EFFECT OF GREEN ACCOUNTING DISCLOSURE AND FINANCIAL PERFORMANCE: A STUDY OF CONSUMER GOODS FIRMS IN NIGERIA

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Abstract
This study ascertained the effect of green accounting disclosure on financial performance of listed consumer goods firms in Nigeria, using environmental protection disclosure and corporate donation. Ex post facto research design was adopted for the study. A sample of 18 consumer goods firms was used and data extracted from the companies audited annual reports and accounts. Using regression analysis, it was established that environmental protection disclosure and corporate donation with firm size as the control variable were significant. This shows the extent to which consumer goods firms disclose information voluntarily, particularly regarding environmental protection, corporate donations, and employee welfare, can significantly influence stakeholders' perceptions and decisions. Based on the findings of the study, it was recommended that there should be constant green accounting disclosure by the firms for mitigating its environmental impact and promoting sustainable practices. This will enable them share with their stakeholders to demonstrate their commitment toward environmental responsibility.
Keywords: *Environmental protection disclosure and corporate donations and financial performance*

Introduction

Green accounting is a type of accounting that attempts to factor environmental costs into the financial results of operations. It has been argued that gross domestic product ignores the environment and therefore decision makers need a revised model that incorporates green accounting. Environmental pollution is one of the problems facing the world today, due to its impact on society, nature and performance (Arumona *et al*., 2021). The phenomenon of environmental pollution has received increasing attention in recent times, especially in light of the industrial progress in the contemporary world and the diversity of sources of pollution, and the attempt of industrial companies, particularly oil and gas firms to get rid of its harmful waste to the environment and people (Onoh *et al*., 2023). As a result of the development of interest in environmental performance as one of the foundations of development in any country, non-use of modern scientific methods that analyzes environmental costs and provide detailed information on those costs and the efforts and amounts that companies bear for the purpose of environmental protection will give guaranteed results on the extent of their success or failure (Sanni & Kolawole, 2019).

Companies that adhere to green accounting in accordance with governmental regulations and effectively manage environmental concerns have the potential to enhance their environmental performance, ultimately leading to an improvement in the company's financial performance (Riadi & Aqshal, 2023). Presently, companies in are perceived to be inadequately implementing green accounting due to a suboptimal emphasis on environmental considerations and their associated impacts (Widyowati, 2022). As time progresses, a variety of environmental issues have emerged as a consequence of business activities. Communities and non-governmental organizations are encouraging business operators to prioritize their roles and responsibilities toward the environment, rather than solely concentrating on financial aspects. In practical terms, green accounting encompasses a company's business activities and processes related to environmental matters, which are identified, evaluated, quantified, and disclosed within accounting reports, enabling the reporting the incurred costs (Ratusasi & Pengaruh, 2023).

Business competition in the era of Society requires companies to continue to develop product innovations, expand business, improve employee performance, in order to continue to survive and be able to compete by having a competitive advantage over other competitors. The company or issuer is expected to be able to manage its finances and non-finances. In addition to profitability, another company goal is to maximize the value of the company for its long-term survival or called going concern. The better the company's performance, the better the company's profitability and will have an impact on the company's value (Ikhsan, 2007). Company value is a description of the state of a company, where there is a special assessment from potential investors. Companies that set aside negative impacts in the form of hazardous waste must pay attention to the surrounding environment. Green Accounting or environmental accounting is part of a company's business activities. Green accounting is a type of environmental accounting that describes efforts to incorporate environmental benefits and costs into economic decision making or a business financial outcome. The importance of environmental accounting basically demands full awareness of companies and other organizations that have benefited from the environment (Kartika & Utami, 2019).

Prior study were carried out in different sectors, mainly on oil and Gas; Amalya *et al*. (2023) ascertained the relationship of green accounting on financial performance with environmental performance as a mediation variable. Aryani *et al*. (2023) evaluated the effect of green accounting on financial performance of company value with profitability as an intervening variable on mining sector companies listed on IDX for the period 2018-2021. Choiriah and Lysandra (2023) ascertained the effect of green accounting, quality management financial performance, and green innovation as moderation variables from 2018 to 2021. Olaoye and Alao (2023) investigated green accounting practices and business health of listed oil and gas firms in Nigeria (2012-

2021). Ihenyen and Ikegima (2022) determined environmental accounting and organizational performance of listed industrial sector companies in Nigeria.

On this note, there is scarce research of this nature in consumer goods companies, hence, this is to ascertain the effect of green accounting disclosure on financial performance of listed consumer goods firms in Nigeria. The research is guided by other specific objectives which include:

1. To determine the effect of environmental protection disclosure on earnings per share of listed consumer goods firms in Nigeria.
2. To ascertain the effect of corporate donations disclosure on earnings per share of listed consumer goods firms in Nigeria.

Literature review

Conceptual Review

Green Accounting

Green accounting is a type of accounting that seeks to include and relate environmental cost factors to corporate activities. Cohen and Robbins (2021) Green accounting or environmental accounting is defined as: "A style of accounting that includes indirect costs" This means that environmental accounting is a type of accounting that includes indirect costs and benefits from economic activities, such as the environmental and health effects of business plans. Apart from that, environmental accounting is accounting that identifies, measures, evaluates the details costs associated with a company's actions towards the environment (Aniela, 2022). Environmental accounting is also similar to a quantitative measurement framework for environmental conservation activities carried out by companies (Suartana, 2021). Green accounting is a method of reporting the impact that a company's management activities have on the environment by including it in financial reports. Ningsih and Rachmawati (2021) Green Accounting, aims to link the environmental budget and business operating funds. Green accounting also provides opportunities to reduce energy and natural resources, reduce health risks, and promote competitive advantage for companies. In this way, green accounting is an effort to improve the economics of a company without ignoring the state of the surrounding environment.

Green accounting is carried out by companies to create an evaluation of data in the form of numbers regarding costs and environmental impact. The benefits of environmental accounting concepts for companies facilitate the ability of companies to minimize the environmental problems they face (Nuryanti et al., 2021). Green accounting solutions for companies are a form of corporate responsibility towards stakeholders. This is because stakeholders want to focus not only on financial value, but also on environmental value, that is, whether a company takes into account the environmental impact of its operations. Regulations on Green Accounting are Law No. 2 No. 23 of 1997 on Environmental Management. This law regulates the obligations of everyone who carries out activities to protect, manage and provide correct and accurate information about the environment (Hamidi, 2019).

Environmental Protection Disclosure

In relation to environmental protection disclosure there is no standard definition and it is left mostly to the discretion of the companies to decide which expenditure or cost should be included under the environmental expenses or costs. For a general understanding of environmental protection disclosure, it can be referred to the voluntary disclosure of a company's initiatives, policies and actions aimed at mitigating its environmental impact and promoting sustainable practices. It encompasses a range of information that consumer goods firms voluntarily share with their stakeholders to demonstrate their commitment to environmental responsibility. Measuring environmental performance and setting targets is a critical component for organizations to become more productive, more profitable and more sustainable.

Accountants are expected to take a proactive role in environmental protection process with the advent of liberalization. The cost of environmental degradation due to industrial activities should be internalized in corporate account to the extent possible. That is why environmental accounting and reporting is of paramount importance today.

Clarkson, Richardson and Vasvari (2008) reported that disclosure and transparency are critical elements of a robust corporate governance framework as they provide the basis for informed decision making by shareholders, and potential investors with respect to capital allocation, corporate transactions and financial performance monitoring. High quality disclosure through its influence on investors and lenders who must assess risks and returns to decide where best to place their money, strengthen the efficiency of capital allocation as well as offer the benefit of reducing the cost of capital.

Corporate Donation Disclosure

Corporate donation disclosure is a voluntary practice wherein companies publicly disclose their financial contributions and support to charitable organizations, community development projects and social causes. This disclosure allows companies to communicate their commitment to social responsibility and showcases their efforts to positively impact society. By disclosing their donations, companies demonstrate a genuine concern for societal wellbeing and an alignment with broader ethical values, thereby leading to increased brand loyalty, competitive advantage in the market and trust and goodwill of stakeholders.

Corporate donation has been classified as a receipt of funds or assets which must have been given with no consequent obligation in order to provide goods and services to the benefit of the donor. Donations are considered to be voluntary in nature with little or no business consideration (Ozurumba, 2016). Therefore, donations are considered as an appropriation of profit and not a business expense. They are not considered as resources used to carry on the business. Although critical to some organization operations, cost of donation can be problematic from an accounting standpoint. But the issues lie in whether the cost of donation to the organization be recognized in financial statements and how they should be valued (Ozurumba, 2016).

Large publicly held companies are bridling proposed federal legislation that would require them to disclose their donation cost given out, warning that such law would have a chilling effect on corporate philanthropy. Many experts in corporate laws agree that companies should disclose their cost of donation. The problem with today's corporate philanthropy is that it sometimes functions to promote and increase corporate management. In cases where there is no clear benefit to the company, it is a waste of corporate property.

Whether companies should disclose their donations is part of a broad and long-running debate for corporations in society. Some corporate executives believe that companies should give nothing to charities. They argue that the managers are to maximize returns to shareholders, who can then donate their money as they wish.

Financial Performance

A company's financial performance is an analysis performed with the purpose of determining how well a company performs its financial activities with reference to ideal financial execution rules (Nurfaidah, Andi, Bunyamin & Andi, 2023). Corporate performance is a formal effort undertaken by a company to accurately assess the company's operational activities performed during a particular time period. Financial performance describes a company's objectives, that is, a company's ability to increase its profits by generating profits. Financial performance is very important to evaluate because it can motivate employees to achieve organizational goals and follow predetermined standards of behavior, thereby generating desired profits. Financial performance is measured through data obtained from a company's financial reports. Financial reports are prepared to describe past financial conditions and are used to predict future financial conditions.

Earnings per Share

The term earning per share (EPS) is generally considered to be most significant variable in defining share price. It also plays very important role to measure the price to earning valuation ratio. Earnings per share (EPS) is a popular financial ratio which is widely used by investors worldwide. It measures potential profit on investment in company's shares (Sierpinska & Jachna, 2004). It is a solid indicator of a firm's profitability. Earnings per share (EPS) is a part of a company's income that is allocated to each outstanding share of common stock, serving as an indicator of the firm's profitability.

The payment of dividend to shareholders depends on the profitability of a firm/company. The more profitability any firm earns, the more chances of healthy dividends are high. But high profitability is not the guarantee to pay a dividend to the shareholders. It totally depends on the policy of the firm and decision of the board, (Balaputhiran, 2014).

Empirical Review

Etim, Usen, Obot and Edet (2024) determined the effect of green accounting practices on financial performance of oil and gas companies in Nigeria. Desktop approach was employed to review of existing empirical studies conducted in Nigeria on green accounting practices of oil and gas firms between 2013 and 2022. Findings from the study indicates that green accounting significantly influenced financial performance of quoted oil and gas firms in Nigeria over the period reviewed. Nurfaidah, Andi,Bunyamin and Andi (2023) identified and analyzed the impact of green accounting implementation and environmental performance on corporate financial performance of manufacturing companies in the basic industry and chemical sectors on the Indonesia Stock Exchange in2021-2022. Multiple regression analysis was used with the aid of SPSS program. Based on the analysis results, it is shown that green accounting and environmental performance variables do not affect the financial performance of companies. Riadi and Aqshal (2023) assess the impact of green accounting, represented by environmental performance (measured by the Proper indicator), environmental costs, and environmental disclosure (measured by the Global Reporting Initiative indicator), on financial performance (return on assets). The research employed a quantitative approach involving classical assumption testing and analysis of multiple linear regression data for LQ45 mining sector companies listed on the Indonesia Stock Exchange during 2018-2021. The findings of the study revealed that environmental performance, environmental costs, and environmental disclosures did not exert any influence on financial performance. Amalya *et al*. (2023) ascertained the relationship of green accounting on financial performance with environmental performance as a mediation variable from 2019 to 2020 and the key variables of the study were financial performance (dependent variable) measured by return on assets (ROA) and green accounting (independent variable) measured by environmental cost. Data for the study were collected from the annual reports and financial statements of the entities and analysis was conducted using simple linear regression approach. The results indicated that green accounting exerted significant influence on financial performance (ROA) of the entities sampled for the study. Aryani *et al*. (2023) evaluate the effect of green accounting, financial performance on company value with profitability as an intervening variable: Study on mining sector companies listed on IDX for the period 2018-2021. Choiriah and Lysandra (2023) ascertained the effect of green accounting, quality management on financial performance, and green innovation as moderation variables from 2018 to 2021. The data were analyzed using descriptive statistics and simple linear regression technique.

The results obtained indicated that green accounting exerted significant influence on financial performance. The results obtained from the analysis also showed that quality management had no influence on ROA of the firms studied. Olaoye and Alao (2023) investigated green accounting practices and business health of listed oil and gas firms in Nigeria (2012-2021). This study was carried out to examine the effect of green accounting practice on business health of listed oil and gas firms in Nigeria. The period of the study ranged from 2012 to 2021. Accounting practices in the study being the independent variable was measured by Waste Management Practice Disclosure (WMPD), Environmental Protection Practices Disclosure (EPPD) and Pollution Prevention Practices Disclosure (PPPD) and financial performance which was the dependent variable used in the study was proxied by Return On Asset (ROA) and Earnings Per Share (EPS). Data for the study were obtained from the financial reports of the entities sampled for the study and the data were analyzed using Ordinary Least Square (OLS) technique. The results obtained for the analysis conducted showed that WMPD had a negative and insignificant influence on EPS. Ihenyen and Ikegima (2022) determined environmental accounting and organizational performance of listed industrial sector companies in Nigeria. The study aimed to examine the impact of environmental accounting on organizational performance of listed industrial companies in Nigeria from 2010 to 2020. To establish the influence of independent variable on the dependent variable, relevant data were extracted from the published annual reports and financial statements of the entities chosen for the study. The data were analyzed using canonical correlations and the results obtained indicated that the environmental accounting (WMC, CDC and EHSC) exerted substantial influence on organizational performance (ROA, ROE and NPM) of listed industrial sector businesses in Nigeria studied. Ilelaboye and Alade (2022) **ex**amined environmental accounting and financial performance of listed family-owned companies in Nigeria. The study sought to investigate the influence of environmental accounting on financial performance of the listed family owned firms in Nigeria. The study was conducted to cover the period from 2012 to 2020 and the relevant variables used in the study were financial performance (dependent variable) measured by return on capital employed (ROCE) and environmental accounting proxied by restoration cost (RC), community development cost (CDC) and health and safety cost (HSC). The study adopted purposive sampling technique to select six (6) family-owned companies. Data were extracted from the annual reports and financial statements of the sampled companies. Data analysis was conducted using both descriptive statistics and ordinary least squared (OLS) techniques analytical approach. The analysis indicated that RC had adverse and inconsequential influence on the financial performance, and CDC had adverse and material influence on financial performance while HCS exerted a direct and insignificant influence on financial performance. Benson *et al*. (2021) studied the effect of green accounting on financial performance of oil and gas companies in Nigeria. The aim of the study was to investigate the effect of green accounting on financial performance of oil and gas companies in Nigeria.

The period of the study ranged from 2010 to 2020. The independent variables of the study were environmental accounting and green management accounting, and the dependent variable of the study was financial performance measured by return on assets (ROA) and return on equity (ROE). The study was quantitative in nature and thus, secondary data were obtained from annual reports and financial statements of the companies sampled for the study. The data were analyzed using both descriptive and simple linear regression approach. The results obtained from the analysis indicated that environmental cost accounting exerted significant influence on the financial performance (ROE and ROE) of oil and gas companies. Also, it was discovered that green management accounting had significant influence on the ROA and ROE of oil and gas firms. Emmanuel (2021) determined green accounting reporting and financial performance of manufacturing firms in Nigeria. This study examined green accounting disclosure and its effect on financial performance of listed manufacturing firms in Nigeria. The dependent variable of the study was financial performance measured by return on assets (ROA) and return on equity (ROE) and the independent variable of the study was green accounting reporting and the study covered the period of ten (10) years from 2010 t0 2019. Data for the study were obtained from the annual reports of forty (40) out of the sixty-six (66) manufacturing companies whose shares were traded on the floor of Nigerian Exchange Group (NXG) as at 31st December 2019. Data analysis was conducted using descriptive statistics and the panel regression approaches. From the analysis, it was discovered that green accounting disclosure had direct and material influence on financial performance (ROA and ROE). However, the study also showed that there was a negative influence of green accounting disclosure on share price of manufacturing firms in Nigeria. Ordu and Amah (2021) examined sustainability accounting and financial performance of oil and gas companies in Nigeria. The study was conducted to assess the between sustainability accounting and performance of selected quoted oil and gas companies in within the period of 2012-2017. The dependent variable used in the study was financial performance measured by return on Assets (ROA) and the independent variable of the study was sustainability accounting (SA) proxied with environmental expenditure (ENVSPND). Relevant data for the study were extracted from the annual reports of the entities sampled for the study and the data were analyzed using correlational design and regression technique. From the analysis, it was discovered that environmental accounting had an insignificant influence on ROA of the oil and gas companies in Nigeria**.** Riyadh *et al*. (2020) conducted a study on the analysis of green accounting cost impact on corporations' financial performance. The study sought to examine the influence of green accounting disclosures on financial performance. The study was conducted to cover one year period (2018) and the key variables of the study were green accounting (independent variable) measured by environmental cost (EC) and financial performance (dependent variable) measured by net profit margins (NPM), return on assets (ROA) and earnings per share (EPS). Data for the study were obtained from one hundred (100) multinational corporations and the data were analyzed using multiple regression analysis were employed. From the analysis, it was found that green accounting costs exerted negative influence on financial performance. Ikpor *et al*. (2019) investigated environmental accounting and sustainable financial performance: Evidence from the Nigerian petroleum industry. The study was conducted to ascertain the influence of environmental accounting on financial performance. The period of the study was from 1970 to 2017 and the essential variables of the study were environmental accounting (independent variable) measured by environmental operating costs (EOC) and environmental prevention costs (EPC) and financial performance (dependent variable) measured by profit after tax (PAT). The population of the study consisted of forty-eight (48) petroleum companies in Niger Delta and ten (10) out of the 48 companies were sampled for the study. Relevant data for the study were obtained from the published annual reports and financial statements of ten (10) petroleum companies operating in the Niger Delta part of Nigeria sampled for the study. To establish the influence of the independent variable on the dependent variable, data analysis was conducted using ordinary least square (OLS) regression method. From the analysis, it was found that EOC and EPC exerted significant and negative influence on the performance of petroleum firms in Nigeria. Nguyena and Trana (2019) investigated disclosure levels of environmental accounting information and financial performance: The case of Vietnam. The study was conducted to cover the period from 2013 to 2017 and the relevant variables for the study were financial performance (dependent variable) measured by return on assets (ROA) and the control variables used in the study were business size (BS), financial leverage (LEV), listing period (AGE) and independent auditors (AUD). To establish the influence of the independent variable on the dependent variable, relevant data were extracted from the published annual reports and financial statements. The data were analyzed using both descriptive and regression analytical tools. The results of the analysis indicated that environmental accounting had an insignificant influence on financial performance of the firms. Sanni and Kolawole (2019) conducted a study on influence of environmental accounting on the performance of pharmaceutical companies in Nigeria. The study aimed at studying the influence of environmental accounting on performance of pharmaceutical firms in Nigeria from 2009 to 2015. The study employed secondary data which was obtained from the financial statements of all listed pharmaceutical companies in Nigeria. To establish the influence of environmental accounting on performance, panel data regression analysis was used to analyses the data obtained. From the analysis, it was discovered that environmental accounting positively influenced performance proxied by PAT, FS and LEV.

Methodology

Research Design

Ex-Post Facto research design was employ in this study, since the study sought to establish cause-effect relationship and the researcher has no control over the variables under study.

The population for this study consists of the twenty (20) consumer goods manufacturing companies quoted on the floor of Nigeria Exchange Group as at 31st December, 2022.

Sample Size and Sampling Technique

Purposive sampling technique was adopted to select the sample size of this study. The sample size of this study consist of eighteen (18) quoted consumer goods manufacturing companies that were continuously listed by Nigerian Exchange Group during the period 1st January 2013 to 2022 and whose financial statements and reports are available and have been consistently submitted to Nigerian Exchange Group for the period of study.

Source of Data

This study employed the use of secondary data. Information was sourced from Nigerian Exchange Group (NGX) fact books, annual reports and accounts of the sampled companies. These variables include; earnings per share as dependent variable, while environmental protection disclosure, corporate donation and employee welfare is independent variables.

Model Specification

The econometric models of the study was adapted from the studies by Ohidoa, Omekhodu, and Oserogho (2016) as shown below:

$ED_{it} = \alpha + \beta_1 FAGE_{it} + \beta_2 FSIZEit + \beta_3 LEV_{it} + \varepsilon i$

Where;

ED = Environmental Disclosure

FAGE = Firm Age

FSIZE = Firm Size

LEV= Leverage

α = Constant Term

β = Coefficient Term

i = No of firms

t = Time Period

e = Error term

The model was functionally expressed as:

Thus, the researcher modified the model as follows:

$EPS_{it} = \beta_0 + \beta_1 EVP_{it} + \beta_2 FSZ_{it}\ \mu_{it}$ -- - i

$EPS_{it} = \beta_0 + \beta_1 CDN_{it} + \beta_2 FSZ_{it}\ \mu_{it}$ - - - ii

Where:

$EPS_{i,t}$ = Earnings per share of firm *i* at time *t*

EVP_{it} = environmental protection disclosure *i* at time *t*

CPD_{it} = corporate donation *i* at time *t*
$FSZ_{i,t}$ = Size of company *i* at time *t*
β_0 = Intercept coefficient
$\beta_1 - \beta_2$ = Coefficients of independent variables
μ_{it} = The error term which account for other possible factors that could influence
i stands for the *i*th firm (18 companies)
t stands for year *t* (2013-2022) (Ten years)

Method of Data Analysis

The analysis of data for this research based on the data collected from publications of the Nigerian exchange Group and the annual reports of the quoted companies. Both the dependent and independent variables were computed from the data gotten from the Nigerian Exchange Group from 2013 to 2022.

Descriptive statistics employed to summarily describe the mean, median, standard deviation, kurtosis and skewness of the study variables. Inferential statistics will also be utilized with the aid of E-Views 9 using:

i. Coefficient of correlation: which is a good measure of relationship between two variables that tell us about the strength of relationship and the direction of the relationship as well?
ii. Multiple regressions analysis: Regression analysis predicts the value the dependent variable based on the value of the independent variable and explains the impact or effect of changes in the values of the variables.

Decision Rule

Accept the alternative hypothesis, if the Probability value (P-value) of the test is less than 0.05 (5%). Otherwise reject.

Data Analysis and Results

Table 1: Descriptive Statistics

	EPS	EVP	CPD	FSZ
Mean	2.015057	0.600000	8546.200	35017567
Median	1.986716	1.000000	5600.000	28806612
Maximum	3.179300	1.000000	47546.00	59713684
Minimum	1.512564	0.000000	0.000000	27528040
Std. Dev.	0.509256	0.516398	14046.76	10639662
Skewness	1.109363	-0.408248	2.424575	1.408857
Kurtosis	3.740297	1.166667	7.385802	3.794621
Jarque-Bera	2.279493	1.678241	17.81230	3.571223
Probability	0.319900	0.432090	0.000136	0.167695
Sum	20.15057	6.000000	85462.00	3.50E+08
Sum Sq. Dev.	2.334078	2.400000	1.78E+09	1.02E+15
Observations	10	10	10	10

Source: E-view output, 2024

Table 1 shows the mean (average) for each of the variables, their maximum values, minimum values, standard deviation and Jarque-Bera (JB) Statistics (normality test). The results in table 1 provided some insight into the nature of the Nigerian banks that were used in this study.

It was observed that on the average over the ten (10) years periods (2013-2022), the sampled firms in Nigeria were characterized by positive earnings per share (EPS) (2.015). Also, the large difference between the maximum and minimum value of the environmental protection disclosure (EVP),corporate donation (CPD), and firm size (FSZ) show that the sampled firms in this study are not dominated by firms with more earnings per share (EPS).

In this table, the Jarque-Bera (JB) which test for normality or the existence of outliers or extreme values among the variables shows that most of the variables are normally distributed at 5% level of significance. This means that any variable with outlier are not likely to distort our conclusion and are therefore reliable for drawing generalization. This also implies that the least square estimate can be used to estimate the pooled regression model.

Test of Hypotheses
Hypothesis 1

Ho_1: There is no significant effect of environmental protection disclosure on earnings per share of listed consumer goods firms in Nigeria.

Table 2: Regression analysis between EPS, EVP and FSZ

Dependent Variable: EPS
Method: Least Squares
Date: 01/10/24 Time: 22:59
Sample: 2013 2022
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.560941	0.261824	2.142432	0.0694
EVP	0.205760	0.170817	1.204568	0.2675
FSZ	3.80E-08	8.29E-09	4.583468	0.0025

R-squared	0.848089	Mean dependent var	2.015057
Adjusted R-squared	0.804686	S.D. dependent var	0.509256
S.E. of regression	0.225063	Akaike info criterion	0.098449
Sum squared resid	0.354572	Schwarz criterion	0.189225
Log likelihood	2.507753	Hannan-Quinn criter.	-0.001131
F-statistic	19.53979	Durbin-Watson stat	1.680116
Prob(F-statistic)	0.001366		

Source: Researcher's computation through E-view 9.0 statistical package

Interpretation of Regression Result

In Table 2, R-squared and adjusted Squared values were (0.85) and (0.80) respectively. The indicates that all the independent variables jointly explain about 80% of the systematic variations in earnings per share (EPS) of our samples firms over the ten years periods (2013-2022). Table 2 reveals an adjusted R-squared value of 0.80,which represents the coefficient of multiple determinations imply that 80% of the total variation in the dependent variable (EPS) of quoted consumer goods firms in Nigeria is jointly explained by the explanatory variables (EVP and FSZ). The R-squared of 80% did not constitute a problem to the study because the F- statistics value of 19.53979 with an associated Prob.>F = 0.001366 indicates that the model is fit to explain the relationship expressed in the study model. The value of adjusted of 80% also shows that 20% of the variation in the dependent variable is explained by other factors not captured in the study model. This suggests that apart from EVP and FSZ, there are other factors that mitigate EPS of quoted consumer goods firms in Nigeria.

Test of Autocorrelation: using Durbin-Waston (DW) statistics which we obtained from our regression result in table 2, it is observed that DW statistics is 1.680116 and an Akika Info Criterion and Schwarz Criterion which are 1.434969 and 1.501143 respectively also further confirms that our model is well specified. In addition to the above, the specific findings from each explanatory variable are provided as follows:
The results in table 2 illustrated that environmental protection disclosure has a positive but insignificant effect with earnings per share measured with a beta coefficient (β_1) and t- value of 0.205760 and 1.204568 respectively and p- value of 0.268, while firm size has a positive and significant effect with earnings per share measured with a beta coefficient (β_1) and t- value of 3.800 and 4.583 respectively and p- value of 0.003.

Decision

Since the Prob(F-statistic) = 0.001366 of the test and is less than 0.05 (5%), this study upholds that there is a significant effect between environmental protection disclosure and earnings per share of listed consumer goods firms in Nigeria at 5% level of significance. Thus, null hypothesis is rejected and alternative hypothesis accepted.

Hypothesis 2

Ho_2: There is no significant effect of corporate donation disclosure on earnings per share of listed consumer goods firms in Nigeria.

Table 3: Regression analysis between EPS, CPD and FSZ

Dependent Variable: EPS
Method: Least Squares
Date: 01/10/24 Time: 23:00
Sample: 2013 2022
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.587792	0.294270	1.997458	0.0859
CPD	-4.44E-06	5.81E-06	-0.765137	0.4692
FSZ	4.18E-08	7.67E-09	5.457444	0.0009

R-squared	0.830755	Mean dependent var	2.015057
Adjusted R-squared	0.782399	S.D. dependent var	0.509256
S.E. of regression	0.237556	Akaike info criterion	0.206502
Sum squared resid	0.395032	Schwarz criterion	0.297278
Log likelihood	1.967488	Hannan-Quinn criter.	0.106922
F-statistic	17.18005	Durbin-Watson stat	1.017435
Prob(F-statistic)	0.001994		

Source: Researcher's computation through E-view 9.0 statistical package

Interpretation of Regression Result

In Table 3, R-squared and adjusted Squared values were (0.83) and (0.78) respectively. The indicates that all the independent variables jointly explain about 78% of the systematic variations in earnings per share (EPS) of our samples firms over the ten years periods (2013-2022). Table 3 reveals an adjusted R-squared value of 0.78,which represents the coefficient of multiple determinations imply that 78% of the total variation in the dependent variable (EPS) of quoted consumer goods firms in Nigeria is jointly explained by the explanatory variables (CPD and FSZ). The R-squared of 78% did not constitute a problem to the study because the F- statistics value of 17.18005 with an associated Prob.>F = 0.001994 indicates that the model is fit to explain the relationship expressed in the study model. The value of adjusted of 78% also shows that 22% of the variation in the dependent variable is explained by other factors not captured in the study model. This suggests that apart from CPD and FSZ, there are other factors that mitigate EPS of quoted consumer goods firms in Nigeria.

Test of Autocorrelation: using Durbin-Waston (DW) statistics which we obtained from our regression result in table 4.2.2, it is observed that DW statistics is 1.017435 and an Akika Info Criterion and Schwarz Criterion which are 0.206502 and 0.297278 respectively also further confirms that our model is well specified. In addition to the above, the specific findings from each explanatory variable are provided as follows:

The results in table 4.2.2 illustrated that corporate donation has a negative but insignificant effect with earnings per share measured with a beta coefficient (β_1) and t- value of -4.440 and -0.765 respectively and p- value of 0.469, while firm size has a positive and significant effect with earnings per share measured with a beta coefficient (β_1) and t- value of 4.180 and 5.457 respectively and p- value of 0.001.

Decision

Since the Prob(F-statistic) = 0.001994 of the test and is less than 0.05 (5%), this study upholds that there is a significant effect between corporate donation and earnings per share of listed consumer goods firms in Nigeria at 5% level of significance. Thus, null hypothesis is rejected and alternative hypothesis accepted.

Conclusion and Recommendations

This study ascertained the effect of voluntary disclosure on financial performance of listed consumer goods firms in Nigeria, using environmental protection disclosure, corporate donation as the independent variables while earnings per share was used as a proxy for financial performance.. Ex post facto research design was adopted for the study. A sample of 18 consumer goods firms was used and data extracted from the companies audited annual reports and accounts.

From the result, it was established that environmental protection disclosure, corporate donation and employee welfare will firm size as the control variable were significant. This shows the extent to which consumer goods firms disclose information voluntarily, particularly regarding environmental protection, corporate donations, can significantly influence stakeholders' perceptions and decisions. Therefore, the study concludes that voluntary disclosure has significant effect on financial performance of listed consumer goods firms in Nigeria.

Based on the findings of the study, it was recommended as followings;

1. There should be constant environmental disclosure by the firms for mitigating its environmental impact and promoting sustainable practices. This will enable them share with their stakeholders to demonstrate their commitment toward environmental responsibility.

2. Firms should be encouraged in disclosing their donations, as this will demonstrate a genuine concern for societal wellbeing and an alignment with broader ethical values, thereby leading to competitive advantage in the market

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Appendix

The companies are stated below

S/N	Consumer Goods Companies
1	Dn Tyre & Rubber Plc[Mrs]
2	Guinness Nig Plc[Cg+]
3	P Z Cussons Nigeria Plc.[Cg+]
4	Nigerian Brew. Plc.[Cg+]
5	Unilever Nigeria Plc.[Cg+]
6	Cadbury Nigeria Plc.
7	Golden Guinea Brew. Plc.[Brs]
8	Nothern Nigeria Flour Mill Plc
9	Vitafoam Nig Plc.
10	Flour Mills Nig. Plc.[Cg+]
11	Nestle Nigeria Plc.[Cg+]
12	Nigerian Enamelware Plc.
13	Champion Brew. Plc.[Bls]
14	Nascon Allied Industries Plc
15	Union Dicon Salt Plc.[Brs]
16	International Breweries Plc.[Bls]
17	Dangote Sugar Refinery Plc[Cg+]
18	Honeywell Flour Mill Plc[Cg+]
19	Mcnichols Plc
20	Multi-Trex Integrated Foods Plc[Bmr]