Environmental Accounting Information Disclosure and Shareholders Investment Decision in Listed Consumer Goods Manufacturing Firms in Nigeria

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ABSTRACT

Adequate disclosure of information enhances investors' confidence and decision making. The attainment of optimal investment decision making has remained one of the major goals of every shareholder and one of such shareholders' investment decision is environmental accounting disclosure. Decision of shareholders to invest in consumer goods sector has negative effect on the growth of the sector. Studies have shown that not many listed consumer goods manufacturing firms have integrated environmental accounting information disclosure in their operations. Consequently, this study investigated the effect of environmental accounting information disclosure on shareholders' investment decision using earnings per share in listed consumer firms in Nigeria. The E x-post facto research design was adopted in the study over the period 2012 to 2021. The population and sample size of the study was 21 and 16 respectively and purposive sampling technique was adopted. Based on the Global Reporting Index (GRI) 2013 criteria, data were gathered from the annual reports of the sampled firms through secondary method of data collection and multiple regression technique of data analysis was used for analysis. The findings showed that there is a positive and significant effect of community development disclosure and employee health and safety disclosure on shareholders' investment decision making in Nigeria (Adj R^2=0,091, F=5.945, p=0.001).

The study concluded that environmental accounting disclosure influenced shareholders' investment decision in listed consumer goods manufacturing firms in Nigeria. The study recommended among others, that management of listed consumer goods manufacturing firms should continue to increase community development disclosure and employee health and safety disclosure in order to boost earnings per share which will translate to increased shareholders' investment decision-making because rational investors invest based on informed decision.

Key terms: Earnings per share; Community development disclosure; Employee health and safety disclosure; Environmental protection disclosure, Global Reporting Initiative; Investments decision.

INTRODUCTION

One cannot overstate the importance of environmental accounting disclosures by firms because environmental accounting disclosures act as a way for businesses to inform stakeholders about their environmental performance, enhancing values and corporate image as well as building a sustainable foundation for improved earnings and operations in the future. No business can claim not to have an impact

on the environment and as a result, real and potential equity investors in a firm will want to know how well the directors are carrying out their stewardship responsibilities as far as environmental issues are concerned (Udo, 2018). Investors always base their decisions to sell all, or some of their shares or to purchase some on financial figures (Akubo, et al. 2019).

Investment decisions by shareholders are usually influenced by expectations of returns, which in turn depend on projections of future growth and product demand. Users of corporate information are influenced by relevant corporate information's predictive and/or confirmatory values. In order to discern between useful information and less useful information, faithful representation requires that useful and informed decision represent realistically the economic conditions on ground.

The evaluation of a firm's investment qualities, including risk, safety, liquidity and growth, is of primary importance to both current and future investors. Investment opportunities influence how a stock's current value and expected future worth relate to one another which usually translates to the bottom line of earnings per share at year end. According to the firm's financial situation and operating results, investors place a high priority on the security of their investments. Many investors are interested in a firm's potential for expansion, thus they look at the organization's resources and management. Investors are also interested in tracking the progress and effectiveness of the management through their annual reports and accounts disclosures of both financial and non-financial information such as environmental performance (Akubo, et al. 2019). Investment decisions refer to the process of allocating resources to various assets or projects with the expectation of generating future income or returns. These decisions can be classified into different types based on various criteria such as capital budgeting decisions; working capital management; asset allocation; dividend decisions; social and environmental accounting decision; mergers and acquisitions (M&A) decisions amongst others (Nwansi & Dibiah, 2023)

According to Nirmala et al. (2011), corporate information about a firm and its growth which are reflected in earnings per share at year end influences shareholders' decisions. The decision-making of shareholders is also thought to be affected by disclosure of environmental information, such as the cost of core environmental protection, cost of employee health and safety and cost of community development. Consequently, this study is examining the impact of environmental protection disclosure on shareholders' investment decision making in listed consumer goods manufacturing firms in Nigeria.

Gitman and Zutter (2018); Nwansi and Dibiah, (2023) asserted that the problems of shareholders' investment decisions are critical aspects of corporate finance and can have significant consequences for both individual investors and the overall financial market some of these problems include information asymmetry; lack of financial literacy among shareholders; inadequate regulatory oversight; weak corporate governance; and inadequate risk assessment. The consequences of some of these problems could be poor investment decisions; fraud, malpractice and financial scandals; significant financial losses; value-destroying decisions; and excessive exposures (Gitman & Zutter, 2018). Presently, on a global basis social and environmental decision is one of the most important investment decisions of a firm even though it is on a voluntary basis (Uyagu, 2019).

In Nigeria, most studies on effect of environmental accounting disclosure such as Ogan and Akinbowale and Udo (2019) focused only on effect of environmental disclosure on profitability of listed firms using return on assets and return on equity while others such as Adebayo and Oyewole (2021) and Akubor (2021) focused on effect of environmental accounting disclosure on market price per share. These studies failed to examine the effect of environmental accounting disclosure on shareholders decision making proxied by earnings per share which is a more realistic ratio for investment decision making by investors and this presents a gap to be filled by this study. Therefore, the main objective of this study was to investigate the effect of environmental accounting disclosure on shareholders' decision making in Nigerian listed consumer products manufacturing firms.

The following hypotheses were developed in null form to meet the study's objective:

Ho1. community development disclosure has no significant effect on shareholders' investment decision making of listed consumer goods manufacturing firms in Nigeria.

Ho2. employee health and safety disclosure has no significant effect on shareholders' investment decision making of listed consumer goods manufacturing firms in Nigeria.

Ho3. environmental protection disclosure has no significant effect on shareholders' investment decision making of listed consumer goods manufacturing firms in Nigeria.

This study will be significant to real and potential investors, regulatory authorities, and academic community.

LITERATURE REVIEW/THEORETICAL REVIEW

Conceptual Review

This study has conceptualized Shareholders Investment decision and their measures and also Shareholders Investment decision and their measures

Dewi and Iramani (2014) defined investment decision as the choice to invest money in one or more assets with the objective of making money later. It concerns how investors allocate capital into investment opportunities that will be successful in the future. The decisions made by individual investors to invest in stocks, which immediately reflect the market price of shares, are referred to as investment decisions (Adedoyin et al. 2019). This implies that the market price of a firm's share will be affected by equity investors' choice to purchase shares in a specific firm or not based on the financial and non-financial data of the firm.

In general, investors' decisions refer to the choices made by investors on where, how much, and how to invest money in different financial instruments in order to produce income, or value appreciation of their investment (Sindhu & Kumar, 2014). This study used earnings per share to gauge investment choice of share-holders. Earnings per share is profit after tax of a firm divided by total number of existing shares at every point in time. EPS is a financial metric that divides net earnings available to common shareholders by the average number of shares outstanding during a certain time period. Earnings are important in determining a firm's stock price as well as in assessing its profitability. It displays how much a firm generates per share; a greater EPS indicates that the stock has a higher value when compared with others in the industry.

It is also worth noting that the market value of a firm is made up of a variety of financial and non-financial metrics that reveal the degree of objectives achieved. Investors' assessments of a firm's management' capacity to anticipate and respond to events that are expected to occur in the firm's economic environment have an impact on the market value of the firm (Emeka & Nwokeji, 2019).

Shareholders' investment decisions involve the process of choosing among various investment options to allocate funds in a way that maximizes returns while managing risk. Brealy et. al (2017), Ross et. al (2018) and Gitman and Zutter (2018) identified the following measures and indicators that help shareholders assess investment opportunities and make informed decisions.

Return on Investment (ROI): Measures the profitability of an investment by comparing the gain or loss

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Risk-Adjusted Return: Adjusts the return on investment for the level of risk associated with the investment. Common metrics include the Sharpe ratio and the Treynor ratio.

Net Present Value (NPV): Evaluates the profitability of an investment by calculating the present value of expected future cash flows minus the initial investment.

Internal Rate of Return (IRR): Represents the discount rate that makes the net present value of an investment zero.

Earnings Per Share (EPS): Measures a company's profitability by dividing net earnings by the number of outstanding shares.

Dividend Yield: Indicates the annual dividend income relative to the current market price of a share.

Environmental Accounting disclosure and their measures

Environmental accounting disclosure involves the communication of environmental information by companies in their financial reports, sustainability reports, or other public disclosures. The purpose is to provide stakeholders with information about a company's environmental impact, performance, and sustainability efforts. Various measures and indicators are used to quantify and communicate environmental information. Traditional accounting which is purely based on profit making by firms cannot adequately disclose the cost that a firm spends on preservation of natural resources. Therefore, environmental accounting is crucial in providing information about the firm's environmental responsibility. Environmental accounting reveals the awareness of the firm's economic contribution to the welfare and safety of the environment (Uyagu, 2019). A branch of accounting known as "environmental accounting" tracks the use of natural resources, their cost to the firm, and their effects on the environment through the use of numbers. It offers information on the firm's contribution to economic welfare as well as the costs incurred for resource preservation and pollution management (Chavarkar, 2020).

Environmental accounting is a subset of accounting which examines how an organization's operations affect the environment. Environmental costs and benefits must be identified, quantified, and communicated (Smith, 2021). As firms are expected to demonstrate their dedication to sustainability and accountability to stakeholders, environmental accounting is becoming more and more crucial. Smith (2021) lists one of the main advantages of environmental accounting as its ability to assist firms in identifying areas where they can cut expenses and lessen their environmental effect. Organizations can, for instance, determine how to lower their greenhouse gas emissions by evaluating their carbon footprint and then making energy-saving changes or switching to renewable energy sources. Environmental accounting can also assist firms to understand their environmental opportunities and risks, which can guide their decision-making.

Life cycle assessment (LCA), which is a process for evaluating the environmental implications of a product or service from cradle to grave, is one of the most popular approaches to environmental accounting. LCA entails calculating an item's environmental effects over the course of its full life cycle, including the gathering of raw materials, production, usage, and disposal (Smith, 2021). LCA can assist businesses in identifying the most important environmental effects of their goods or services and in creating mitigation

plans for its impact (Tilt, 2016).

Here are some common measures related to environmental accounting disclosure according to (Global Reporting Initiative (GRI). 2021; and Organization for Standardization (ISO) 2021)

Carbon Footprint: This measures the total greenhouse gas emissions, usually expressed in terms of carbon dioxide equivalents, associated with a company's activities.

Energy Consumption: Measures the Quantifies the amount of energy consumed by a company, often categorized into direct and indirect energy use.

Employee Health and safety: Reports the safety measures put in place and the number of accidents annually.

Community development: Discloses measures the practical steps taken by the firm especially those relating to social responsibility

Water Usage: Reports the volume of water used by a company in its operations, distinguishing between different sources such as direct withdrawals and indirect water use in the supply chain.

Waste Generation: Quantifies the amount of waste generated by a company, often categorized into hazardous and non-hazardous waste.

Biodiversity Impact: Measures the impact of a company's operations on biodiversity and ecosystems, including efforts to mitigate negative effects.

Environmental Expenditures: Reports the financial resources allocated to environmental initiatives, including investments in pollution control, environmental protection, and sustainability projects.

Theoretical Review

Stakeholders' theory

This study is posited on the stakeholders' theory, which has been a part of management studies since 1970. By incorporating corporate accountability to a wide spectrum of stakeholders, Freeman (1984) gradually built the theory (Izedonmi, 2016). First, the term "stakeholder" was used to refer to the partnership between managers and shareholders without explicitly recognizing that there were other parties interested in the success of the firm. However, further research projects expanded the focus to encompass, to name a few, employees, creditors, suppliers, government organizations, and operating environments. The stakeholder theory has several applications in the field of accounting because it is believed that a firm's success depends on the cooperation of its stakeholders which provide both tangible and intangible resources that ensure the firm's survival.

In return, it is obligatory to the firm to be providing information both financial and non-financial to stakeholders on the firm's operations, as opposed to just giving information to the owners (Nguyen, 2020). According to the hypothesis, it follows that the firms' survival depends on their ability to provide non-financial information of environmental information which may have a favorable impact on the market value of the firms.

Modern Portfolio Theory (MPT)

This study is also anchored on the modern portfolio theory which was propounded by Markowitz in 1952 and it emphasizes the importance of investment decision such as diversification in constructing investment

portfolios. By holding a mix of assets with uncorrelated or negatively correlated returns, investors can reduce overall portfolio risk without sacrificing returns. MPT distinguishes between systematic (market-related) and unsystematic (company-specific) risk. Systematic risk cannot be diversified away, but unsystematic risk can be reduced through diversification. MPT introduces the concept of expected return and standard deviation (risk) as key parameters in portfolio analysis. Investors are assumed to be risk-averse, seeking portfolios that offer the highest expected return for a given level of risk or the lowest risk for a targeted level of return which shareholders do through investment decision.

Empirical Reviews

Nwansi and Dibiah (2023) investigated the effect profitability on Shareholders' Investment of Deposit Money Banks in Nigeria using return on assets, return on equity and net profit margin as independent variables while the dependent variable of shareholders' investment was proxied by share price. The study found that all the independent variables had negative and insignificant effect on share price.

Also, sing data covering the period 2012 to 2020, Adebayo and Oyewole (2021) assessed how environmental accounting disclosure affects the market value of listed non-financial firms in Nigeria. The study used longitudinal panel research design and the population was one hundred and twelve (112) listed non-financial firms. Seventy-two (72) listed non-financial firms were selected using a purposive sampling method from the firms' annual reports. The market value, as determined by earnings per share (EPS), was the dependent variable while the independent variable were environmental accounting measured using the Global Reporting Initiatives' (GRI) eight-theme index of environmental protection disclosure. The study used panel feasible generalized least square regression as its technique of data analysis. The findings showed that environmental protection disclosure has a positive and significant impact on both share price. The results of this study provide strong evidence that environmental protection disclosure has a considerable impact on the market value of listed nonfinancial firms in Nigeria. It advises corporate businesses to emphasize including environmental information in their annual reports because doing so could increase their market price.

Similarly, Simşek and Ztürk (2021) used the province of Istanbul as a case study to assess the relationship between environmental accounting and corporate success. It was discovered that environmental accounting and performance are related in a mutually meaningful ways. However, it was found that the firms examined in the study had low environmental accounting disclosures of the themes (categories) investigated. Also, Khandelwal and Chaturvedi (2021) assessed financial performance of some Indian firms as well as environmental accounting disclosures. The multivariate test employed in the study demonstrated that environmental factors, as well as ROE and ROA, have a substantial impact.

The study recommended that Indian listed firms stay up with the regulatory framework that the government and other regulatory authorities have put in place. In Nigerian, Udo (2019) empirically analyzed environmental accounting disclosure standards in oil and gas firms listed in Nigeria. In the study, an ex-post facto research design was used and the population which employed the census sampling technique, consisted of the ten (10) oil and gas businesses listed on the Nigerian Exchange Group (NEG). The study's data sources were secondary sources because environmental data from the annual reports of the listed Oil and Gas firms were collected using content analysis and an environmental protection disclosure index with 40 items in line with Global Reporting Initiative (GRI) was constructed. Descriptive and inferential statistics were used to analyze the data.

The results showed that the sampled oil and gas firms disclosed very little financial and non-financial (environmental) information in their annual reports, with minimum disclosure practices of 0.0283 and maximum disclosure practices of 0.2727. The results showed that profitability has a significant negative influence on environmental accounting disclosure, while leverage and liquidity have significant positive influences and long-term financing contribution has a negligible positive influence. The study's findings

suggest that the financial characteristics of a firm (profitability, leverage, and liquidity) will be the primary determinants of environmental accounting disclosure in Nigerian Oil and Gas industry. It also shows that many listed oil and gas firms disclose very little qualitative environmental accounting information in their annual reports. It was recommended that efforts should be directed by the firms in Nigeria towards preparing environmental financial statements and that there is a major need for standardized environmental accounting disclosure of the industry in Nigeria through mandatory disclosures.

In Nigerian, Akubor et al. (2021) investigated the influence of corporate information on equity investors' decision-making among listed non-financial firms. The population consists of all listed non-financial firms in Nigeria, and forty-eight (48) sampled firms covering the years 2012 to 2019 were obtained using a filtering sampling technique. After running certain diagnostic tests such as Pearson correlation, Variance Inflator Factor, Heteroscedasticity and Hausman specification tests, the hypotheses were analyzed using the Robust Fixed effect (RE) regression technique of data analysis. The findings demonstrated that, over the study period, Nigeria's quoted non-financial firms' market prices (MPS) are significantly positively impacted by environmental protection disclosure, firm growth and firm size.

The study recommended among others that, management of non-financial organizations in Nigeria should take into account the rate of growth of their firms by making sure that the value of their revenues consistently increases each year in order to attract more investments from equity investors in the capital market.

Environmental accounting disclosure techniques were studied by Ogan and Akinbowale (2021) using annual reports of listed Nigerian oil and gas firms and ex-post facto research design was used while the population of the study was the ten (10) oil and gas firms that are listed on the Nigerian Exchange Group (NEG). Secondary environmental data sourced from annual reports and accounts of 10 listed oil and gas firms were collected using content analysis. The study used environmental protection disclosure index with 40 items in line with Global Reporting Initiative (GRI) was constructed.

Descriptive and inferential statistics were used to analyze the data and the results showed that the sampled oil and gas firms disclosed very little financial and nonfinancial environmental information in their annual reports, with minimum disclosure practices of 0.0283 and maximum disclosure practices of 0.2727. As of December 31, 2018, the average disclosure level of the sampled firms' environmental accounting stood at about 11.67%. The results showed that profitability has a negative and significant influence on environmental accounting disclosure, while leverage and liquidity have positive and significant influence and long-term financing contribution has a negligible positive influence. The study's findings suggest that the financial characteristics of a firm (profitability, leverage, and liquidity) were the primary determinants of environmental accounting disclosure in the Nigerian oil and gas industry.

It also shows that many listed oil and gas firms disclose very little qualitative environmental accounting information in their annual reports. It was recommended that regulatory authorities in Nigeria should be preparing environmental financial statements and that a standardized environmental accounting disclosure checklist is put in place for the oil and gas industry in Nigeria.

METHODOLOGY

The ex-post-facto research design was used for this investigation since the researcher cannot modify the data because they have already occurred and can be verified, hence this design was chosen to better explain the relationship between the dependent and independent variables. The population of the study is the 21 listed consumer goods manufacturing firms in Nigeria while the sample size of 16 listed consumer products manufacturing firms on the Nigerian exchange Group (NEG) between 2012 and 2021 were used in the study. A series of requirements were established to determine the sample size of the study, including the

firm's need to be listed from 2012 to 2021 and the availability of financial statements during the entire scope of the study. In order to get quantitative values, a dichotomous approach of content analysis technique was employed to collect data from financial statements and codify qualitative information into categories where a disclosure score of (1) if the item was reported and (0) if not disclosed. A multiple regression analysis was used through the aid of Statistical Package for Social Sciences (SPSS) Version 23 software to determine the impact of environmental protection disclosure parameters such as community development disclosure, employee health and safety disclosure, environmental protection disclosure on shareholders' investment decision making proxied by earnings per share (EPS) as the dependent variable. The following is a description of the functional relationship.

$$EPS = f(CDD, EHS, EVD) \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots(1)$$

With the aid of this equation, the study arrived at a model which is presented as follows in a testable form:

$$EPS_{i,t} = \beta_0 + \beta_1 CDD_{i,t} + \beta_2 EHS_{i,t} + \beta_3 EVD_{i,t} + U_{i,t}, \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots(2)$$

Where, β_0 is the intercept while β_{1-3} is the coefficient of the independent variables.

Variables Definition and Measurements

Table 1. Variables Definition and Measurements

Variables	Definitions	Measurements	Sources/References
	Dependent variables		
Share holders' investment Decision Making using EPS	Earnings Per Share.	Profit after tax/total number of ordinary share at each year end.	Ugwu (2018) Ugwudioha (2010)
	Independent variables		
CDD	Community Development Disclosure	Unweighted disclosure approach where a firm is scored "1" for an item disclosed in the annual report and "0" if not disclosed.	Uyagu (2019); Buniami, Lutz, & Schweinfest (2008)
EHS	Employee Health and Safety	Unweighted disclosure approach where a firm is scored "1" for an item disclosed in the annual report and "0" if not disclosed.	Uyagu (2019)
EVD	Environmental protection disclosure	Unweighted disclosure approach where a firm is scored "1" for an item disclosed in the annual report and "0" if not disclosed.	Uyagu (2019)

Researcher's Compilation 2023

The following diagnostic tests were conducted to enrich the analysis of data.

To check that any or all of the explanatory variables in a multiple regression analysis were not highly inter-correlated to generate severe multicolinearity problems in the data, the multi-colinearity test, variance inflation factor (VIF) and tolerance values were carried out.

RESULTS AND DISCUSSION

Table 2 shows the summary statistics of the variables in terms of the mean, standard deviation, minimum and maximum values.

Table 2. Descriptive statistics of variables

Variables	Obs	Mean	Std Deviation	Minimum	Maximum
EPS	150	2.15	3.50	-0.70	29.95
CDD	150	0.89	0.310	0	1
EHS	150	0.81	0.396	0	1
EVD	150	0.60	0.491	0	1

Source SPSS (Version 23) Outputs

Share holders' investment decision making proxied by EPS has a mean of 2.15, a standard deviation of 3.5. The implication of these values is that there is no wide dispersion in earnings per share of the sampled from the mean. Earnings per share also had values of 0.70 and 29.95 representing minimum and maximum values respectively in listed consumer goods manufacturing firms in Nigerian. The values of community development disclosure (CDD) ranged from 0 to 1 representing minimum and maximum values respectively while a mean of 0.89 and a standard deviation of 0.310 values were obtained.

The implication of the mean and standard deviation values obtained is that there is a wide dispersion in the values. This also implies that there is variability in the level of community development disclosures of listed consumer products manufacturing firms in Nigeria. Additionally, the employee health and safety (EHS) disclosure had a mean of 0.81 and a standard deviation of 0.396, showing a very wide dispersion. This may be because, Nigerian listed consumer goods manufacturing firms do not all have the same fixed number of employee health and safety disclosure. The minimum and maximum values of employee health and safety disclosures over the period of the study stood at o and 1 respectively over the period under consideration. Contrary to employee health and safety the environmental protection disclosure values of listed consumer goods manufacturing firms in Nigeria had a mean and standard deviation value of 0.60 and 0.491 respectively. This suggests that on average, there were not many differences in the environmental protection disclosure composition of these firms because there is not a significant range in its standard deviation values and this may be due to the voluntary nature of environmental protection disclosure which is not mandatory. The minimum and maximum values of disclosure over the period under consideration stood at o and 1 respectively.

Table 3 demonstrates the association between the dependent and independent variables of the study. Two of the independent variables (community development disclosure and employee health disclosure) have positive correlations with the dependent variable (EPS). This implies that as community development disclosure and employee health and safety disclosure increase share-holders' investment decision proxied by earnings per share also increases. However, that of core environmental protection disclosure had a negative association with share-holders' investment decision proxied by earnings per share. This implies that as environmental protection disclosure decreases, share-holders' investment decision proxied by earnings per share increases. This may be due to the large amount of money required for environmental conservation and performance by listed manufacturing firms. It is however worthy of note that engaging in environmental

conservation and performance must be one of the long term goals of a corporate organizations.

Table 3 Correlation Matrix of Dependent and Independent variables

Variables	EPS	CDD	EHS	EVD	VIF
EPS	1.000				
CDD	0.150	1.000			1.031
EHS	0.253	-0.167	1.000		1.059
EVD	-0.123	0.074	-0.179	1.000	1.035

Source: SPSS (Version 23) Outputs 2020

From the correlation values indicated in table 3, it can be seen that the highest correlation value is 25.3% between employee health and safety and earnings per share. Emory (1982) noted that values more than 0.80 can be problematic while Hussain, Islam, and Andrew (2006) indicated that multi collinearity may be a source of concern when the correlation between variables is 0.9 and higher. Therefore, it is clear from the aforementioned table that the magnitude of the correlation among the variables generally indicated no severe multi-collinearity problems. A Variance Inflation Factor (VIF) test was used to assess whether mult-collinearity was a severe problem, and the results showed that there was no severe mult-collinearity problems because the results ranged from a minimum of 1.031 to a maximum of 1.059 and a mean value of 1.042. Test of mult-collinearity with a VIF result of 5.00-10 can also indicate absence of severe mult-collinearity problems (Neter, Kutner, Nachtsheim & Wasserman 1996).

Table 4 below shows the findings of multiple regression using earnings per share (EPS) as the dependent variable and the community development disclosure (CDD), employee health and safety (EHS) disclosure and environmental protection disclosure (EVD)

Table 4 Regression Results

Ind0. Variables	Coefficients OLS	Standard Error OLS	T Statistics OLS	P-Values
Constants	-1.453	1.171	-1.241	0.216
CDD	0.202	0.898	2.534	0.012
EHS	0.270	0.722	3.354	0.001
EVD	-0.089	0.570	-1.118	0.265
No of Obs	150	150	150	150
R-Squared	0.110			
Adjusted R-Squared	0.091			
F-Statistic	5.945			
P-Value	0.001			

Source: SPSS (Version 23) Outputs

EPS=0.202 + 0.270- 0.089

The model's validity for each of the estimations was clear from the p-value of 0.001, which was statistically

significant at 1% level of significance. The explanatory variables were able to explain the change in shareholders' decision making proxied by earnings per share (EPS), as evidenced by the R-squared of 11.00%. This meant that under multiple regression, the independent variables might account for 11.00% of changes in the dependent variable. The F-statistics of 5.945 and the p-value of 0.001 further supported the model's suitability.

A positive coefficient of 0.202 with a p-value of 0.012 at a 5% level of significance was found for community development disclosure in table 4 above. This has the inference that as community development disclosure increased, so did the level of shareholders' investment decision making proxied by earnings per share. This is because the probability value of 0.012 is less than the 5% level of significance (0.012%<5%) and based on this result, study rejected the null hypothesis, which stated that there is no significant effect of community development disclosure on shareholders' investment decision making of listed consumer products manufacturing firms in Nigeria. This finding supported the studies conducted by Adebayo and Oyewole (2021); Akubor et al. (2021) who documented that there is a positive and significant effect of community development disclosure on share prices and market price per share.

Additionally, at a 5% level of significance, the employee health and safety disclosure has a positive coefficient of 0.270 and a p-value of 0.001, because the probability value of 0.047 was less than the 5% level of significance (0.001%<5%%), it was inferred that employee health and safety disclosure was positive and significantly impacted shareholders' decision making proxied by earnings per share of listed consumer goods manufacturing firms in Nigeria. Based on these results, the study rejected the null hypothesis, which claimed that the employee health and safety disclosure of listed consumer goods manufacturing firms in Nigeria has no discernible impact on shareholders' investment decision making proxied by earnings per share. This finding confirmed those of Adebayo and Oyewole (2021); Akubor et al. (2021) who found a positive and significant effect of employee health and safety disclosure on share price.

With a negative coefficient and p-values of -0.089 and 0.265, respectively, the multiple regressions estimated that core environmental protection disclosure had a negative and significant impact on environmental protection disclosure of listed consumer goods manufacturing firms in Nigeria. This implies that as the proportion of environmental protection disclosure decreases, the level of shareholders investment decision proxied by earnings per share increases because less money was deployed to the core environmental conservation. Due to the probability value of 0.265 being more than 5% level of significance (0.05%), the study failed to reject the null hypothesis, which claimed that there is no significant effect of environmental protection disclosure on shareholders' investment decision making of listed consumer goods manufacturing firms in Nigeria. This finding is consistent with Udo (2019) who found a negative and significant effect of environmental protection disclosure on profitability. While it opposes those of Adebayo and Oyewole (2021) who found a positive and significant effect of environmental disclosure on share price of firms.

CONCLUSION AND RECOMMENDATIONS

The impact of environmental protection disclosure frameworks on shareholders' investment decision making in listed consumer goods manufacturing firms in Nigeria was examined over the period 2012 to 2021. Out of the twenty one listed consumer products manufacturing firms that are active in Nigeria Exchange Group, the study had a sample size of sixteen. Based on the findings of the study's descriptive statistics, correlation matrix and multiple regression analysis, there is a clear policy implication for environmental protection disclosure in Nigeria. According to the study's findings, Nigerian listed consumer goods manufacturing firms have relatively little environmental protection disclosure when compared to the (Global Reporting Initiative) GRI 2013 guideline. The study came to conclusion that, with the exception environmental protection disclosure, the other two independent variable comprising of community development disclosure and employee health and safety disclosure had positive and statistical significance at

5% level of significance. It was also found that environmental protection disclosure had a negative and insignificant effect on shareholders' investment decision making in listed consumer goods manufacturing firms in Nigerian. Based on the aforementioned findings, the study recommended that listed consumer goods manufacturing firms in Nigeria should continue to increase community development disclosure and employee health and safety disclosure in order to increase earnings per share which will translate to increased shareholders' investment decision because a rationale investors invests based on informed decision. Furthermore, although environmental conservation is important, listed consumer goods manufacturing firms in Nigeria should find an optimal manner of investing in environmental protection efforts in order to meet up the firms' financial obligations to other stake holders of the firms.

CONTRIBUTION TO FUTURE RESEARCH

Firstly, this study has provided both empirical and statistical evidence on the utility of three independent variables that constitute community development disclosure, employee health and safety disclosure and environmental information disclosure against one dependent variable of shareholders' investment decision making (proxied by earnings per share) in listed consumer goods manufacturing firms in Nigerian. Future research can be conducted by including other independent variables such as energy consumption disclosure and product safety disclosure in addition to community development disclosure, employee health and safety disclosure and environmental information against shareholders' investment decision making (proxied by earnings per share) as the dependent variable. Besides, these variables may be investigated on the entire manufacturing firms in Nigeria or in the financial sector of the economy such as listed deposit money banks and insurance firms in Nigeria.

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Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
EPS	150	-.70	29.95	2.1478	3.49841
CDD	150	0	1	.89	.310
EHS	150	0	1	.81	.396
EVD	150	0	1	.60	.491
Valid N (listwise)	150				

Correlations			EPS	CDD	EHS	EVD
Pearson Correlation		EPS	1.000	.150	.253	-.123
		CDD	.150	1.000	-.167	.074
		EHS	.253	-.167	1.000	-.179
		EVD	-.123	.074	-.179	1.000
Sig. (1-tailed)		EPS	.	.034	.001	.068
		CDD	.034	.	.021	.186
		EHS	.001	.021	.	.015
		EVD	.068	.186	.015	.
N		EPS	150	150	150	150
		CDD	150	150	150	150
		EHS	150	150	150	150
		EVD	150	150	150	150

Model Summary[b]					Change Statistics					Durbin-Watson
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	
1	.331[a]	.110	.091	3.34357	.110	5.945	3	145	.001	.677
a. Predictors: (Constant), EVD, CDD, EHS										
b. Dependent Variable: EPS										

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	199.389	3	66.463	5.945	.001[b]
	Residual	1621.025	145	11.179		
	Total	1820.413	148			
a. Dependent Variable: EPS						
b. Predictors: (Constant), EVD, CDD, EHS						

Coefficients[a]												
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1 (Constant)	-1.453	1.171		-1.241	.216	-3.766	.861					
CDD	2.276	.898	.202	2.534	.012	.501	4.052	.150	.206	.199	.970	1.031
EHS	2.420	.722	.270	3.354	.001	.994	3.846	.253	.268	.263	.944	1.059
EVD	-.637	.570	-.089	-1.118	.265	-1.763	.489	-.123	-.092	-.088	.966	1.035
a. Dependent Variable: EPS												