ph.D. Thesis in Accounting.
- Elkington, J. (1997). *Cannibals with Forks: Triple Bottom Line of 21st Century Business*, London, Capstone Publishing Ltd.
- Gary, R. H., & Bebbinton, J. K., (2001), *Accounting for the Environment*, London: Sage Publications.
- Hamid, M. A. (2002). Theoretical Framework for Environmental Accounting – Application on Egyptian Petroleum Sector. A paper presented at the 9th Annual Conference of the Economic Research Forum (ERF). American University in Shaja, UAE.
- Hart, S. L. (1997). *Beyond Greening: Strategies for a Sustainable World*.

- Harvard Business Review, 75(1), 66-76.
- Hasel, L. N., (2005), The Relevance of Environmental Performance. *European Accounting Review*, 4(2), 345 – 367.
- Holm, C., & Rikhardsson, P. (2008). Experienced and Novice Investors: Does Environmental Information Influence Investment Allocation Decisions? *European Accounting Review*, 17(3), 537-557.
- Howes, R. (2002). *Environmental Cost Accounting: An Introduction and Practical Guide*, London, The Chartered Institute of Management Accountants
- International Federation of Accountants (2005), *International Guideline Document: Environment Management Accounting*. New York.
- Olayiwola, A. O., (2007). *Procedures in Educational Research*. Hanijam Publications, Kaduna.
- Owolabi, A.A. (2007). *Incorporating Environmental Costs into Nigeria Oil and Gas Accounting*, A thesis submitted to the Department of Management and Accounting, Faculty of Administration, Obafemi Awolowo University; Ile-Ife, Nigeria.
- Ranayamatian, J. and Dirz D. (1996), *Environmental Accounting - a tool for Better Management. Management Accounting*, 74(2)
- Robbins N. (1991). *Environmental Auditing-a tool whose time has come*. *Multinational Business*, 2, 20-21
- United States Environmental Protection Agency (1995). *An Introduction to Environmental Accounting as a Business Management Tool: Key Concepts and Terms*. Washington.
- Uwuike, U. A., (2011). *Corporate and Environmental Disclosure in Nigeria: A Comparative Study of the Building Material and Brewery Industry. International Journal of Business and Management*, 6(2), 258 – 264.