EFFECT OF ENVIRONMENTAL MANAGEMENT ACCOUNTING AND FINANCIAL PERFORMANCE OF NIGERIAN CONSUMER GOODS FIRMS

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Abstract
This study is to determine the effect of environmental management accounting on corporate performance of quoted Nigerian consumer goods firms. Specifically, the objectives of the study are to; evaluate the extent environmental restoration cost affects return on assets of quoted Nigerian consumer goods firms, ascertain the extent pollution prevention cost affects return on assets of quoted Nigerian consumer goods firms and determine the extent environmental protection cost affects return on assets of quoted Nigerian consumer goods firms. Ex post facto research design and time series data were adopted. Formulated hypotheses were tested using regression analysis with aid of SPSS Version 20.0. Based on this, the study found out that environmental restoration cost, pollution prevention cost and environmental protection cost have effect on return on assets of quoted Nigerian consumer goods firms. Based on this, the study recommended among others that regular and continuous environmental evaluation will improve organizations' sales, income and ensure that environmental situational needs are met.

Keywords: Environmental Management Accounting, Financial Performance and Nigerian Consumer Goods Firms.

INTRODUCTION

The awareness of the environment and man's ability to cause damage started from the fifties of the 19th century. This concern had been repeatedly expressed in a series of international summits and consensus right from the sixties. The starting point that composed an organized through proves a large scale the celebrated public action of the club of Rome entitled "Limit to Growth" that initiated a worldwide debate of economic growth at the expense of natural environment (Shil & Iqbal, 2005).

In Nigeria for instance, one sector of the economy that has attracted a lot of public outcry on issues relating to environmental concerns is the manufacturing sector. Though a major source of revenue to the Nigerian State (e.g. the oil and gas industries), their activities are often associated with severe health implications and environmental degradation which in recent past have caused nagging social disputes and disruption of some multinational companies economic activities (Uwaoma & Ordu, 2016). The concerns are been heightened due to stakeholders and host community's increased awareness of environmental degradation issues such as air and water pollution from heavy industrial machines, lack of clean-fresh water, lack of sea foods due to oil spill, and the likes. The need for sustainable environmental cost management in the manufacturing industries has thus become the concern and focus of most nations and responsible corporate managements the world over. Organizations are now expected to be able to demonstrate that they are aware and addressing the impact of their operations on the environment and society in general (Uwuigbe & Jimoh, 2012).

Environmental Management Accounting (EMA) systems have the dual purpose of managing and improving the financial and environmental performance of an entity. Application of EMA, which integrates two of the main principles of sustainable development – environmental and economics, can help to significantly improve corporate decision-making (UNDSD, 2003). According to Burritt, Hahu, Schaltergger (2001), EMA can generate information about the use of resources with environmentally related impacts and affects the financial position and performance of organization.

Consequential effect on corporate organizations may result in incurring future capital expenditure and cash flows which may impinge on going concern as balance sheet secured loans may not be secured after all if land values for instance are affected by environmental factors. Also, the limited awareness of environmental costing principles and methodology has become an important issue to be addressed (Bassey, Oba & Onyah, 2013).

In addition to social pressure, accounting, especially environmental costs are critically important to form this environmental awareness. In the 1970s, environmental accounting has gained increasing significance, particularly in Western countries. The Environmental Accounting research has focused on "Sustainable Development" and aimed to provide balance between economy and ecology (Lazol, Muğal &Yücel, 2008).

Nowadays, the demand for company to apply environment disclosure is very high in order to save the world and it is proved that company with environment disclosure can achieve good performance. Along with economic growth, pressure on natural systems and earth resources

intensify, managers seek to reduce operating costs and environmental impacts resulting from operational activities (Azar, Shahbazi, Abad & Mousavi, 2014).

Most of researchers have explored how the stringency of the environmental policy regime affects a company's EMA applicability and financial performance. Among most of the studies that examined the relationship between environmental management and firm performance, some found negative relationship (Amacha and Dastane, 2017; Nobanee and Ellili, 2017; Kasum and Osemene, 2010; Ezejiofor, John-Akamelu and Chigbo, 2016) while many found positive relationship (Nakao, Amano, Matsumura, Genba, & Nakano, 2007; Clause and Rikhardsson, 2008; Ding, 2009; Beredugo and Mefor, 2012; Moorthy and Yacob, 2013; Sayedeh and Saudah, 2014). Okoye and Ezejiofor (2013) discovered that sustainable environmental accounting has significant impact on corporate productivity in order to enhance corporate growth. The findings of these studies were uncertain, besides few research of this nature focused on those costs incurred by these entities in maintaining their environment where they operate in order to ascertain whether this affects corporate profitability, sustainability, integrity and reputation.

Going further, several reasons could be attributed to these observed inconsistencies in prior studies. A look at the previous studies particularly those by Nigerian authors shows a large domination of samples comprising only of a single sub-sector with the most current data being that of 2014 (Nnamani, Onyekwelu & Ugwu, 2017).

Against the backdrop, there is need to establish the extent environmental management accounting has impacted on the corporate performance of quoted consumer goods firms in Nigeria.

The main objective of this study is to determine the effect of environmental management accounting on financial performance of quoted Nigerian consumer goods firms. Specifically, the study sought to;

1. Evaluate the extent environmental restoration costs affect return on assets of Nigerian consumer goods firms.
2. Ascertain the extent pollution prevention cost affect return on assets of Nigerian consumer goods firms.
3. Determine the extent environmental protection cost affect return on assets of Nigerian consumer goods firms.

REVIEW OF RELATED LITERATURE

Conceptual Framework

EMA can be defined as the generation and analysis of both financial and non-financial information in order to support internal environmental management processes (Shane, 2005). It is complementary to the conventional financial management accounting approach, with the aim to develop appropriate mechanisms that assist in the identification and allocation of

environment-related costs (Bennett & James, 1998). The major areas for EMA application include; in the assessment of annual environmental costs/expenditures, product pricing, budgeting, investment appraisal, calculating costs, and savings of environmental projects, or setting quantified performance target. Besides being a tool for reporting environmental costs to external stakeholders, the EMA has an internal company-level function and focus (Jasch, 2003; Lange and Alferi, 2004).

EMA is as wide-ranging in its scope, techniques and focus as normal management accounting. Burritt, Hahn and Schaltegger (2001) stated: "there is still no precision in the terminology associated with EMA". They viewed EMA as being an application of conventional accounting that is concerned with the environmentally-induced impacts of companies, measured in monetary units, and company-related impacts on environmental systems, expressed in physical units. EMA can be viewed as a part of the environmental accounting framework and is defined as 'using monetary and physical information for internal management use' (ACCA, 2007). EMA encompasses environmental reporting which is the disclosure of information in the published annual report or elsewhere, of the effect that operations of the business have on the natural environment.

Financial Performance

There are several aspects of performance, each of which contributes to the overall performance in an organization. Despite the evolution of various available benchmarks and performance measurement, the answer to what is performance may still be hard to pin down. The banking sector aims for strong performance, but few banks worry about what constitutes such performance. The current run up of the stock market, at a time when corporate profits are fast declining, raises the question of whether or not banks are doing satisfactory good job for their shareholders (Ghouri & Khan, 2011).

Hansen and Mowen (2005) states that firm performance is very essential to management as it is an outcome which has been achieved by an individual or a group of individuals in an organization related to its authority and responsibility in achieving the goal legally, not against the law, and conforming to the moral and ethic. Performance is the function of the ability of an organization to gain and manage the resources in several different ways to develop competitive advantage.

The main objective of financial performance measuring is to determine the operating and financial characteristics and the efficiency and performance of economic unity management, as reflected in the financial records and reports (Amalendu, 2010). Akinsulire, (2008) and Pandy (2003) points out that no performance review is beyond dispute, for instance, reported profit is a matter of opinion. If income is to be measured in terms of the increase or decrease in the wealth of an enterprise, obviously some definitions of that stock of wealth is required. Akinsulire (2008) and Pandy (2003) measure wealth in three categories; as financial capital – the equity stake in an enterprise in money terms; real financial capital, the equity stake in an enterprise in real terms (the proprietary concept); operating capacity capital, the ability of the enterprise to maintain its ability to provide goods and services (the entity concept). In addition, measuring performance is very important because it builds on the results, make

different decisions in economic units. According to (Benjalux, 2006), performance measures are the life blood of economic units, since without them no decision can be made. Financial performance measure is one of the important performance measures for economic units. Financial performance measures are used as the indicators to evaluate the success of economic units in achieving stated strategies, objectives and critical success factors (Katja, 2009).

Return on Assets (ROA)

ROA gives profitability on assets of the firm after meeting all expenses and taxes. It measures the profit of the firm after tax for each dollar invested in assets (Horne & Wachowicz 2005). It is indicator of managerial performance. So, higher value of this ratio means better managerial performance (Ross, Westerfield & Jaffe 2005). ROA can be increased by increasing profit margin or asset turnover. ROA = Net Profit / Total Assets.

Environmental Management Accounting and Financial Performance

The above-mentioned accounting techniques are useful for EMA to identify and allocate environmental cost. In addition, there are alternative techniques to estimate environmental costs such as the 'environmental costs decision tree' as described by Rinner (2000). An understanding of how a company's environmental performance affects its financial prospects, and how the stringency of the environmental policy regime might constrain a company's financial opportunities are issues of concern to policy makers (Darnall, et al, 2006).

Identifying environmental costs and related financial opportunities is a tangible way of gaining the attention of upper management by linking environmental responsibilities with costs (Ann & Richard, 1998). In 1998, the USEPA argued that the definition of environmental costs depended on how a company intends to use the information, for example in capital budgeting or product design. Environmental aspects and their costs range from cooling water that is paid for twice (to supply and to treat), the cost of tracking, monitoring, inspecting, reporting, treating and disposing of hazardous materials and associated liability costs which consume increasing human and financial resources. One should recognize that environmental costs are not a separate type of costs; rather they are part of money flowing throughout a corporation (Hu & Chong, 2003).

Review of Empirical Studies

Amacha and Dastane (2017) examined the relationship between sustainability practices and firm performance in the Malaysian Oil and Gas sector. Their specific objectives were to conduct a data analysis to understand the relationship between environmental, social and governance performance and financial performance which was measured using EBIT, EPS and PE ratio. A sample size of 21 oil and gas firms from 2011 – 2013 were used and multiple regression model with the aid of SPSS version 21. The result shows that the majority of oil and gas companies in Malaysia had poor performance in terms of sustainability disclosure. On all three chosen profitability parameters (EBIT, EPS and PE ratio), the companies that practiced sustainability performed better than their counterparts that did not.

Nobanee and Ellili (2017) examined the impact of economic, environmental, and social sustainability reporting on financial performance of UAE Banks in Abu Dhabi Securities Exchange from 2003-2013 using economic, environmental and social dimensions against banking performance which they measured using ROE. Panel data analysis technique was used and their results revealed that sustainability disclosures as well as economic, environmental and social disclosures have no significant effects on the banking performance of UAE banks. Wibowo (2012) ascertained the effect of corporate social responsibility disclosure and profitability using a sample of 25 firms from SRI-KEHATI Index and covering the period 2005 – 2010. Findings revealed that there is positive impact of the social performance to the profitability of the firms and also there is positive impact of the profitability of the company to the social performance of the firms. Sayedeh and saudah (2014) proposed model of the relationship between environmental management accounting and firm performance. The experimental finding shows that there is no universal agreement about the actual impact of EMA on firm performance. In the sense that the positive relationship between EMA and firm performance has been obtained in most studies, some studies have still found a negative or neutral relationship. Cortez and Cudia (2011) explored environmental innovations on financial performance of Japanese electronics companies following the growing literature linking corporate social performance with profitability. Using sample electronics companies listed in the Tokyo Stock Exchange. The findings point to risk minimization efforts of electronics companies in spite of declining profitability. Bassey, Oba and Onyah (2013) analyzed the extent of implementation of environmental cost management and its impact on output of oil and gas companies in Nigeria from 2001 to 2010. Multiple regression analytical technique was employed. Findings revealed that there is a significant relationship between the parameters that influence environmental cost management and output of oil and gas produced in Nigeria. Also, it was discovered that there are no established standards in Nigeria guiding environmental cost management in the oil and gas industries in Nigeria. Okoye and Ezejiofor (2013) assessed sustainability environmental accounting in enhancing corporate performance and economic growth. The paper analyzed and tested two hypotheses with Pearson Product Movement Correlation Co-efficient. The study discovered that sustainable environmental accounting has significant impact on corporate productivity in order to enhance corporate growth. Enahoro (2009) investigated the best practice of environmental accounting among companies currently operating in Nigeria. Cross-sectional and longitudinal content analyses were carried out. The test statistics applied in the study were the t-test statistics, Pearson Product-Moment correlation tests, ANOVA, and Multivariate Linear Regression Analysis. Findings show that environmental operating expenditures are not charged independently of other expenditures. Beredugo and Mefor, (2012) evaluated the relationship between environmental accounting and reporting and sustainable development in Nigeria. Pearson correlation coefficient and OLS were used for data analyses, and was discovered that there is a significant relationship between environmental accounting and reporting and sustainable development; that with environmental accounting encourage organizations to track their greenhouse gas (GHG) emissions and other environmental data against reduction targets, and there are consequences for noncompliance with environmental accounting and reporting.

Mehenna and Vernon (2004) examined the integration of environmental policy with business policy. The study found that the business firm's strategy includes responding to capital and operating costs of pollution control equipment. This is caused by increasing public concerns over environmental issues, and by a recent government-led trend to incentive-based regulation. Mohammad, Sutrisno, Prihat and Rosidi (2013) examined the effect of environmental accounting implementation and environmental performance and environmental disclosure as mediation on company value. Samples are 59 companies that selected with purposive sampling technique. Analysis technique used is the Partial Least Square (PLS). The finding indicate that environmental accounting implementation is able to affect company value, environmental information disclosure and on environmental information disclosure as well as environmental performance has not been able to affect company value through environmental information disclosure. Lubomir and Dietrich (2009) analyzed the links from environmental performance to revenues, costs, and profits using an unbalanced panel of Czech firms from the years 1996 to 1998. The results indicate strongly that better environmental performance improves profitability by driving down costs more than it drives down revenues. Clause and Rikhardsson (2008) studied the effect of environmental investment on investment decisions. The results suggest that environmental information disclosure influences investment allocation decisions. This finding would imply that companies that are apathetic to their environmental responsibility might experience eventual crashes on their stock price if their investors are rational in considering the future value of the firm based on its present state of environmental responsibility. Lars and Henrik (2005) determined the effect of environmental information on the market value of listed companies in Sweden using a residual income valuation model. The results show that environmental responsibility as disclosed by sampled companies has value relevance, since it is expected to affect the future earnings of the listed companies. Their finding has implications for companies that pollute the environment – their future solvency may be eroded with gradual depletion in earnings. Ding (2009) investigated Taiwanese enterprises that have been certified with ISO14000 for environmental management from the financial aspect. For the 108 samples, his finding was that their environmental performances had significant negative effects on the return on assets, return on equity and net operating profit. Ijeoma (2015) determined the role of environmental cost accounting towards environmental sustainability in Nigeria. The source of data for this study is primary source of data collection with the aid of questionnaire. The research instrument was randomly administered to 200 respondents from organizations in Nigeria: Agricultural/Agro-Allied, Breweries, Chemical and Paints, Health Care/Pharmaceutical and Oil Marketing companies. The findings of the study revealed that majority of the respondents agreed that business organizations in Nigeria have not being aware of environmental policies. It was also found that that there exists no significant difference on business organizations in Nigeria not being aware of environmental policies. Seetharaman, Mohamed and Saravanan (2007) determined the relationship of environmental accounting and environmental management system in order to determine the sustainability of organization. It concludes with an emphasis on the use of environmental accounting for continuous improvement in environmental corporate policies and programs by taking into account the regulatory, technical developments, scientific developments, and it

must be fully integrated into EMS along with other functional area. Farhad and Azhdar (2002) determined the chief executive officers' (CEO) perception of the environmental scanning in relation to the firm's performance in SME sector in the context of the British electrical and electronic firms. The authors disaggregated the SME sector into three components, which are micro-enterprises, small enterprises and medium enterprises. Not surprisingly, it is widely viewed as the first step in the process of strategic management. It is concluded that there is a significant relationship between increasing environmental scanning of the firm, and the success of firm performance in small and medium sized enterprises. The weakness of this article is that the authors did not include environmental management as part of environmental scanning parameters study for the CEOs to consider in managing their firm. Ezejiofor, John-Akamelu, and Chigbo (2016) assessed the effect of sustainability accounting measure on the performance of corporate organizations in Nigeria. Ex post facto research design and time series data were adopted. Data for study was collected from annual reports and accounts of the company in Nigeria. Formulated hypotheses were tested using Regression Analysis with aid of SPSS Version 20.0. The study found that environmental cost does not impact positively on revenue of corporate organizations in Nigeria, also that environmental cost impacted positively on profit generation of corporate organizations in Nigeria. Owolabi, Akinwunmi, Adetula & Uwuigbe (2016) examined the extent of sustainability reporting practiced by Lafarge Africa Plc. Content analysis was used to analyze the data extracted from their annual reports and the Global Reporting Initiative (GRI) G4 sustainability reporting guideline was used as a basis of assessment. The study found no disclosures on human rights issues, 3% environmental disclosures and an aggregate of 30% disclosure based on one hundred and sixty-nine indicators used.

Most of researchers have explored how the stringency of the environmental policy regime affects a company's EMA applicability and financial performance. Most of the studies who examined the relationship between environmental management and firm performance, the findings of these studies were inconsistent. Furthermore, several reasons could be attributed to these observed inconsistencies in prior studies. Excluding the fact the country-specifics and other peculiarities may influence the outcome of studies conducted in both developed and developing countries because of divers ways corporations respond to environmental and social concerns in different climes, a look at the previous studies particularly those by Nigerian authors shows a large domination of samples comprising only of a single sub-sector with the most current data being that of 2014 (Nnamani, Onyekwelu & Ugwu, 2017).

METHODOLOGY

Research Design

Due to the nature of the study, ex post fact research design and time series data were adopted in collecting data from financial reports and accounts. The population of the study covered the twenty seven consumer goods firms quoted on the Nigerian Stock Exchange. The study covered six years annual reports and accounts of these companies from 2011 to 2017.

The researcher uses convenient sampling techniques to select consumer goods firms in Nigeria. The researcher dropped four companies out of the twenty seven of them for non-availability of their annual accounts up to date.

Method of Data Analysis

The data collected for the study were analyzed using simple regression analysis with the aid of statistical package for social sciences (SPSS) 20.0

Decision Rule

The decision for the hypotheses is to accept the alternative hypotheses if the f -value of the test statistic is positive and significant at 5% significance level.

Model Specification

The estimated model takes the following form:

$ROA_{it} = a_0 + \mu_i + \beta_1 ENVRC + \beta_2 ENVPPC_{it} + \beta_3 \mathrm{ENVPC}_{it} + {}_i\sum_{it}$ ……………………..…..(i)

$ROA_{it} = a_0 + \mu_i + \beta_I ENVRC_{it} + \sum_{it}$ …………………………….…………...…..…..(ii)

$ROA_{it} = a_0 + \mu_i + \beta_I ENVPPC_{it} + \beta_2 EPS_{it} + \sum_{it}$ …………………………….………..(iii)

$ROA_{it} = a_0 + \mu_i + \beta_I ENVPC_{it} + \sum_{it}$ ………………………………………………... (iv)

Where:

The dependent variable: Financial performance (ROA) and

The Independent variables:

ENVRC = environmental restoration costs

ENVPPC = pollution prevention cost

ENVPC= environmental protection cost

a_0 = slope of the model

$\beta_I, \beta_2, \beta_3$, = coefficient of parameters.

Test of Hypotheses

Hypothesis One

Ho: Environmental restoration cost has no effect on return on assets of Nigerian consumer goods firms.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9185.890	1	9185.890	1.915	.239[b]
	Residual	19185.660	4	4796.415		
	Total	28371.549	5			

a. Dependent Variable: ROA

b. Predictors: (Constant), ENVRC

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	388.794	312.880		1.243	.282
	ENVRC	-5.113	3.695	-.569	-1.384	.239

a. Dependent Variable: ROA

Table above revealed that the F-stat (1.915) and Sig-value (0.239) indicates that the hypothesis of a statistically significant linear relationship between the dependent and independent variables cannot be rejected at 5% level.

The regressed coefficient correlation result above shows that an evaluation of the performance of the explanatory variables (Beta Column) shows that environmental restoration cost is positive and significant (Sig. = .282). Therefore environmental restoration cost has effect on return on assets of quoted Nigerian consumer goods firms. In the light of this, we reject null hypothesis and accept alternative which states that environmental restoration cost has effect on return on assets of Nigerian consumer goods firms

Hypothesis Two

Ho: Pollution prevention cost has no effect on return on assets of Nigerian consumer goods firms.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24706.469	1	24706.469	26.964	.007[b]
	Residual	3665.080	4	916.270		
	Total	28371.549	5			

a. Dependent Variable: ROA

b. Predictors: (Constant), ENVPPC

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	324.210	71.680		4.523	.011
	ENVPPC	-5.326	1.026	-.933	-5.193	.007

a. Dependent Variable: ROA

Table above revealed that the F-stat (26.964) and Sig-value (0.007) indicates that the hypothesis of a statistically significant linear relationship between the dependent and independent variables cannot be rejected at 5% level.

The regressed coefficient correlation result above shows that an evaluation of the performance of the explanatory variables (Beta Column) shows that pollution prevention cost is positive and significant (Sig. = .007). Therefore environmental pollution cost has effect on return on assets of quoted Nigerian consumer goods firms. In the light of this, we reject null hypothesis and accept alternative which states that environmental pollution prevention cost has effect on return on assets of Nigerian consumer goods firms.

Hypothesis Three

Ho: Environmental protection cost has no effect on return on assets of Nigerian consumer goods firms.

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	20888.769	1	20888.769	11.166	.029[b]
	Residual	7482.780	4	1870.695		
	Total	28371.549	5			

a. Dependent Variable: ROA

b. Predictors: (Constant), ENVPC

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1451.962	447.556		3.244	.032
	ENVPC	-17.790	5.324	-.858	-3.342	.029

a. Dependent Variable: ROA

Table above revealed that the F-stat (11.166) and p-value (0.029) indicates that the hypothesis of a statistically significant linear relationship between the dependent and independent variables cannot be rejected at 5% level.

The regressed coefficient correlation result above shows that an evaluation of the performance of the explanatory variables (Beta Column) shows that environmental protection cost is positive and significant (Sig. = .029). Therefore environmental pollution cost has effect on return on assets of quoted Nigerian consumer goods firms. In the light of this, we reject null hypothesis and accept alternative which state that environmental protection cost has effect on return on assets of Nigerian consumer goods firms.

Discussion of Findings

Based on the outcome from the hypotheses tested, environmental management accounting has impacted positively on the corporate performance of consumer goods firms in Nigeria.

This means that increase on the environmental management accounting can affect the operations of corporate firms.

This finding is in line with Ezejiofor, John-Akamelu, and Chigbo (2016) whose study found that environmental cost does not impact positively on revenue of corporate organizations in Nigeria, also that environmental cost impacted positively on profit generation of corporate organizations in Nigeria. Dabbas and Al-rawashdeh (2012) revealed that there is a significant relationship between the costs of environmental activities, such as the provision of donations/establishment non-profit projects, support projects/charities and the profitability of industrial companies. Also, the finding of Wibowo (2012) shows that there is positive impact of the social performance to the profitability of the firms. Amacha and Dastane (2017) on their result concluded that a strong and significant relationship exists between sustainability practices and financial performance of companies. Sayedeh and saudah (2014), Lubomir and Dietrich (2009) on their analytical results indicate strongly that better environmental performance improves profitability by driving down costs more than it drives down revenues.

Conclusion

From the empirical results, environmental management accounting significantly and positively relates to corporate performance of the consumer goods firms in Nigeria. This indicates that continuous environmental evaluation handled in an acceptable way garners sales and therefore improved income. Compliance of environmental laws also significantly and positively relate to perceived financial performance.

It can be concluded that environmental-related cost management positively influences firm's profitability and enhances organizational performance, that large firms significantly reports and discloses environmental related information, also that environmental-friendly organization enjoys high level of corporate cooperativeness. Measuring performance and setting targets is a critical component for organizations to become more productive, more profitable, and more sustainable.

Recommendations

Based on the findings of this study, the researcher recommends as follows;

1. Regular and continuous environmental evaluation will improve organizations sales, income and ensure that environmental situational needs are met.
2. Compliance to environmental policies/laws will enhance organizational performances and competitiveness.
3. Measuring performance with the set targets could also serve as a critical component for organizations to become more productive, profitable and sustainable.

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