

ENVIRONMENTAL ACCOUNTING AND TAXATION AND PERFORMANCE OF MANUFACTURING COMPANIES IN NIGERIA (2014 - 2022)

FAKAYODE, OPEOLUWA PAUL¹ AND OLAYEMI, OLUSEYANU OLAMIDE²

Lecturer, Department of Marketing, Faculty of Management Sciences,

Ladoke Akintola University of Technology, Ogbomoso, Oyo State, Nigeria.¹

Lecturer, Department of Business Management, Faculty of Management Science,

Ladoke Akintola University of Technology, Ogbomoso, Oyo State, Nigeria.²

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ABSTRACT

The argument from different quarters is premised on the fact that environmental accounting and taxation could lead to increased expenses for the companies or collapse of the companies due to higher production costs. This study therefore examined the effect of environmental accounting and taxation on the performance of manufacturing in Nigeria. Purposive sampling techniques were used to select fifteen companies from the manufacturing sector. An ex-post facto research design was employed. Secondary data used for the study was extracted from the financial reports of the selected companies. Variables used included Return on Assets (ROA) Sales Growth (SG) Environmental Costs (EC), and Environmental Liabilities (EL). Content analysis and multiple regression were used to analyze the data collected. The findings of the study revealed EC (0.0391597, $p=0.017<0.05$) and EL (0.0291861, $p=0.033<0.05$) have a positive and significant effect on the ROA of companies. Further results showed that EC (-0.032978, $p=0.598>0.05$) and EL (-0.0277371, $p=0.595>0.05$) have negative and insignificant effects on the growth of companies. The study recommended that environmental accounting and taxation should be made an important inclusion in the financial reports of companies to ensure that companies engage in production activities that will not have adverse effects on the environment.

Keywords: Environmental accounting, environmental costs, environmental liabilities, environmental taxation, return on assets,

1.0 INTRODUCTION

1.1 Background to the Study

Manufacturing processes across industries around the globe have brought about huge adverse climatic condition causing damage to the ecosystem. Industrial revolution brought about a rise in the use of technology and machineries for production processes, and these processes are not without several hazardous effects on the ecosystem. As affirmed by Hasan and Hakan (2012) companies nowadays cause a lot of environmental problems because of profit maximization, the endless needs, rapidly advancing technological developments, and unconscious consumption of natural resources, as they execute their operations. The impact of the activities of the organizations on the environment with respect to pollution of water, air, land and abuse of natural resources are coming under the scrutiny of government, shareholders and citizens,

(Holt, 2012). This surge in the negative effects of industrial activities on the environment have necessitated the public and governments demand that organizations make provisions for the environment in which they operate, hence environmental accounting. Likewise, various governments have introduced different stringent conditions, including environmental taxation to reduce this deadly aftermath of production processes.

Environmental accounting is any form of accounting that involves the collection, recording, and reporting of internal and external information about the financial and non-financial impact of organizational activities upon individuals, society and more generally on the physical environment, (Cornor, 2006). Environmental accounting entails identification, measurement and allocation of environmental costs, and the integration of these costs into business and encompasses the way of communicating such information to the companies' stakeholders (Gupta, 2013). Yakhou and Dorweiler (2003) specified that environmental accounting is an inclusive field of accounting. It provides reports for both internal use, generating environmental information to help make management decisions on pricing, controlling overhead and capital budgeting, and external use, disclosing environmental information of interest to the public and to the financial community

Environmental taxation is a means of encouraging a shift towards an eco-friendlier way of producing and using goods. Environmental taxation is defined as a means of penalizing individuals or companies that produce goods that causes harm to the society. The main purpose of environmental taxation is to factor environmental damage or negative externalities into prices to make production and consumption eco-friendly. This type of taxation increases the cost of production for companies, according to the critics of environmental taxation, though it serves as a means of revenue for the government and also helps to make the environment clean. Companies pay different taxes in proportion to the amount of pollution they cause to their environments, which inflate the cost production and subsequently lead to increase in prices of goods. This makes it necessary to examine the effect of environmental accounting and taxation on the performance of manufacturing firms in Nigeria.

1.2 Statements of the Problem

Industrialization around the world has brought about factory pollutants and greater land use, which have harmed the natural environment (Mastrandrea and Schneider, 2008). Environmental factors in some instances result into negative effect on the activities of the business (Adegbeie, Ogidan, Siyanbola & Adebayo, 2020). However, the environmental consequences of industrial activities are often ignored especially in developing countries like Nigeria. Over time the environmental problems become so obvious and serious that they can no longer be ignored. However, most profit-oriented firms in Nigeria are mainly interested in the enormous amounts of profit they make without considering the environmental implications of their actions (Enahoro, 2009).

Countries across the world have imposed various types taxes on industries, such as a carbon tax imposed by some countries in Europe while others have also included taxes on noise pollution, energy creation and mining. However, the environmental cost incurred by companies is not limited to taxation and fines only but also costs which have been incurred in order to reduce or eliminate releases of hazardous substances and all other costs associated with

corporate processes which reduce adverse effect on the environment (Onyali, Okafor and Egolum, 2014).

In essence, increase in prices of goods may reduce purchase of such goods and this in turn lower production for such goods. The argument from different quarters is premised on the fact that environmental accounting and taxation could lead to increase expenses for the companies or collapse of the companies due to higher production costs. Stunted sales growth, decrease in profitability which could lead organizational inefficiency and inability to expand business because of environmental accounting and taxation have been asserted to affect organizational performance. It is in the view of this that this study examines the effect of environmental accounting and taxation on the performance of manufacturing firms in Nigeria.

1.3 Research Questions

The research questions for this study are

- i. What is the effect of environmental accounting and taxation on the profitability on the manufacturing companies in Nigeria?
- ii. What is the effect of environmental accounting and taxation on the growth of manufacturing companies in Nigeria?

1.4 Objectives of the Study

The general objective of the research is to examine the effect environmental accounting and taxation on the performance of manufacturing companies in Nigeria. The specific objectives are to:

- i. Examine the effect of environmental accounting and taxation on profitability of manufacturing companies in Nigeria.
- ii. Examine the effect of environmental accounting and taxation of growth of manufacturing companies in Nigeria.

1.5 Research Hypotheses

Based on the objectives of the study the following hypotheses were formulated and were stated in null forms:

H01: Environmental accounting and taxation has no significant effect on the profitability of manufacturing companies in Nigeria.

H02: Environmental accounting and taxation has no significant effect on the growth of manufacturing companies in Nigeria.

1.6 Scope of the Study

This study centres on environmental accounting and taxation and performance of manufacturing companies. The study concentrates on the manufacturing sector with a special focus on three major sub-sectors which are the industrial goods, consumer goods and healthcare

sectors. The study will make use of secondary data extracted from the annual reports of the selected fifteen companies for a period of nine years (2022). Variables for the study include return on assets, return on equity, total assets, and profit after tax.

1.7 Significance of the Study

Environmental accounting and taxation have become important tools in checking the activities of manufacturing companies. These activities have continuously caused serious damage to humans, wildlife, agriculture and natural resources. Environmental accounting and taxation are introduced and mandated on companies by governments and regulatory bodies. Since environmental accounting and taxation constitute a depletion on the income of the manufacturing companies, it thus became necessary to examine their effects on the performance of companies in the manufacturing sector.

Besides, most of the literature related to this topic focused on only one sector while this study focuses on three major sectors – industrial goods, consumer goods and health care. The findings of this study will be beneficial to stakeholders/communities as it would help to widen their knowledge on environmental accounting and taxation. The study will also assist policy makers in formulating policies that would enhance the implementation of environmental taxation that would be of benefit to the general public. The study will also contribute significantly to the academic world and serve as a platform for more researches on environmental accounting and taxation.

2.0 LITERATURE REVIEW

2.1 Conceptual Clarifications

2.1.1 Environmental Accounting

Environmental accounting entails the provision of appropriate information in the financial statements regarding the estimated social cost occasioned by the production externalities on the environment and how much deliberate intervention cost had been incurred to bridge the gap between the marginal social cost and the marginal private cost by a firm (Sanni and Kolawole, 2019). According to Weng, Chen and Chen (2015), environmental accounting is also referred to as green accounting and it measures (in economic terms) the performance of firms in respect to the environment. It involves the identification, measurement and reporting of environmental specific cost, for example liability cost and waste disposal cost.

It is an inclusive field of accounting that provides reports for both internal use, generating environmental information to help make management decisions on pricing, controlling overhead and capital budgeting, and external use; disclosing environmental information of interest to the public and to the financial community. 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 (United Nations, 1971). In addition, the International Federation of Accountants (1998:4) defined “environmental accounting as the management of environmental and economic performance through the development and implementation of appropriate environment-related accounting systems and practices.

2.1.2 Environmental Taxes

Environmental taxes are taxes imposed on activities, individual or industrial, that pollute or cause harm to the environment. They can serve to discourage behaviour that is potentially damaging for the environment and can provide incentives to lessen the burden on the environment and to preserve it by 'getting the prices right'. The economic rationale for their use comes from their ability to influence markets in a cost-effective way, unlike regulatory or administrative approaches. Information about environmental taxes is important for areas such as environmental policy and environmental fiscal reform, as well as for analytical purposes. A policy issue that has been of particular interest in recent years is green tax reform, which involves increasing taxes on the use of the environment and reducing taxes on other tax bases, in particular labour. Environmental taxes are estimates of the environmental impact of a certain tax, such as the reduction in pollution resulting from introducing a new tax or from increasing the rates of an existing tax.

Environmental taxes can be categorized into four; resource, energy, transport and pollution. Resource taxes includes taxes linked to the extraction or to the use of natural resources, such as water and forests as these activities deplete natural resources. Pollution taxes include taxes on measured or estimated emissions to air and water and management of waste. Energy taxes include taxes on the production and use of energy products like petrol, diesel, gas and electricity. Transport taxes mainly includes taxes related to the ownership and use of motor vehicles.

2.1.3 Return on Assets

Return on assets (ROA) is an indicator of how profitable a company is relative to its total assets. ROA gives a manager, investor, or analyst an idea as to how efficient a company's management is at using its assets to generate earnings. Return on assets is displayed as a percentage; the higher the ROA the better.

2.1.4 Return on Equity

Return on equity is one of the measures of financial performance. It shows how efficiently a company handles and uses the money shareholders contributed to the company. It is calculated by dividing net income by shareholders' equity. The higher the return on equity, the more efficient the company is in generating income from the equity of the shareholders.

2.1.5 Profitability

The major aim of business is to maximize profit. Profitability is defined in relation to the external rate of return opportunity for the capital required to operate the company. According to Owolabi and Obida (2012), profitability is defined as the ability of a firm to make profits from all its activities which are operating, investing and financing activities. A firm must be able to generate revenue in excess of direct and indirect cost incurred to generate the revenue before it can make profit. Also, maximizing shareholders' wealth means a firm is able to pay dividend consistently as a result of the appreciation of the worth of the firm's market share (Olowe, 2018).

2.1.6 Firm Size

Firm size refers to the volume of operation of the firm. 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. Evidence from literature showed that firm size has a great impact on environmental accounting because the larger the firm the more the tendency it impacts on the environment in the pursuit of economic activities.

2.2 Theoretical Framework

2.2.1 Polluter Principle Pay

According to the Polluter Principle Pay (PPP), the polluter should bear the expense of carrying out the measures decided by public authorities to ensure that the environment is in an acceptable state (OECD, 1972). If environmental costs are not internalized this could lead to distortion of international trade and investment (Mann, 2009). Thus, due application of the principle also protects economic interests. The PPP is today understood in a much broader sense, not only covering pollution prevention and control measures but also covering liability, e.g. costs for the clean-up of damage to the environment, (OECD 1989 and 1992). Also, the field of application of PPP has been extended in recent years from pollution control at the source towards control of product impacts during their whole life cycle. Environmental taxation is based on PPP

2.2.2 Stakeholder Theory

The stakeholder theory developed by Freeman in 1984 assumes that firm has the social responsibility for the use of resources to engage in business activities that will generate profit and continuous increase in profit for the benefit of all stakeholders in the business. The theory is anchored on organization management and business ethics with the focus on values and morals that must influence organizational performance. The theory centers on the need for management to satisfy all interested parties connected to the organization. The theory takes cognizance of how the organization manages the stakeholders to achieve their objective (Adegbe, Ogidan, Siyanbola & Adebayo, 2020). The stakeholder's theory can be further explained with two theories which are:-

Corporate Social Responsibility Theory - which affirms that corporations are entities with economic, legal, ethical, and philanthropic obligations. Corporations responsible for a triple bottom line seek sustainability in the economic, social, and environmental realms.

Corporate Governance Theory— this stated that corporate governance describes the expected role of a company top management and board of directors in ensuring that the firm's activities at least meet the goals of the firm's stakeholders (Wogu, 2016).

2.3 Empirical Review

Various studies have been carried to examine the nexus between environmental accounting and taxation and the performance of manufacturing companies around the world and Nigeria in particular. However, most of these studies focused on environmental accounting only.

Bassey, Effiok and Eton (2013) examined the Impact of Environmental Accounting and Reporting on Organisational Performance of Selected Oil and Gas Companies in Niger Delta Region of Nigeria. The study was conducted using the Pearson's product moment correlation coefficient. Data were gathered from both primary and secondary sources. It was found from the study that environmental costs have a satisfied relationship with firm's profitability. It was concluded that environmentally friendly firms will significantly disclose environmental related information in financial statements and reports.

Nguyen and Tran (2019) assessed the relationship between disclosure levels of environmental accounting information and financial performance. Data were collected from the firms listed in Vietnam Stock Exchange from 2013 to 2017, including the firms disclosed and the ones did not disclose the environmental accounting information. The study used two regression models to investigate the relationship between environmental accounting information and return on assets. The results indicated that there was a close relationship between disclosure level of environmental accounting information and financial performance. In addition, there was a difference in terms of financial performance between the firms that had not disclosed environmental accounting information and the ones that disclosed the environmental accounting information.

Mohammad, Fakhrul and Rezaur (2016) assessed the relationship of company profitability and extent of environmental accounting reporting disclosures in the annual reports in quoted manufacturing companies in DSE. For this research, an Environmental Accounting Reporting Disclosure Index (EARDI) is developed consisting of 21 major environmental accounting disclosures. Return on Asset (ROA) is used as the proxy variable for company profitability. To obtain the EARDI score, content analysis is being used and statistical techniques such as frequency, mean, standard deviation, ANOVA, Bi-variate regression model analysis was conducted to acquire research outcome. The data obtained were analysed with multiple regression technique. The outcome revealed that there exists a significant association among environmental cost management and profitability of the Oil Sector in Nigeria.

Makori and Jagongo (2013) conducted a study on "Environmental Accounting and Firm Profitability: An Empirical Analysis of Selected Firms Listed in Bombay Stock Exchange, 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 key findings of the study shows that there is significant negative relationship between Environmental Accounting and Return on Capital Employed (ROCE) and Earnings per Share (EPS) and a significant positive relationship between Environmental Accounting and Net Profit Margin and Dividend per Share.

Asuquo (2012) carried out a study on Environmentally Friendly Policies and Their Financial Effects on Corporate Performance of Selected Oil & Gas Companies in Niger Delta Region of Nigeria". Data were collected from both primary and secondary sources. Thereafter, the data were analysed using simple ordinary least square regression method and the study hypothesis

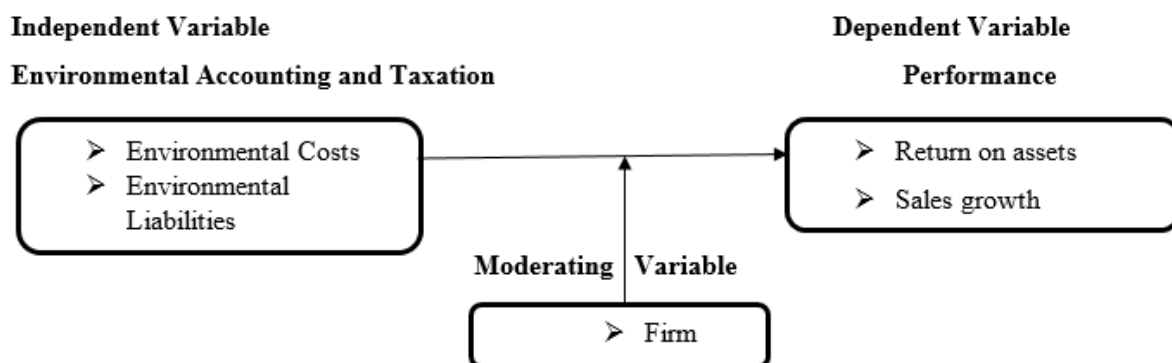
was also validated. The study revealed that the cost of ensuring environmentally friendly policies as well as firm competitiveness have significant relationship with the firms' profitability (Corporate performance). Thus, it was concluded that the related cost of environmental protection and management positively influences a firm's profitability; and environmentally friendly organization enjoy high level of corporate competitiveness resulting in high performance.

2.3.1 Gap in Literature

Several existing literature on environmental accounting and taxation and performance of firms in developed and developing countries have been reviewed. While some studies focused on the disclosure quality of environmental accounting information, other concentrates on their reporting practices. There is a lack of enough research on environmental accounting and taxation as it pertains to the performance of manufacturing firms in Nigeria, especially on environmental taxation.

2.4 Conceptual Framework

The independent variable is the environmental accounting and taxation and it is proxy by environmental cost and environmental liabilities while the dependent variables is performance which is proxy by Return on Assets (ROA) and Sales Growth (SG). The moderating variable is firm size.



3.0 METHODOLOGY

3.1 Study Area

The study area covered the manufacturing sector in Nigeria. The study area is limited to manufacturing companies that are quoted on the Nigeria Exchange Group (NGX). The manufacturing companies are selected for this study because their activities are much more responsible for the various damage in the ecosystem.

3.2 Research Design

This study will adopt an ex-post facto research design because it involves the use of secondary data which will be extracted from the annual reports of the selected companies.

3.3 Population

Population for the study is limited to all the companies from the industrial goods, healthcare and consumer good sectors listed on the Nigeria Exchange Group. The three sub-sectors were selected because they are the major sub-sectors of the manufacturing sectors and they are mostly involved in industrial processes that produce huge emission of poisonous gases. The industrial goods sector has twelve companies, healthcare sector has eleven companies while the consumer goods sector has twenty companies (NGX, 2021).

3.4 Sampling Technique and Sampling Size

Purposive sampling techniques will be used to select five companies from each of the three sectors used for this study. This makes it a total of fifteen companies to be used as sample size for the study.

3.4.1 Sampling Frame

The sampling frame for the study consisted of the number of firms selected from each sub-sector.

S/N	SUB-SECTORS	POPULATION	SAMPLE SIZE
1.	Consumer Goods	22	5
2.	HealthCare	11	5
3.	Industrial Goods	12	5
	Total	43	15

3.5 Sources of Data and Method of Data Collection

Secondary data will be used for this research. The secondary data will be obtained from the annual financial reports of the selected fifteen companies. It covers a period of nine years (2014 - 2022). The period is selected because it is believed there would have been a full integration of the IFRS in the preparation of annual reports used by the companies in Nigeria.

3.6 Description and Measurements of Variables

Independent variables used in this study are environmental costs and environmental liabilities while the dependent variables are return on assets, return on equity and sales growth. The moderating variable is the firm size how the variables were measured is shown in the table below:

Variable	Measurements
Return on Assets (ROA)	Profit before tax/Total Assets
Sales Growth (SG)	(Salest – Salest-1)/Salest-1
Firm Size (FS)	Log (Total Assets)

3.7 Method of Data Analysis

Both inferential and descriptive statistics will be used for data and testing of the hypothesis. The descriptive statistics will include percentage frequency and standard deviation. The inferential statistics will include content analysis, multiple regression, and Analysis of Variance (ANOVA). Content analysis and multiple regression will be used to examine the effect of environmental accounting and taxation on the profitability and sales growth of manufacturing companies in Nigeria.

Content analysis and One-way ANOVA will be used to determine if there is a significant difference in the effect of environmental accounting and taxation on the performance of manufacturing sub-sectors.

3.7.1 Content Analysis

A dichotomous procedure of content analysis technique of gathering data is used in codifying qualitative information into categories in order to derive quantitative values. Any of the sampled firm selected could score a maximum of sixty (60) points and a minimum of 0. The formula for calculating the reporting score using the sixty (60) disclosure index items in ISO 14031 benchmark as adopted from previous studies by (Wiseman 1982 and Uwigbe 2011) is shown below:

RS = 60
Σri
i=1

Where: RS = Reporting score, ri = a score of (1) if the item is reported and (0) if not reported. i = 1, 2, 3,60.

All the reported items are then summed up and divided by 60 to arrive at a value for the dependent variable.

3.8 Model Specification

The model specified for this study used Return on Assets (ROA) and Sales Growth (SG) as proxies for performance which is the dependent variable, while environmental accounting and taxation proxied by environmental costs and environmental liabilities independent variable.

Y = a + β1X1 + β2X2 + β3X3 + μ Regression Equation

Where: Y = Dependent Variable (Performance) a = Constant b = Coefficient x = Independent Variable (Environmental accounting and taxation)

The regression model is stated below:

PERF = α + β1EC + β2EL + β3FS + μ equation 1

ROA = α + β1EC + β2EL + β3FS + μ equation 2

$$SG = \alpha + \beta_1 EC + \beta_2 EL + \beta_3 FS + \mu \dots\dots\dots \text{equation 3}$$

Where:

PERF = Performance

ROA = Return on Assets

SG = Sales Growth

EC = Environmental Costs

EL = Environmental Liabilities

FS = Firm Size

4.0 RESULTS AND DISCUSSION

This section presents the results of the data extracted from secondary sources and analyzed using descriptive and inferential statistics such as mean, standard deviation, regression and one-way ANOVA.

4.1 Descriptive Statistics of Results

Table 4.1 shows the result of the descriptive statistics of the variables used for the study. Return on Assets (ROA) Sales Growth (SG) Environmental Costs (EC), and Environmental Liabilities (EL) have mean values that are close to the values of their standard deviation which means that the dataset of the variables are homogenous in nature. However, there is a presence of heterogeneity in Firms Size (FS) due to the difference in the mean value and standard deviation. This is due to the fact that the firms are not of equal sizes.

Table 4.1: Descriptive Statistics of Variables

Items	Mean	Standard Deviation
Return on Assets	0.1114	0.1919
Sales Growth	0.212	0.2062
Environmental Costs	1.0074	1.0330
Environmental Liability	1.2666	1.2470
Firm Size	7.531	0.9254

4.2: Effect of Environmental Accounting and Taxation on Profitability of Manufacturing Companies in Nigeria.

The effect of environmental accounting and taxation on the profitability of manufacturing companies was examined using multiple regression statistical tool. The result as presented in

Table 4.2 shows that the coefficient of determinant (R²) is 0.3165 which means the independent variable environmental accounting and taxation proxied by EC, and EL, and the moderating variable FS combined to explain approximately 32% of the variation in the dependent variable profitability which is proxied by ROA. This suggests that there are other factors that control 68% variation in ROA. Furthermore, the F-value is 20.37 and it is 0.0000 which is lower than 0.05 level of statistical significance. This means that there is a significant relationship between the independent variable and the dependent variable. Also, from Table 4.3 EC has a coefficient of 0.0391597 at 0.017 which is lower than 0.05 level of statistical significance. This indicates that EC has a positive and significant effect on ROA of companies. Likewise, EL has a coefficient of 0.0291861 at 0.033 which is lower than 0.05 level of statistical significance. This suggests that EL has a positive and significant effect on ROA of companies. Also, FS has a coefficient of 0.0041507 at 0.208 which is greater than 0.05 level of statistical significance. This means that FS has an insignificant but positive effect on ROA of companies.

Table 4.2: Model Summary of the Effect of Environmental Accounting and Taxation on Profitability of Manufacturing Companies in Nigeria

Source	SS	df	MS	Number of obs = 135
-----+-----				F(3, 132) = 20.37
Model	2.09249215	3	.697497382	Prob > F = 0.0000
Residual	4.51965005	132	.034239773	R-squared = 0.3165
-----+-----				Adj R-squared = 0.3009
Total	6.6121422	135	.048978831	Root MSE = .18504

Table 4.3: Coefficients of the Effect of Environmental Accounting and Taxation on Profitability of Manufacturing Companies in Nigeria

ROA	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
-----+-----						
EC	.0391597	.0162538	2.41	0.017	.0070081	.0713113
EL	.0291861	.013563	2.15	0.033	.0023571	.0560151
FS	.0041507	.0032774	1.27	0.208	-.0023322	.0106336

4.3: The Effect of Environmental Accounting and Taxation on Growth of Manufacturing Companies in Nigeria

Multiple regression statistical tool was also used to examine the effect of environmental accounting and taxation on the growth of manufacturing companies. The result as presented in Table 4.4 shows that the coefficient of determinant (R²) is 0.1242 which means the independent variable proxied by EC and EL, and the moderating variable FS combined to explain approximately 12% of the variation in the dependent variable (SG). This suggests that other factors control 88% variation in SG. Furthermore, the F-value is 6.24 and it is 0.0005 which is lower than 0.05 level of statistical significance. This means that there is a significant relationship between the independent variable and dependent variable. Also, from Table 4.5 EC has a coefficient of -0.032978 at 0.598 which is greater than 0.05 level of statistical significance. This indicates that EC has a negative and insignificant effect on SG of companies. Likewise, EL has a coefficient of -0.0277371 at 0.595 which is greater than 0.05 level of statistical significance. This suggests that EL has a positive and significant effect on SG of companies. Also, FS has a coefficient of 0.0251041 at 0.048 which is greater than 0.05 level of statistical significance. This means that FS has a significant and positive effect on SG of companies.

Table 4.4: Model Summary of the Effect of Environmental Accounting and Taxation on Growth of Manufacturing Companies in Nigeria

Source	SS	df	MS	Number of obs = 135
-----+				F(3, 132) = 6.24
Model	9.43246031	3	3.14415344	Prob > F = 0.0005
Residual	66.5411299	132	.504099469	R-squared = 0.1242
-----+				Adj R-squared = 0.1042
Total	75.9735902	135	.562767335	Root MSE = .71

Table 4.5: Coefficients of the Effect of Environmental Accounting and Taxation on Growth of Manufacturing Companies in Nigeria

SG	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
-----+						
EC	-.032978	.0623658	2.53	0.598	.0903877	.1563438
EL	-.0277371	.0520414	2.53	0.595	.075206	.1306801
FS	.0251041	.0125752	2.00	0.048	.0002291	.0499792

5.0 DISCUSSION

Objective one examined the effect of environmental accounting and taxation on profitability of manufacturing companies in Nigeria. From the result, it was discovered there are other factors that constitute 68% apart from environmental accounting and taxation that affect the profitability measured by ROA of manufacturing companies. These other factors may or may not be related to environmental issues. This indicates that environmental accounting and taxation do not cause much variation in the profitability of companies. Also, EC with a coefficient of 0.0391597 at $p = 0.017$ which is lower than 0.05 significance level means that 1% increase in the EC will increase profitability by 3.91%. This suggests that companies that make account for environmental costs have the opportunity to increase their profitability by spending on resources that are eco-friendly and can reduce cost of production. Likewise, EL has a coefficient of 0.0291861 at $p = 0.033$ at 0.05 significant level means that 1% increase in EL will result in 2.91 increase in ROA. This findings corroborate the work of Falope, Ofor and Ofurum (2019) that environmental costs and environmental liabilities have positive effects on ROA.

Objective two examined the effect of environmental accounting and taxation on growth of manufacturing companies. The findings show there are other factors that affect the growth (SG) of manufacturing companies which sum up to 88% that are not considered in this work. This suggests that environmental accounting and taxation do not have much effect on the growth of manufacturing companies. Furthermore, EC has a negative coefficient of -0.032978 at 0.598 which is greater than 0.05 statistical level. This means that EC does not affect the growth of the manufacturing companies. Since environmental accounting and taxation are still voluntary in Nigeria, whether or not a company accounts for them does not affect the sales performance of a company. In the same vein, EL has a negative coefficient of -0.0277371 at $p = 0.595$ which is greater than 0.05. This indicate that EL does not affect the sales performance of companies whether they fulfil their obligations or not. Also, it was discovered that FS has a positive coefficient of 0.0251041 which is significant at 0.05. This means that the size of the firm is related to its growth. The more a firm grows the larger its becomes. The more a firm sells its product in the market, the more the enlargement in terms of more machineries, more employees, increase in production and possibly more branches.

6.0 CONCLUSION AND RECOMMENDATION

The study examined environmental accounting and taxation and performance of manufacturing companies in Nigeria. It specifically examined the effect of environmental accounting and taxation on profitability and growth of manufacturing companies in Nigeria. From the it's findings, the study concluded that environmental accounting and taxation do not cause much variation in the profitability and growth of companies. Furthermore, it is concluded that environmental costs has a positive and significant effect on profitability while environmental liabilities has a negative and insignificant effect on growth of manufacturing companies in Nigeria. Arising from the findings of the study, it is therefore recommended that environmental accounting and taxation should be made an important inclusion in the financial reports of companies. This is to ensure that companies engage in production activities that will not have adverse effect on the environment.

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