

## Effluent Disclosure and market Value of Listed Food and Beverage Firms in Nigeria

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### Abstract

The increasing negative environmental footprints arising from firms' economic activities have triggered adverse investor reactions thereby affecting the market value of these firms. The main objective of this study was to examine the effect of effluent disclosure on the market value of listed food and beverage firms in Nigeria. The research design adopted was ex post facto; secondary data were employed and the population comprised 10 listed food and beverage companies in Nigeria. The method of data analysis employed was ordinary least squares (OLS) regression and the statistical package employed was EViews version 13. The result of the analysis revealed that effluent disclosure exerts a positive and statistically significant effect on market capitalization ( $\beta = 0.182$ ;  $p = 0.028$ ) while effluent disclosure has no significant effect on earnings per share of listed food and beverage companies in Nigeria ( $\beta = 0.139$ ;  $p = 0.573$ ). It was thus concluded that firms that provide comprehensive information on effluent treatment and environmental compliance are perceived as having lower exposure to environmental penalties, litigation, and regulatory sanctions. Therefore, it was recommended that firms should enhance the quality, consistency, and credibility of their effluent disclosure practices in line with global reporting standards to attract investors and improve market valuation.

**Keywords:** Effluent disclosure, earnings per share, market capitalization, environmental accounting

### 1.0 Introduction

The increasing global emphasis on environmental sustainability has intensified the demand for corporate transparency in environmental practices, particularly in relation to waste management and effluent discharge. Industrial activities, especially in manufacturing sectors such as food and beverage production, generate significant volumes of liquid waste, which, if improperly managed, can lead to severe environmental degradation, water pollution, and public health risks. Consequently, stakeholders now place growing pressure on firms to disclose information regarding their environmental impacts and mitigation strategies (Iyoha & Igbinoia, 2023). Effluent disclosure, as a key component of environmental reporting, provides insights into how firms manage wastewater, comply with environmental regulations, and adopt sustainable practices. Thus, effluent disclosures serve as a mechanism through which firms communicate their environmental responsibility and commitment to sustainable development, which may, in turn, influence investors' perceptions and market valuation (Agweda et al. 2024). In the food and beverage sector, where production processes are highly water-intensive and generate substantial effluent, the need for transparent reporting is especially critical. Poor effluent management in this

sector can result in environmental pollution, regulatory sanctions, and reputational damage, all of which have implications for firm value.

Effluent disclosure has become a central issue in corporate environmental reporting, particularly as societies increasingly demand that organizations demonstrate responsibility for the ecological consequences of their operations. Effluents disclosure refers to the communication of information by firms regarding the type, quantity, and management of liquid waste they generate, as well as the measures taken to mitigate harmful effects (Kuo et al., 2022). This practice is rooted in the recognition that corporate activities extend beyond financial performance to include significant environmental and social implications. Market value of firms represents the worth of the firms as perceived by the market operators. It refers to the net worth of the firm as at any point in time. It shows the amount in which willing investors are ready to pay to acquire interest in the company. The market value of a firm is a collection of non-financial and financial measures that give information on the level of attainment of objectives as well as outcomes. It is affected by investors perceptions of it managers capability to foresee as well as respond to anticipated firm's economic environment (Emeka- Nwokeji, 2019).

For firms in the food and beverage sector, whose production processes are highly associated with water usage and waste generation, the need for comprehensive effluent reporting has become even more critical. Despite this growing demand, the extent to which effluent disclosures influence the market value of firms remains a subject of ongoing debate. Empirical evidence on the relationship between effluent disclosures and firm value has produced **mixed results**. While some studies report a positive and significant relationship between environmental disclosures and firm value (Oshiole et al., 2024; Akpan & Nkanta (2023)), others find insignificant effects (Agweda, 2024; Iyoha & Igbinovia (2023)). Moreover, extant literature has largely emphasized **aggregate environmental disclosures or general green accounting practices**, with limited attention devoted specifically to **effluent disclosures as a distinct component of environmental reporting** (Akpan & Nkanta, 2023; Iyoha & Igbinovia, 2023). This aggregation potentially obscures the unique contribution of effluent-related information to firm valuation. In addition, prior studies have predominantly employed **single proxies of market value**, such as market value added (Agweda, 2024), with little consideration for a **multi-dimensional assessment** that incorporates both market-based and accounting-based indicators like market capitalization and earnings per share. This creates a gap in understanding how effluent disclosures influence different dimensions of firm value. Furthermore, existing Nigerian studies have concentrated mainly on **industrial goods and agro-manufacturing firms** (Agweda, 2024; Iyoha & Igbinovia, 2023), with **limited empirical evidence from the food and beverage subsector**, despite its high environmental sensitivity and regulatory exposure. Given the sector's significant contribution to environmental pollution through effluent discharge, the lack of focused empirical investigation raises concerns about the generalizability of prior findings. In addition, evidence from other developing economies indicates **low levels of compliance with global environmental reporting standards**, particularly in relation to waste and effluent disclosures (Meiryani, 2024). Thus, this study was carried out to ascertain the effect of effluent disclosure and market value of listed food and beverage companies in Nigeria.

## 1.2 Research Objectives

The main objective of this study was to ascertain the effect of effluent disclosure on market value of listed food and beverage firms in Nigeria. The specific objectives were to:

1. examine the effect of effluent disclosure on market capitalization of listed food and beverage companies in Nigeria.
2. ascertain the effect of effluent disclosure on earnings per share of listed food and beverage companies in Nigeria.

### **1.3 Research Questions**

In order to achieve the objectives of this study, the following research questions were raised;

1. What effect does effluent disclosure have on market capitalization of listed food and beverage firms in Nigeria?
2. To what extent does effluent disclosure affect earnings per share of listed food and beverage firms in Nigeria?

### **Research Hypotheses**

The following hypotheses were formulated to guide the study;

Ho1: Effluent disclosure does not have any significant effect on market capitalization of listed food and beverage firms in Nigeria.

Ho2: Effluent disclosure does not have any significant effect on earnings per share of listed food and beverage firms in Nigeria.

## **2.0 REVIEW OF RELATED LITERATURE**

### **Effluent Disclosure and Market Capitalization**

Effluent disclosure, as a critical component of environmental reporting, plays an important role in shaping investors' perception of a firm's environmental responsibility and long-term sustainability (Khuong et al., 2022). Market capitalization, which reflects the market's valuation of a firm based on its share price and outstanding shares, is highly sensitive to the quality and transparency of information available to investors ((Iyoha & Igbinoia, 2023). Consequently, the disclosure of effluent-related information can serve as a strategic tool for enhancing firm value in the capital market. Effluent disclosure can also boost market capitalization through risk reduction mechanisms. As observed by Olagunju and Ajiboye (2022), firms that provide comprehensive information on effluent treatment and environmental compliance are perceived as having lower exposure to environmental penalties, litigation, and regulatory sanctions. Reduced risk translates into lower uncertainty about future cash flows, which investors reward with higher valuations. In this regard, effluent disclosure contributes to the stability and predictability of firm performance, which is a key determinant of market value. Furthermore, transparent effluent reporting may improve a firm's access to capital by appealing to environmentally responsible and institutional investors who incorporate environmental, social, and governance (ESG) factors into their investment decisions. As global investment trends increasingly favor sustainable firms, companies with robust effluent disclosure practices are more likely to attract long-term capital inflows. This increased investment demand can drive up share prices and, consequently, market capitalization. Empirical evidence generally supports the positive association between environmental disclosures and firm value. Studies such as Agweda (2024) and Iyoha and Igbinoia (2023) document that environmental and effluent-related disclosures significantly

enhance firm value, suggesting that investors perceive such disclosures as value-relevant information.

## **Effluent Disclosures and Earnings per Share**

Effluent disclosure, as an integral aspect of environmental reporting, has important implications for a firm's financial performance, particularly **earnings per share (EPS)**, which represents the portion of a company's profit attributable to each outstanding share. EPS is a key indicator closely monitored by investors, as it directly influences investment decisions and firm valuation. The extent and quality of effluent disclosure can therefore shape both operational outcomes and market perceptions that ultimately affect EPS. Effluent disclosure can also positively influence EPS through **cost efficiency and innovation**. According to Meiryani (2024), firms that actively monitor and report their effluent management practices are more likely to adopt cleaner technologies, recycling systems, and efficient resource utilization processes. These initiatives can reduce production costs associated with waste disposal, regulatory fines, and environmental remediation. Lower operational and compliance costs improve net income, thereby increasing EPS. Agweda (2024) also noted that environmentally responsible firms often benefit from government incentives, tax reliefs, or subsidies, which further enhance profitability. Conversely, **non-disclosure or inadequate disclosure of effluent-related information** can have adverse consequences for both EPS and overall market value. Lack of transparency increases information asymmetry and raises concerns among investors regarding hidden environmental liabilities. This may lead to reduced investor confidence, lower demand for the firm's shares, and a decline in share price, ultimately affecting market value negatively. In addition, firms that fail to disclose or properly manage effluent are more exposed to regulatory penalties, litigation costs, and reputational damage, which can significantly erode profits and reduce earnings per share (Akpan & Nkanta, 2023). Empirical studies provide support for these arguments, indicating that environmental disclosures, including effluent-related reporting, are associated with improved financial performance and firm value (Oshiole et al., 2024; Iyoha & Igbinoia, 2023).

## **2.2 Theoretical Review**

This study is anchored on **legitimacy theory, signaling theory, and stakeholder theory**, as the theories provide a strong foundation for explaining the relationship between effluent disclosures and market value of firms. Legitimacy theory as propounded by Suchman (1995) posits that organizations continually seek to ensure that their operations are perceived as being consistent with the norms, values, and expectations of the society in which they operate. Firms engage in environmental disclosures, including effluent reporting, as a means of demonstrating that their activities are environmentally responsible and socially acceptable (Meiryani, 2024). As noted by Oshiole et al. (2024) effluent disclosure enables firms in the food and beverage sector to communicate their compliance with environmental regulations and commitment to sustainable waste management practices. By doing so, firms maintain their 'license to operate, reduce societal and regulatory pressures, and avoid legitimacy threats such as sanctions, protests, or reputational damage. This enhanced legitimacy can improve investor confidence and corporate reputation, thereby positively influencing market capitalization and earnings per share (Agweda, 2024).

On the other hand, Signaling theory explains how firms voluntarily disclose information to reduce information asymmetry between management and external stakeholders, particularly investors (Spence, 1973). According to Akpan and Nkanta (2023), high-quality firms use effluent disclosures as signals of superior environmental performance, effective management practices, and long-term sustainability. Therefore, firms that provide comprehensive and transparent effluent disclosures signal lower environmental risk, regulatory compliance, and efficient resource utilization. These positive signals can attract investors, increase demand for the firm's shares, and

enhance share prices, leading to higher market capitalization (Iyoha & Igbinovia, 2023). Additionally, improved investor confidence and reduced cost of capital can enhance profitability, thereby increasing earnings per share. Thus, signaling theory supports the view that effluent disclosure is value-relevant information in capital markets.

Similarly, stakeholder theory emphasizes that firms are accountable not only to shareholders but also to a wide range of stakeholders, including customers, employees, regulators, host communities, and environmental groups (Freeman, 1984). These stakeholders have varying interests in the firm's environmental performance and disclosure practices. Effluent disclosure serves as a mechanism for addressing stakeholders' concerns about environmental impact, particularly regarding water pollution and waste management. According to Kuo et al. (2022), firms that disclose their effluent management practices are better able to satisfy stakeholder expectations, foster trust, and build stronger relationships with key stakeholder groups. This can lead to improved corporate reputation, customer loyalty, and reduced conflicts with regulators and host communities, ultimately enhancing financial performance and market value (Meiryani, 2024). Conversely, failure to disclose such information may result in stakeholder dissatisfaction, reputational damage, and financial losses.

### 2.3 Empirical Review

Oshiole et al. (2024) examined the influence of effluent disclosure on market value of listed consumer goods firm in Nigeria covering the period of ten (10) years 2013-2022. The study adopted ex-post facto with focus on longitudinal Panel Series design and secondary data were used for analysis which were obtained from Nigerian Exchange Group. While panel regression analysis technique was used to analyse the research data. The result revealed that employee health and safety cost have a positive and significant effect on market value while effluent disclosure has a positive and insignificant effect on market value of listed consumer and industrial goods firm in Nigeria.

Meiryani (2024) examined the level of information disclosure by health companies in Indonesia about their corporate social responsibility (CSR) in terms of their waste and effluent treatment based on the Global Reporting Initiative's G4 (GRI-G4) guidelines were used as the reporting standard. The population in this study comprises healthcare companies listed on the Indonesia Stock Exchange. Samples were taken by using purposive sampling method. Content analysis was performed for the sample companies' annual reports and financial statements for the period 2018–2020. The analysis results indicate that the level of information disclosure by health companies in Indonesia regarding their CSR in terms of their waste and effluent treatment is still low. Most companies disclose a minimal amount of information and do not comply with GRI-G4 standards; only a few companies disclose the required information in accordance with GRIG4 standards.

Agweda (2024) assessed the effect of effluent disclosure on market value added of listed industrial goods firms in Nigeria for a twelve (12) year period covering from 2012-2023. Ex-Post facto research design was employed. Twelve (12) listed industrial goods firms constituted the sample size of this study. Secondary data were extracted from the annual reports and accounts and sustainability reports of the sampled firms and were analysed using E-Views 10.0 statistical software. The study employed inferential statistics using Panel Least Square (PLS) regression analysis. Findings from the empirical analysis showed that effluent disclosure ( $\beta_1 = 0.164494$ ;  $p$ -value = 0.000000) has a significant and positive effect on market value added of listed industrial goods firms in Nigeria at 5% level of significance. The study recommended that corporate organizations should ensure that they get ahead of regulation by preparing their businesses for

likely mandatory environmental reporting rules, thereby gaining competitive edge when it comes to performance on the stock market, access to capital and winning tenders.

Nkanga et al. (2023) examined the effect of voluntary disclosures on firms' value taking samples from deposit money banks listed on the floor of the Nigeria Exchange Group from 2012-2021. The research design adopted for this study was ex post facto, purposive sampling technique was employed and secondary source of data used was obtained from the studied companies' annual report and Nigeria Exchange Group fact book. Dummy Least Square Variable regression was adopted to analyze the data. The findings of the study revealed that social donation and gifting disclosure has a positive significant effect on the market value of deposit money banks while employee health and safety disclosure has an no significant negative effect on market value of listed deposit money banks in Nigeria.

Iyoha and Igbinovia (2023) examined environmental information disclosures and value of agro-manufacturing firms listed on the Nigerian Exchange Group (NXG). The conflicting arguments between free market capitalism and eco-modernist theorists and the paucity of empirical evidence on the place of carbon accounting, environmental consciousness, environmental disclosures, and firm value relying on the submissions of the signaling and legitimacy theories necessitate the study. The study adopted an ex post facto research design. A census of the entire five (5) agricultural firms, twelve (12) industrial goods firms, and three (3) consumer goods firms to make a sample size of twenty (20) firms listed in the NXG from 2014 to 2020 was taken. The panel least squares estimation technique is adopted. The result revealed that effluent and waste, and biodiversity information disclosures exhibit positive significant impact on firm value of AgroManufacturing firms in the NXG while cost on environmental activities as well as compliance to environmental laws information disclosures exhibit positive insignificant impact on firm value of AgroManufacturing firms in the NXG. The positive relationships are in conformity with signaling theory, i.e., environmental information disclosure signals firm environmental consciousness, and this tends to improve the value of the firm in the long run.

Khuong et al. (2022) analyzed the impact of country disclosure on the firm value of listed companies in Viet Nam. As the sharp increase in population and urbanization has led to the depletion of water resources, the issue of water management is having an impact on the sustainable development of businesses. These days stakeholders and investors are taking this issue more and more seriously, which leads to a business disclosing country information that has a positive effect on their firm value. We use the quantitative method through instrumental variables for a sample of 170 companies listed on the Ho Chi Minh Stock Exchange and conducted from 2015-2019. The results of our study have shown that there is a positive influence of information disclosure on corporate governance. Our research aims to provide additional information for the current literature by providing further evidence for the field and suggesting solutions for governments, stakeholders and companies.

Olagunju and Ajiboye (2022) examined how environmental accounting disclosure influences the market value of listed non financial firms in Nigeria between 2012 and 2020. The research design adopted is the longitudinal design. A total population of one hundred and twelve (112) listed non-financial firms was identified. A purposive sampling was used to generate a sample of seventy-two (72) listed non-financial firms sourced from firms' annual reports. The dependent variable is the market value measured using earnings per share (EPS). The independent variable is environmental accounting measured by the index of environmental disclosure constructed using a content analysis; eight themes of the Global Reporting Initiatives (GRI). The study employed panel feasible generalized least square regression technique for data analyses. The outcomes revealed that environmental disclosure influence earning per share as well as share price positively and significantly. Hence, this study found robust proof which suggests that environmental disclosure significantly influence market value of listed nonfinancial firms in Nigeria.

Okafor et al. (2022) ascertained the determinants of environmental disclosure of quoted Oil and Gas firms in Nigeria for a period of thirteen (13) years spanning from 2008 to 2020. Panel data were used in this study, which were obtained from the annual reports and accounts of eleven (11) sampled quoted Oil and Gas firms for the periods 2008-2020. Ex-Post Facto research design was employed. Inferential statistics using Pearson correlation coefficient, Multicollinearity test, Panel Least Square (PLS) regression analysis and Hausman test were applied to test the hypotheses of the study. The results of the tested hypotheses revealed that there is a significant and positive relationship between Leverage and Effluent Disposal of quoted Oil and Gas firms in Nigeria at 5% level of significance there is a significant but negative relationship between Firm Size and Effluent Disposal of quoted Oil and Gas firms in Nigeria at 5% level of significance there is a significant and positive relationship between Audit Committee Size and Effluent Disposal of quoted Oil and Gas firms in Nigeria at 5% level of significance.

Nkanga et al. (2023) examined the effect of voluntary disclosures on firms' value taking samples from deposit money banks listed on the floor of the Nigeria Exchange Group from 2012-2021. The research design adopted for this study was ex post facto, purposive sampling technique was employed and secondary source of data used was obtained from the studied companies' annual report and Nigeria Exchange Group fact book. Dummy Least Square Variable regression was adopted to analyze the data. The findings of the study revealed that social donation and gifting disclosure has a positive significant effect on the market value of deposit money banks while employee health and safety disclosure has an no significant negative effect on market value of listed deposit money banks in Nigeria.

### 3.0 Methods

This study adopted ex-post facto research design as data used were historical. The population of this study consisted of 10 listed food and beverage firms in Nigeria. This study adopted the ordinary least squares regression for the analysis. Content analysis was used in deriving the data for effluent disclosures through the instrumentation of a disclosure checklist. This checklist was developed based on Global Reporting Initiatives disclosure guidelines and theoretical developments by previous researchers. The disclosure checklist consisted of 6 disclosure items capturing effluent disclosure practices. Each reporting item on the checklist was assigned a value of '1' if disclosed and '0' if the item was assumed relevant but not disclosed. The disclosure index for the disclosure parameter was the ratio of actual disclosure to the expected disclosure. This is given thus;

$$\text{The disclosure index} = \frac{\text{Aggregate actual disclosure score}}{\text{Total Expected disclosure}} \times 100$$

#### Model specification

In line with the previous researches, the researcher adapted and modified the Model of Oshiole et al. (2024) in determining the effect of effluent disclosure on market value. This is given below:

$$\text{Market value} = f(\text{Effluent disclosure}) \tag{1}$$

$$\text{MCAP}_{it} = \alpha_0 + \beta_1 \text{EFLD}_{it} + \mu_{it} \dots\dots\dots \tag{2}$$

$$\text{EPS}_{it} = \alpha_0 + \beta_1 \text{EFLD}_{it} + \mu_{it} \dots\dots\dots \tag{3}$$

Where:

MCAP = Market capitalization

EPS = Earnings per share

EFLD = Effluent disclosure

$\mu$	=	Constant
$\beta_1$	=	Coefficients of the regression
$e$	=	Stochastic disturbance
$i$	=	$i^{\text{th}}$ firm
$t$	=	time period

### Operationalization of variables

The variables used in this study are measured as presented in the table below;

**Table 3.1: Operationalization of Variables**

S/N	Variable	Measurement	Source	Apriori sign
1	Market capitalization (Dependent variable)	Log of Current share price x number of outstanding shares	Agweda et al. (2024)	
2	EPS	Ratio of Profit after tax to number of ordinary shares outstanding	Onyebuenyi and Ofoegbu (2022) e	+
3	Effluent disclosures	A dummy variable of “1” where firms disclose information related to Effluent disclosure and “0” if otherwise	Akpan and Nkanta (2023)	+

Source: Author’s operationalization (2026)

## 4.2 Data analysis and discussion

### 4.2.1 Descriptive statistics

**Table 4.1:** Descriptive statistics of the effect of effluent disclosures on the market value of listed food and beverage firms in Nigeria.

	EFFD	MCAP	EPS
Mean	0.423	4.524	0.478
Median	0.412	4.622	0.452
Maximum	0.855	8.100	0.700
Minimum	0.100	2.220	0.200
Std. Dev.	0.152	1.632	0.146
Skewness	0.842	0.615	0.534
Kurtosis	3.112	3.845	2.660
Jarque-Bera	5.939	7.257	3.376
Probability	0.051	0.027	0.185
Observations	100	100	100

Source; Researcher’s computation (2026)

Table 4.1 presents the descriptive statistics for effluent disclosure (EFLD), market capitalization (MCAP), and earnings per share (EPS) of listed food and beverage firms in Nigeria over the study period. The **mean value of effluent disclosure (EFLD) is 0.423**, indicating that, on average, firms disclose about **42.3% of expected effluent-related information**, suggesting a moderate level of compliance with environmental reporting standards. The minimum and

maximum values of 0.100 and 0.855 respectively reveal substantial variation in disclosure practices, indicating that while some firms disclose very little effluent information, others provide relatively extensive disclosures. The standard deviation of 0.152 further confirms moderate variability in disclosure levels across firms. For **market capitalization (MCAP)**, the mean value of 4.524 indicates the average market value of the sampled firms. The wide range between the minimum (2.220) and maximum (8.100) values reflects significant differences in firm sizes within the sector. The standard deviation of 1.632 indicates considerable dispersion in market capitalization, suggesting that firms vary widely in their market valuation. Regarding **earnings per share (EPS)**, the mean value of 0.478 indicates the average earnings attributable to each share of the firms during the period. The minimum and maximum values of 0.200 and 0.700 respectively, indicate variability in profitability levels across firms. The standard deviation of 0.146 shows moderate dispersion in EPS, implying that while some firms are more profitable than others, the variation is not excessively large. The **skewness statistics** show that all variables are positively skewed (EFLD = 0.842, MCAP = 0.615, EPS = 0.534), indicating that the distributions have longer right tails. This suggests that a few firms have relatively higher values compared to the majority. The **kurtosis values** (EFLD = 3.112, MCAP = 3.845, EPS = 2.660) indicate that EFLD and MCAP are slightly leptokurtic (more peaked than a normal distribution), while EPS is slightly platykurtic (flatter than normal), implying moderate deviations from normality.

### 4.3 Test of hypotheses

**Table 4.1: Data analysis for hypothesis one**

Dependent Variable: Market capitalization  
 Method: Least Squares  
 Date: 3/13/26 Time: 17:06  
 Sample: 2015-2024  
 Included observations: 100

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.67292	0.32901	-1.290	0.2312
EFLD	0.18278	0.49202	3.2390	0.0282
R-squared	0.067389	Mean dependent var		0.382910
Adjusted R-squared	0.053289	S.D. dependent var		0.328922
S.E. of regression	0.321892	Akaike info criterion		0.682901
Sum squared resid	5.339900	Schwarz criterion		0.874892
Log likelihood	-18.02973	Hannan-Quinn criter.		0.728303
F-statistic	3.726920	Durbin-Watson stat		0.738119
Prob(F-statistic)	0.000920			

**Source: Researcher's Computation (2026)**

Table 4.2 above shows the regression results of the effect of effluent disclosure on market capitalization of listed food and beverage companies in Nigeria. The result of the analysis shows  $R^2$  value of 0.067, which simply implies that 6.7% of the total variation in market capitalization is explained by effluent disclosure. It has a coefficient of 0.183, which implies that one percent increase in effluent disclosure will lead to 18% increase in market capitalization of listed food and beverage companies in Nigeria.

### Hypothesis one

**H<sub>01</sub>:** Effluent disclosure has no significant effect on market capitalization of listed food and beverage companies in Nigeria.

The regression result in table 4.2 shows that effluent disclosure (coef. 0.182 P-value 0.028) has significant effect on market capitalization. Since the probability value of (0.028) is less than 0.05, the null hypothesis was rejected and this implies that effluent disclosure has significant effect on market capitalization of listed food and beverage companies in Nigeria.

**Table 4.2 Data analysis for hypothesis two**

Dependent Variable: EPS

Method: Least Squares

Date: 3/13/26 Time: 17:06

Sample: 2015 2024

Included observations: 100

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.62392	2.29018	-1.626	0.107
EFLD	0.139482	0.32938	0.566	0.573
R-squared	0.120198	Mean dependent var	1.402920	
Adjusted R-squared	0.110238	S.D. dependent var	1.281901	
S.E. of regression	1.492820	Akaike info criterion	3.192028	
Sum squared resid	12.83022	Schwarz criterion	3.373201	
Log likelihood	82.82739	Hannan-Quinn criter.	3.292012	
F-statistic	6.726199	Durbin-Watson stat	0.463839	
Prob(F-statistic)	0.029308			

**Source: Researcher’s Computation (2026)**

The table 4.2 above shows the impact of effluent disclosure on earnings per share of listed food and beverage companies in Nigeria. The result shows that R<sup>2</sup> has the value of 0.120 which implies that 12.0 percent variation in EPS is explained effluent disclosure. The coefficient of 0.139 implies that one percent change in effluent disclosure will lead to 14% change in the EPS of listed food and beverage companies in Nigeria.

**Hypothesis two**

**H<sub>02</sub>:** Effluent disclosure has no significant effect on earnings per share of listed food and beverage companies in Nigeria.

The regression result in table 4.3 shows that effluent disclosure (Coef. 0.139; P-value 0.573) has no significant effect on earnings per share. Since the probability value of (0.573) is greater than 0.05, the null hypothesis was accepted and this implies that effluent disclosure has no significant effect on earnings per share of listed food and beverage companies in Nigeria.

**4.4 Discussion of findings**

The empirical finding that effluent disclosure exerts a positive and statistically significant effect on market capitalization ( $\beta = 0.182$ ;  $p = 0.028$ ) implies that that environmental transparency is value-relevant within the Nigerian food and beverage sector. This indicates that investors attach a premium to firms that disclose information on effluent management, perceiving such disclosures as signals of environmental responsibility and reduced regulatory risk. This result aligns with the propositions of signaling theory and legitimacy theory, which emphasize that voluntary environmental disclosures enhance firm reputation and reduce information asymmetry, thereby

improving market valuation. Empirically, this finding is consistent with Agweda (2024), who reported a positive and significant relationship between effluent disclosure and market value added of listed industrial goods firms in Nigeria. Similarly, Iyoha and Igbinovia (2023) found that effluent and waste disclosures significantly improve firm value among agro-manufacturing firms, reinforcing the argument that environmental information disclosure enhances investor confidence. In addition, Khuong et al. (2022) documented that corporate disclosure positively influences firm value, particularly in contexts where environmental concerns are increasingly salient. However, the result contrasts with Oshiole et al. (2024), who found a positive but insignificant effect of effluent disclosure on market value, suggesting that the value relevance of such disclosures may depend on firm-specific or sectoral dynamics. Overall, the finding underscores that effluent disclosure constitutes a strategic mechanism through which firms enhance market capitalization by signaling environmental accountability and strengthening stakeholder confidence.

In the contrast, effluence disclosure has no significant effect on earnings per share of listed food and beverage companies in Nigeria ( $\beta = 0.139$ ;  $p = 0.573$ ). This implies that environmental disclosure does not materially influence short-term accounting performance of listed firms. Although the positive coefficient suggests a potential beneficial relationship, the lack of statistical significance implies that such effects are weak and not reliably different from zero. Empirically, this result corroborates the findings of Oshiole et al. (2024), who reported an insignificant relationship between effluent disclosure and market value, indicating that environmental disclosures may not always translate into measurable financial outcomes. Furthermore, Meiryani (2024) observed that the level of effluent-related disclosure among firms is generally low and often non-compliant with established standards, which may limit its impact on financial performance. The finding also resonates with Nkanga et al. (2023), who documented that certain disclosure components exert insignificant effects on firm value, highlighting the heterogeneous nature of disclosure-performance relationships. However, this result contrasts with Olagunju and Ajiboye (2022), who found that environmental disclosure significantly influences earnings per share, suggesting that the impact of such disclosures may vary depending on measurement approach and sectoral context.

## 5.0 Conclusion and recommendations

This study examined the effect of effluent disclosure on the market value of listed food and beverage companies in Nigeria, and the findings provide important insights into the value relevance of environmental reporting. Based on the findings of this study, it was concluded that effluent disclosure is more relevant for market-based performance than accounting-based measures. Consequently, it was recommended that firms should enhance the quality, consistency, and credibility of their effluent disclosure practices in line with global reporting standards to attract investors and improve valuation. Regulatory authorities should also strengthen environmental reporting frameworks and enforcement mechanisms to ensure compliance and comparability across firms. Furthermore, investors are encouraged to incorporate environmental disclosure information into their valuation decisions.

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