

ENVIRONMENTAL ACCOUNTING AND THE PROFITABILITY OF CONSUMER GOODS MANUFACTURING CORPORATIONS IN NIGERIA

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ABSTRACT

Accounting for environmental impacts has the capacity to inform policymakers about environmental conditions. This research focused largely on determining whether or not there was a connection between environmental accounting and financial success for businesses in Nigeria. The research used secondary data, including 2020 annual reports from firms listed on the NEG that manufacture consumer products. Twenty-six (26) consumer products manufacturing businesses were randomly selected for the research. The goals of the study were accomplished by employing the Spearman Rank Order Correlation Coefficient. The study found that environmental accounting metrics (net profit margin, dividend per share, and profits per share) were positively and significantly related to business profitability. Findings indicated a good and statistically substantial correlation between environmental accounting and financial efficiency of Nigerian businesses. To prevent environmental aggression among young people, the research suggests that firms disclose their spending on environmental initiatives in yearly reports and comply with national environmental legislation.

Keywords: *Financial, Efficiency, Environmental Accounting*

INTRODUCTION

These days, businesses can't function without the local environment providing the raw materials they need to do their work. Wastes in solid, liquid, and gaseous form damage environmental variables including air, land, and water as a result of business activities or consumption of their goods. Consumers have developed a greater awareness of these environmental issues, and companies operating in their environment have been obligated to consider them, as resource consumption, scarcity of resources, and environmental degradation continue to rise, and so do environmental damages and the imbalance that occurs in the ozone layer and the environmental system (Şimşek & Öztürk, 2021).

More importantly, when contaminated wastes have an influence on the business environment, they also have an effect on man's livelihood as well. Environmental sustainability is jeopardized when clean water, pure air, land, climate, ecosystems, greenhouse gases, energy, biodiversity, and other natural components, as well as man's natural capital, are degraded and altered. Here, man is acting rationally by asking businesses in his environment to provide him with adequate housing, urban development, portable water supply, and other necessities in an effort to lessen the negative effects of environmental degradation and make the best possible use of his environment's resources. With this change, businesses and individuals are introduced to environmental accounting, which involves calculating the negative effects of economic activity on the environment (Adediran & Alade, 2013). The Environmental Agency (2010) defines environmental accounting as the process by which an organization's financial and environmental performance is collected and analyzed using management information systems (MIS), environmental management systems (EMS), and financial accounting systems; errors are identified

and corrected; and the results are communicated to stakeholders. Uwuigbe (2011) chimes in to say that environmental accounting provides a framework for measuring the present, past, and future costs of the environment in order to aid in decision-making and public communication.

Following that, man is confronted with another grave concern: that the environment's resources will eventually run out one day without a matching return. In response to this concern, the government's implementation of environmental laws and regulations became another means of preventing the environment's total annihilation. Pollution of the air, land, and water by gas flaring and garbage disposal are all examples of uncontrolled environmental activities that have risen to the forefront and made natural resource development and environmental accounting reporting a top priority in Nigeria as a result of regulatory "leakages" and policy implementation weaknesses (Umoren, Akpan & Okafor, 2018). Following this, businesses must compile an annual report for distribution to shareholders and other interested parties, in which they must include both qualitative and quantitative information on the company's activities and performance.

Additionally, the major objective of green accounting, also known as environmental accounting, is to analyze the environmental effect of an organization's or company's actions. Environmental accounting, as described by Basseyy, Effiok, and Okon (2013), helps businesses keep track of their environmental spending so that they may find ways to cut back on such costs while simultaneously boosting their bottom line. To this end, Nimalathan (2009) believes that the fundamental objective of business is profit. Profitability refers to an investment's capacity to generate revenue. Nimalathan continues by stating that the term profitability is a compound of two terms: the first is profit, and the second is ability; hence, it is viewed as an organization's ability to generate money. This motivated us to investigate whether or not there is a connection between environmental accounting and financial success for businesses in Nigeria.

Problem Identified

Environmental accounting is a growing concern for organizations globally, and the reasons are diverse, stemming from both the firm's internal and external surroundings, the latter of which is mostly international (Okoye & Ngwakwe, 2014). Nigeria, being a developing country, possesses a plethora of natural resources, including natural gas, limestone, petroleum, vegetation, and a variety of other minerals. These resources, however, are not without environmental damage as companies are utilizing them in an effort to improve and expand their economies.

Numerous operations undertaken by these firms contribute to the generation of waste containing potentially hazardous materials, resulting in social failure and risks to the host communities (Basseyy, Effiok & Eton, 2013). These activities include the elimination of marine fisheries, deforestation, increased climatic disruption, increased atmospheric carbon dioxide, constant mountain melting, increased health hazards caused by noise, the persistent deposit of toxic chemicals in humans, and smoke emissions from generators and factory plants (Amacha & Dastane, 2017; Dembo, 2017). As a result of unemployment and a lack of social infrastructure, the majority of industrial businesses in Nigeria are confronted with youth restiveness. This has frequently led to a series of vandalism attacks against oil pipelines and other important corporate facilities, wreaking havoc on the environment. Polycarp (2019) responds that these concerns might be addressed if Nigerian manufacturing firms handled their environmental costs efficiently and effectively.

Despite the fact that international communities have identified these issues and the Global Reporting Initiative (GRI) was founded on this premise to advance environmental reporting, a large percentage of manufacturing companies continue to believe that any expenditures on environmental issues will often result in additional costs in the short-term, reducing their effectiveness and efficiency in the long-run (Hasan & Hakan, 2012). This study's overarching goal is to learn whether or not Nigerian businesses can remain profitable after factoring in the full cost

of environmental protection measures. This includes being able to pay their bills, invest in their future, and stay ahead of the competition.

This research aims to provide a better understanding of how environmental accounting practices affect business success in Nigeria.

Research Questions

1. Is there a noteworthy connection between environment accounting (EA) and Net Profit Margin (NPM)?
2. Is there a momentous bond between EA and Dividend Per Share (DPS)?
3. Is there a substantial nexus between EA and Earnings Per Share (EPS)?

Ho₁: There is no noteworthy connection between EA and NPM.

Ho₂: No momentous bond exists between EA and DPS.

Ho₃: There is no substantial nexus between EA and EPS.

Stakeholders concerned with the management of their resources and habitats can benefit greatly from this study's results. The study findings will be relevant to scholars and researchers by adding to their existing knowledge and also will serve as an empirical literature for any of the variable under study. Notwithstanding, the study findings will be relevant to manufacturing firms in the area of decision making.

Relevant Literature

Variables

Environmental Accounting

Accounting, being an open system, is always in contact with the outside world. Accounting is obliged to take into consideration not just the interests of certain individuals or groups, but also the interests of the general public, in accordance with the notion of social accountability. Social responsibility accounting, a subfield of environmental accounting, has developed in tandem with the idea of social responsibility. Environmental accounting, according to Weng, Chen, and Chen (2015), is also known as green accounting, as it quantifies (in economic terms) a firm's environmental efficiency. Environmental accounting, according to Uwuigbe (2011), is the process through which firms publish information regarding their environmental performance as a means of demonstrating their accountability for their operations. To Şimşek and Öztürk (2021), environmental accounting includes the processes of recording, reporting, and inspecting environmental expenditures. It also includes the disclosure of projected social costs associated with production externalities on the environment in financial statements, as well as the amount of purposeful intervention costs paid by a business to close the gap between the marginal social cost and the marginal private cost (Sanni & Kolawole, 2019).

Furthermore, it is a subset of accounting that encompasses the communication to stakeholders of firms' environmental cost reporting. In this way, sound corporate governance is also guaranteed, as is openness about firms' social actions. Also, environmental accounting acts as a vehicle for communicating to the outside world the importance of environmental stewardship (Basse et al., 2013). Nonetheless, companies use environmental accounting in a variety of ways, depending on the period's activities and management judgments about what information should be included in cost reports. Environmental accounting procedures create data in two distinct areas (Iliemena, 2020). The first is EMA (internal evidence), while the second is environmental stakeholders accounting (external evidence).

Environmental Accounting for Management

This establishes a mechanism for communicating to an organization's management pertinent information about environmental costs and benefits. The purpose of this is to supply management

with information that will assist them in making better internal decisions. These decisions include those on the cost, design, and pricing of products, capital investments and asset purchases, facility siting, waste management or disposal, material procurement and usage, and so on. The resulting information is referred to as internal information, as it is intended just for management use (Iliemena, 2020).

Environmental Accounting for Stakeholders

This environmental accounting method is integrated into financial statement reporting. This is often referred to as financial accounting for the environment. Environmental accounting's purpose in this context is to offer meaningful environmental data for stakeholder-based reporting. To achieve this goal, information on the organization's direct and indirect effects on the environment is gathered and shared with relevant parties. This data is either a part of the financial accounting data contained in the public financial reports or is provided separately in yearly sustainability reports. Annual financial reports are used by shareholders and potential investors to guide investment and divestment choices. (Iliemena & Okolocha, 2019). Investors, workers, creditors, contractors, the government, host communities, owners, and managers are all examples of an organization's stakeholders.

Environmental accounting may provide a number of advantages for firms, including the following: assisting in the assessment and inspection of ecological declarations and reports; reflecting social perceptions about the environmental impact concerns on the financial structures and yearly financial statements of enterprises; creating ideas and methods to aid in the creation of conservational reporting and an ecological accounting system, and assisting with other inspection-related services such as conservational decision-making and the valuation of management systems.

Green or Environmental Cost

Environmental costs are the expenses made by businesses in order to avoid ecological problems and reduce environmental harm. They are the expenses associated with adhering to, or preventing the violation of, conservation laws, regulations, and corporate rules. The true ecological costs to a corporation may be substantially greater when you include in things like the price of raw materials, the cost of treating and disposing of waste, the price of repairing damage to the company's environmental image, and the price of paying a green risk premium (Iheduru & Chukwuma, 2019). There are costs associated with the environment because of things like pollution control and recycling. The harm these companies cause to the environment also accounts for some of these costs.

Environmental costs may be classified into two components: private and social costs. Private costs are those that directly affect a business's bottom line. Expenses to individuals may be broken down even further into conservative costs, hidden costs, contingent costs, and the costs to one's reputation and interpersonal connections. Societal costs, also known as external costs, are expenses that arise as a result of a company's actions but for which it is not held accountable under the law. These include harms to the environment and to people's health, safety, and property for which monetary damages would be inadequate. To integrate societal costs in planning and decision-making, it is important for ecologically conscious businesses to analyze external repercussions and, to the extent possible, value societal costs (Labaran, 2011; Iheduru, 2018).

Firm Profitability

Profitability refers to a business's ability to generate profit, defined as the extra amount remaining after deducting operational and financial expenses, as well as any applicable charges such as tax (Ross, Westerfield & Jaffe, 2010). Additionally, it may be defined as an excess of revenues over related expenditures over a period of time. Earnings, income, and margin are all terms with

comparable meanings. Profitability is critical for every firm to thrive and develop over time. It is a barometer of economic development, increased national income, and improving living standards. Thus, profit is not just a means of remuneration for owners; it is also connected to the interests of other parts of society (Nimalathasan, 2009). Also, profitability demonstrates how efficiently management operates by utilizing all available market resources. Nimalathasan (2009) define profitability as an investment's ability to generate a profit from its usage. Shareholders demand profitability information to determine the viability of the business in which they have committed their funds. Creditors, likewise, are interested in the business profit as they want to receive interest and principal repayment on a consistent basis.

Measurement of Profitability

Profitability will be determined in this study using NPM, DPS, and EPS.

Net Profit Margin (NPM)

NPM measure is a profitability ratio used to illustrate the link between return on equity and return on sales. To get a good result for this ratio, businesses should first concentrate on the relationship between their sales and their associated operating expenses in order to boost their operating margins.

Dividends Per Share (DPS)

This is the earnings given to shareholders as a percentage of profits per share. Additionally, it has an effect on the market price of the stock. DPS will be larger if EPS is greater. It is calculated by dividing the total dividend paid to equity owners by the total number of equity shares.

Representatively, $DPS = \frac{\text{Total Dividend to ordinary shareholders}}{\text{No. of Common Stock Outstanding}}$

Earnings Per Share (EPS)

Nimalathasan (2009) defined earnings per share as "the amount of profit earned per share." EPS is a ratio that compares a company's share earnings, or what is sometimes referred to as PAT, to the total number of shares issued. EPS is one metric used to determine a company's performance in terms of profit generation for its shareholders. It is determined by dividing the common stockholder's earnings by the total number of ordinary shares outstanding.

Environmental Accounting and Firm Profitability

The purpose of this study is to examine the role that environmental accounting plays in determining a company's bottom line. No significant link was observed between ecological disclosure and business profitability in Nigeria by Che-Ahmad et al. (2015) unless firm size, auditor type, and industry type served as moderators. The shareholder perspective was supported solely by firm size. This result is in line with a study of firms listed on India's Bombay Stock Exchange (Makori & Jagongo, 2013) and with Yeom's (2012) investigation of the connections between corporate social and conservational accounting, physical efficiency, and reputation. Researchers have discovered a strong link between environmental disclosure and corporate profitability in studies of oil and gas firms in Nigeria (Basse, Effio, & Eton, 2013) and companies traded on the Lisbon Euronext Stock Exchange (Carreira, Damio, Abreu, & David, 2014). Additionally, they proposed an ecological disclosure index to assess the extent to which chosen firms' annual reports provide ecological information. Simultaneous examination of environmental disclosure, environmental performance and corporate profitability revealed that there are substantial positive correlations between the three (Al-Tuwaijria, Christensen & Hughes, 2014).

Theoretical Framework

Theory of Voluntary Disclosure

The approach is supported even without regulation thanks to the theory of voluntary disclosure; managers want to disclose more information. Agency theory supports this assumption by arguing that agents should be expected to pay the lion's share of agency expenses (Jensen & Meckling, 1976). Therefore, in order to maximize their wealth, agents work hard to reduce their agency fees. According to agency theory, the presence of agency costs arises when an agent has access to confidential information about the firm's performance that is unavailable to the owners. The SEC and the FASB established rules for required disclosures; voluntary and discretionary disclosures are both referred to in the accounting literature as "information management disclosures." On the other hand, Lawal (2016) claims that the disclosure literature is predicated on the idea that management has more accurate information than the general public. Managers face trade-offs between accounting decisions and disclosures when trying to convey their expert understanding of a firm's efficiency to investors and comply with regulations governing reported performance for commercial, political, or corporate governance purposes.

Theoretical studies on disclosure suggest that investors would assume the worst about companies that don't disclose, leading to full disclosure. The study also assumes no expenses associated with disclosing information and reliable reporting (Lawal, 2016). Accounting research on disclosure is mostly concerned with the types of disclosures that may occur, rather than actual disclosures made by organizations, which is why this theory is important to this study.

Utilitarian Theory

Smart proposed the utilitarian theory in 1973. This theory asserts that companies perform a fundamental role in economic systems, primarily maximization of profit. The requirement for economics of responsibility in corporate business ethics resulted in the birth of EA. According to the research of Osemene, Kolawole, and Oyelakun (2016), a free-market economy leads to determinism, individualism gives place to state control, and individual accountability gives way to communal responsibility. Utilitarianism's social actions are seen as the only means to achieve economic benefits, and the ideology itself is seen as a vehicle for wealth development.

Piercy (2008) further separates utilitarian theories into two categories: corporate social costs and functionalism. The social cost theory serves as a foundation for environmental accounting, since it asserts that corporate non-economic influences impact the socioeconomic system in the community. While functionalist theory expressly calls for the corporation to be viewed as a component of the economic system whose primary objective is profit maximization, the business is viewed as a long-term investment that should create profits. Because of the need to balance viability and social goals, environmental accounting was developed as a defense mechanism for the industrial structure against external threats. In sum, utilitarian theory implies that companies must embrace social responsibilities and the right to engage in social corporations.

Empirical Review

Between 2012 and 2018, Iliemena (2020) looked into how environmental accounting methods impacted the financial health of Nigeria's publicly listed oil and gas companies. Information on the companies under investigation was culled from their publicly available annual reports, sustainability reports, and fact books from stock exchanges. This study employed a retrospective research strategy and examined the data using a linear regression formula. The regression shows a substantial positive connection between environmental accounting practices and sales and ROCE. But there is a small but favorable correlation between environmentally friendly bookkeeping and bottom line earnings.

It has been shown by Iheduru and Chukwuma (2019) that the environmental and social expenses incurred by Nigerian manufacturing enterprises have a direct impact on their profitability.

From the annual reports and financial statements of fourteen (14) randomly selected Nigerian industrial enterprises, we acquired our data. OLS analysis was used on the collected data. Results showed an adverse but noteworthy association between environmental and social costs and ROCE and EPS, whereas a positive but significant relationship existed between environmental and social costs and NPM and EPS (DPS).

Both the concept of environmental accounting in general and the practices of specific companies were investigated by Adagye and Abubakar (2018). In order to explain and stress the importance of the environment, several companies adopted an exploratory research methodology. The study's objective was met through the use of secondary resources for data collection and by reviewing relevant recent literatures in the field of green accounting.

The impact of corporate performance on Nigerian enterprises' environmental accounting disclosures was studied by Fasua and Osifo (2020). The data for their analysis came from the annual reports and financial statements of 18 companies chosen at random from the list of companies trading on the Nigerian stock market. The data was examined by means of a panel regression analysis. Environmental accounting was found to have a statistically substantial positive nexus with ROA, NPM, and EPS.

Researchers Owolabi and Solarin (2020) looked into how environmental accounting affected the credibility of financial statements for Nigerian factories. Descriptive research was used for this investigation because it provides the most accurate picture of a situation or relationship between variables from which inferences may be drawn about a larger population. A method called "purposive sampling" was utilized in the research. The sample included 120 manufacturing enterprises listed on a major stock exchange and their respective 120 financial executives. Forty companies were selected at random from the pool of all those whose financials were actively traded on the NSE throughout the time period of the research. First-hand accounts were used in the research. This information was collected by sending out questionnaires to the financial managers of the 40 tested companies. The collected data was analyzed using both descriptive and inferential statistics. The results demonstrated that the expenditures related with waste and prevention have a major effect on the accuracy of financial accounts.

Oyedokun, Egberioyinemi, and Tonademukaila (2019) investigated the effect of environmental accounting disclosure on the stock prices of publicly listed Nigerian firms that manufactured industrial goods between 2007 and 2016. Researchers used a backwards-looking methodology, looking at data from the sample companies' previous annual reports. The effect of environmental accounting disclosure on firm value was investigated using a multivariate regression model. While Tobin's Q was utilized to measure business value, a variety of non-financial, financial, and performance variables were employed to quantify ecological accounting disclosure. The study found that the firm value of Nigerian manufacturers of industrial goods was significantly affected by non-financial variables, significantly negatively by performance indicators, and not significantly affected by financial indicators.

Sanni and Kolawole (2019) looked into the causes and effects of environmental accounting on Nigerian pharmaceutical companies' bottom lines. Environmental accounting's effect on the efficiency with which Nigerian pharmaceutical firms maximize their shareholders' wealth was also analyzed in the study. All publicly traded pharmaceutical companies in Nigeria had their financial records examined for the study's secondary data analysis. The goals of the study were achieved by employing panel data regression analysis. Research results showed a positive relationship between environmental accounting reports and performance measures (such as community development and employee welfare costs).

The bond between green accounting disclosure and financial viability was studied by Ojo and Balogun (2019) for a sample of firms trading on the NSE. The analysis relied on annual reports and financial statements from 18 different firms trading on the NSE. Data analysis was performed

using a variety of regression methods. The research found a sizable but unfavorable correlation between NPM and EPS, and a sizeable but positive correlation between ROCE and EPS (DPS).

For their 2020 study, Nandini, Sudharani, and Suresh looked at how environmental accounting affected the bottom lines of companies listed on the Bombay Stock Exchange (BSE). The information was gathered from 18 companies' annual reports over a ten-year period that were all traded on the BSE. The Use of Panel Data The information gathered using E-Views was analyzed using a regression technique. According to the data, there is a tight connection between environmental protection expenditures and financial metrics including ROCE, ROA, ROE, ROE/EBITDA, NPM, and EPS. According to the findings, environmental accounting may boost a company's bottom line.

In a study spanning 2012–2017, Nkwoji (2021) looked at how environmental accounting affected the bottom lines of Nigeria's publicly listed oil and gas firms. The research looked at how much money oil and gas corporations in Nigeria were spending on ecological protection compared to how much money they were bringing in after expenses. The research was based on secondary sources and employed an explanatory, historical, and correlational methodology. Information was gathered from public sources including the Nigerian Stock Exchange and the companies' publicly available annual reports and financial statements. The financial statements, sustainability reports, and yearly reports on tax payments made by listed oil firms to governments across the world, as well as the annual returns filed with the Nigerian Stock Exchange for the years in question, all make up the annual reports. Regression analysis was used to examine the data, and the hypothesis was put to the test. Results showed no statistically significant correlation between oil and gas corporations in Nigeria's ecological spending and their bottom lines.

Environmental, social, and governance (ESG) disclosure was examined by Brogi and Lagasio (2019) in connection to corporate profitability measured by return on assets (ROA). Using MSCI ESG KLD STATS data from 2000–2016, they first assess a technique for indexing the ESG score of a sizable group of publicly listed companies in the US. The correlation between ROA and the three components of the Environmental, Social, and Governance (ESG) score was analyzed using a statistical model fitted to 17,358 data points. The lines between industrial corporations and financial intermediaries were clearly drawn. Consequences for policymakers and policy-takers stem from the study's findings of a large and positive relationship between ESG and profitability, as well as a high correlation between environmental consciousness and profitability in banks.

Research by Polycarp (2019) looked into how environmental accounting affected the bottom lines of Nigeria's oil and gas firms. For the study, secondary information was gathered for the years 2015, 2016, and 2017. The data come from the NSE (Nigerian Stock Exchange) (Annual Reports and Accounts of the Oil companies in Nigeria under). Eleven (11) Oil Companies operating in Nigeria (Niger Delta Region) were discovered by the researcher based on information available from the NSE's annual reports and accounts (NSE). The Multiple Regression Method would be used as the econometric analytical tool. Return on capital employed, net present value, earnings per share, and return on assets were all shown to have no or a minimal link with green accounting.

METHODOLOGY

The study utilized an ex-post facto design as it is based on previously collected data that cannot be influenced or manipulated. The study population consists of all consumer goods manufacturing corporations that are listed on the Nigerian Exchange Group. In order to limit the risk of bias, the researcher utilized random sampling to choose a sample size of twenty-six (26) consumer goods manufacturing companies listed.

Table 3.1 Sample Distribution

Number of consumer goods companies	Number
Total number of consumer goods company at NEG	26
Deduct:	
Companies whose financial statements are unavailable	3
Companies whose data are incomplete	6
Balance	17

Secondary data were used in the study and gathered from the published annual reports of consumer manufacturing goods corporations listed on the Nigerian Exchange Group for the year 2020. Data from companies with comprehensive and audited annual reports were used to guarantee the reliability and quality of the data obtained. The study's data were examined first using descriptive statistics to characterize the data's nature. Inferential analysis was carried out further using the Spearman Rank Order Correlation Co-efficient, which is capable of indicating the type of relationship that exists between variables. This was accomplished with the aid of the E-views 10.0 software.

Table 3.2 Variables Evaluation

S/N	Variable(s)	Measurement
Independent		
1.	Environmental Accounting	Environmental accounting disclosures are quantified using a structured index (EADI). The Environmental Accounting Disclosure Index (EADI) identifies areas where a company reports on environmental activities that improve its surroundings. Such a company is assigned a value of '1' if reported; otherwise, it is awarded a value of '0' if not reported.
Dependent		
2.	NPM	$\frac{\text{Net Profit}}{\text{Turnover/Sales}} \times \frac{100}{1}$
3.	DPS	Annual dividend divided by number of shares
4.	EPS	Net profit after tax divided by total number of outstanding shares

Analysis and Discussion of Findings

Data Presentation

Table 4.1 Data Presentation

The data for the study is presented in Table 4.1 below. Environmental accounting disclosure index, net profit margin, DPS and EPS for the year 2020.

COMPANIES	EADI	NPM (%)	DPS (Kobo)	EPS (Kobo)
Flourmills	0.375	0.15	6.7	471.00
Nigeria Enamelware	0.625	-32.64	NA	-318.00
PZ Cussons	0.875	1.23	3.5	0.15
Guinness plc	0.340	12.00	620.0	250.00
Nestle Nig. Plc	0.125	16.08	63.5	57.63
Champions breweries	0.250	2.43	60.0	2.00
Golden guinea breweries	0.250	-16.09	NA	-14.00
International breweries plc	0.375	-9.04	NA	-0.47
Nigerian breweries	0.375	2.23	69.0	1.62

Unilever plc	0.500	-12.27	NA	-1.29
Cadbury plc	0.125	2.63	25.0	49.61
Honeywell	0.340	0.81	45.0	36.00
Northern Nig.	0.625	1.50	35.0	7.00
Dangote sugar	0.750	15.20	1.1	2.58
Okomu oil	0.265	33.23	55.0	8.60
Presco plc	0.375	22.02	200.0	516.00
FTN cocoa	0.500	-1.19	NA	-36.00

Source: 2020 Annual Report of Respective Companies

Analysis

Descriptive Statistics

Table 4.2 Descriptive Statistics of the Variables

	EADI	NPM	DPS	EPS
Mean	0.415882	2.251765	98.65000	60.73118
Median	0.375000	1.500000	50.00000	2.580000
Maximum	0.875000	33.23000	620.0000	516.0000
Minimum	0.125000	-32.64000	1.100000	-318.0000
Std. Dev.	0.207554	15.24120	172.4080	193.2823
Skewness	0.652939	-0.182161	2.578318	1.007703
Kurtosis	2.764181	3.450192	8.338687	4.442363
Jarque-Bera	1.247324	0.237577	27.54624	4.350777
Probability	0.535978	0.887996	0.000001	0.113564
Sum	7.070000	38.28000	1183.800	1032.430
Sum Sq. Dev.	0.689262	3716.707	326969.7	597728.8
Observations	17	17	12	17

Source: Eviews 10.0 Output

Table 4.2 reports the descriptive statistics involving the explanatory and dependent variables of the study. Environmental accounting disclosure index (EADI), NPM, DPS and EPS constitute the main variables of interest. From table 4.2, environmental accounting disclosure index (EADI) has an average value of 0.415882 and a standard deviation of 0.207554 with a maximum and minimum values 0.875000 and 0.125000 respectively. Environmental accounting disclosure index was positively skewed with a value of 0.652939. This suggests a high degree of variability of data between firms. Net profit margin (NPM) has an average value of 2.251765% and a standard deviation of 15.24120%. It has maximum and minimum values of 33.23000% and -32.64000% respectively. Net profit margin was negatively skewed with a value of -0.182161. Dividend per share (DPS) has an average of 98.65000kobo and a standard deviation of 172.4080kobo. It has maximum and minimum of 620.0000kobo and 1.100000 respectively. Dividend per share was positively skewed with a value of 2.578318. This suggests a high degree of variability of data between firms. Lastly, Earnings per Share (EPS) has an average value of 60.73118kobo and a standard deviation of 193.2823kobo with a maximum and minimum values of 516.0000kobo per share and -318.0000kobo per share respectively. Earnings per Share was positively skewed with a value of 1.007703.

The Jarque-Bera statistics reveal that NPM and EPS are normally distributed with probability values of 0.887996 and 0.113564 respectively. While environmental accounting disclosure index (EADI) and dividend per share (DPS) are abnormally distributed with probability values of 0.535978 and 0.000001 respectively.

Correlation Analysis

This section presents the correlation statistics of the variables all in an attempt to assess the relationship among variables.

Table 4.3: Correlation Statistics

Covariance Analysis: Ordinary
 Date: 03/11/21 Time: 01:17
 Sample (adjusted): 1 16
 Included observations: 12 after adjustments
 Balanced sample (listwise missing value deletion)

Correlation	EADI	NPM	DPS	EPS
EADI	1.000000			
NPM	0.194464	1.000000		
DPS	0.179762	0.216342	1.000000	
EPS	0.149385	0.138465	0.363610	1.000000

Probability	EADI	NPM	DPS	EPS
EADI	-----			
NPM	0.0448	-----		
DPS	0.0061	0.4995	-----	
EPS	0.0431	0.6678	0.2453	-----

Source: Eviews 10.0 Output

The result from table 4.3 showed that NPM, DPS and EPS have a positive relationship with ecological accounting disclosure index with correlation coefficients of 0.194464, 0.179762 and 0.249385 respectively. The coefficient of correlation of the variable with respect to itself is 1.000. Furthermore, the p-values of 0.0448, 0.0061 and 0.0431 shows that NPM, DPS and EPS has a significant connection with ecological accounting disclosure index (EADI). The p-values show the direction and the strength of the correlation.

Test of Hypotheses

Hypothesis I

There is no momentous connection between environment accounting and NPM.

Environmental accounting (environmental accounting disclosure) is positively correlated with net profit margin (correlation coefficient = 0.194464, table 4.3). P0.05 indicates a statistically significant correlation ($p = 0.0448$). Thus, we accept the alternative proposition that there is a association between environment accounting and net profit margin and reject the null proposition that there is no such correlation. As a result, environmental accounting has a substantial impact on ROI.

Hypothesis II

There is no noteworthy bond between environmental accounting and DPS.

Environmental accounting (environmental accounting disclosure) is positively correlated with net profit margin (correlation coefficient = 0.194464, table 4.3). P0.05 indicates a statistically substantial correlation ($p = 0.0448$). Thus, we accept the alternative proposition that there is a correlation between environment accounting and net profit margin and reject the null proposition that there is no such correlation. As a result, environmental accounting has a substantial impact on ROI.

Hypothesis III

There is no substantial nexus between environmental accounting and EPS.

From table 4.3, there is a positive bond between EA (environmental accounting disclosure) and earnings per share (correlation coefficient = 0.149385). The relationship is statistically substantial at $p\text{-value} < 0.05$ ($p\text{-value} = 0.0431$). Therefore, we reject the null premise that states that there is no substantial link between environment accounting and EPS and accept the alternate hypothesis. Thus, a significant bond exists between environment accounting and EPS.

Discussion of Findings

The investigation looked into the link between ecological accounting and bottom-line results for businesses and found that there is a substantial association between EA and NPM, thereby rejecting the null hypothesis (NPM). After ruling out a lack of correlation between EA and DPS, the study found that the latter is positively correlated with the former (DPS). Finally, the study concluded that a substantial association existed between ecological accounting and EPS, thus rejecting the third hypothesis, which said that there is no such relationship (EPS). This study's results are consistent with those of Fasua and Osifo (2020), who also discovered a favorable correlation between environmental accounting and business success. This study's conclusions are at odds with those of Polycarp (2019), who looked at the connection between EA and the bottom lines of Nigerian oil and gas firms and found no correlation between ecological accounting and ROCE, NPM, EPS, or DPS. Additionally, Nkwoji (2021) and Jamil and Rodiel (2020) discovered no statistically significant correlation between environmental factors and business success in their respective studies.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Findings

The findings of this study are abridged as follows:

1. There is a momentous connection between EA and NPS.
2. There is a noteworthy bond between EA and DPS.
3. There is a substantial nexus between EA and EPS.

Conclusion

In today's ever-more-cutthroat business climate, companies can't just ignore their social and conservational responsibilities if they want to survive and thrive. Sustainable growth, effective environmental protection efforts, and healthy community connections are all goals of environmental accounting. As the company goes about its operations, it must strike a balance between satisfying its customers' demands and protecting the environment. To that end, this research looked into how the idea of environmental accounting may affect a company's bottom line. Financial success was shown to be positively correlated with environmental accounting practices among the studied businesses.

Recommendations

Based on the study findings, the following were recommended: In the notes to the accounts of their annual reports, companies should include information on environmental spending and environmental expenses offset by income. Businesses should follow national environmental rules to prevent a rise in teenage hostility. The government should mandate environmental reporting in annual reports, pass laws requiring businesses to incorporate conservational concerns into strategic planning, and publish local and international ecological accounting standards that can be reviewed on a regular basis to ensure compliance with ever-evolving requirements.

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