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FIRM SIZE, FIRM GROWTH AND ENVIRONMENTAL REPORTING OF LISTED CONSUMER GOODS FIRM IN NIGERIA

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ABSTRACT

The global emphasis on corporate sustainability and transparency has prompted an investigation on the relationship between environmental reporting, business growth, and size in Nigerian listed consumer products companies. Therefore the study examined firm size and firm growth on environmental reporting of listed consumer goods firm in Nigeria covering the period of fourteen (14) year 2010-2023. The study adopted ex-post facto research design and secondary data was used for analysis which was obtained from Nigerian Exchange Group. Panel regression analysis technique was used to analyse the research data. The result revealed that firm size and firm growth has a negative and significant effect on environmental reporting index of consumer goods firm in Nigeria. The study therefore concludes that firm size and firm growth has insignificant influence on environmental reporting of consumer goods firm in Nigeria. The study recommend that management of consumer goods firm should not increase firm size of firm because it does not enhance the environmental reporting of consumer goods firms in Nigeria

Keywords: Firm size, Firm Growth, Environmental Reporting, Stakeholder, Consumer Goods Firm

INTRODUCTION

Investors and consumers alike are increasingly turning their attention toward environmental issues. Customers are more and more choosing products based on a brand's sustainability commitment (Chukwu *et al.*, 2017). Similarly, investors are looking to put their money into businesses that have excellent environmental policies because they understand the financial risks connected to environmental difficulties (Eccles *et al.*, 2012). Transparent reporting by businesses is imperative in light of this trend toward environmental concern, especially for those in delicate industries. Nigeria's consumer products industry is essential to the country's economy. Due to the large population base these enterprises serve, their environmental impact is substantial. They manufacture common goods. It is important to comprehend their environmental reporting procedures for a number of reasons. In the first place, it clarifies the driving forces behind these businesses' decision to give environmental disclosures top priority. Second, it aids in establishing expectations among stakeholders for the degree of environmental

transparency they should expect (Al-Shammari *et al.*, 2015). Lastly, it offers insightful information to legislators who wish to promote more environmentally friendly corporate operations in the Nigerian consumer products industry (Waddock & Graves, 2015). Company size and company growth are the two main firm-specific characteristics that are the subject of this study and can have an impact on environmental reporting methods. According to Chapple *et al.* (2011), there is a broad expectation that larger corporations will report on the environment more thoroughly due to their more extensive resources and public scrutiny. Their financial resources may enable them to fund specialized sustainable teams and systems for environmental management, resulting in environmental disclosures that are more thorough (Aerts *et al.*, 2014). Furthermore, it's possible that stakeholders who care about the environment, such investors and customers, will put more pressure on larger businesses to be more transparent about environmental concerns (Neu *et al.*, 2011).Businesses that are expanding quickly might put more emphasis on expansion plans and core operations than on reporting on environmental issues (Al-Shammari *et al.*, 2015). There is, however, a more complex viewpoint. To draw in environmentally sensitive investors and ensure long-term success, high-growth businesses might also feel compelled to exhibit their dedication to sustainability (Waddock & Graves, 2015). This can be especially crucial in a cutthroat, worldwide marketplace where environmental consciousness is becoming more and more recognized as a sign of sound company governance. This study attempts to further our understanding of how these variables affect the degree of environmental transparency in the Nigerian consumer products industry by examining the relationship between business size, firm growth, and environmental reporting methods.

H_{01}: Firm size has no significant effect on environmental reporting index of listed consumer goods company in Nigeria.
H_{02}: Firm growth has no significant or notable effect on environmental reporting index of listed consumer goods company in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Firm size

One of the most important components of a company's profile is its firm size, which indicates the size and scope of its activities in the market. Usually, several metrics are used to evaluate it, including total assets, market capitalization, and revenue (Jones et al., 2017). Greater market strength, wider market presence, and an abundance of resources are characteristics of larger companies as compared to their smaller counterparts. Large companies benefit greatly from these characteristics in terms of their capacity to implement and invest in environmental policies and reporting procedures. Large companies typically have superior access to resources, such as financial capital, technological capabilities, and human capital (Darnall et al., 2008). With so many resources at their disposal, they can carry out more extensive environmental projects, like implementing pollution control strategies, adopting eco-friendly technologies, and setting up strong environmental management systems. Furthermore, big businesses frequently have specialized teams or departments dedicated to sustainability that are in charge of managing environmental reporting guidelines and projects. Furthermore, large organizations are better able to create and implement comprehensive environmental

reporting policies due to their greater knowledge and expertise. Environmental specialists, sustainability experts, and compliance officers all of whom are capable of efficiently managing and reporting on environmental performance metrics are among the varied skill pools that large firms usually have access to. Large companies also have a lot of power and influence in their marketplaces, which gives them the capacity to shape industry standards and conventions around environmental sustainability.

Firm Growth

Firm growth is the rate and degree to which a business expands its operations and market presence; it is typically measured by metrics such as revenue growth or market share increase (Zhu *et al.*, 2020). Growing businesses, realizing the importance of adapting to changing investor demands, consumer preferences, and regulatory landscapes, frequently prioritize environmental sustainability as a key element of their growth strategy (López & García, 2019). This prioritization is due to a number of factors: first, adjusting to changing consumer preferences toward environmentally conscious practices allows businesses to cultivate brand loyalty and improve their reputation among environmentally conscious consumers; secondly, by incorporating environmental considerations into their business operations, businesses can attract and retain customers. Furthermore, proactive compliance with environmental standards guarantees legal conformity, protecting businesses from potential penalties while also assisting in the mitigation of regulatory risks. Finally, implementing sustainability measures can result in cost savings and operational improvements, which will increase the business's long-term profitability and competitiveness. As a result, businesses that incorporate environmental sustainability into their growth plan strengthen their resilience and competitiveness in the market while simultaneously making a positive impact on the environment.

Environmental Reporting

According to Cormier and Gordon (2001), environmental reporting is the open dissemination of an organization's environmental policies, activities, performance indicators, and compliance with environmental laws. It gives businesses a way to show stakeholders how committed they are to environmental sustainability and responsibility. A variety of formats are available for environmental reporting, such as sustainability reports, yearly reports, and corporate social responsibility (CSR) disclosures. Stakeholders such as investors, clients, staff, and government agencies can learn more about the company's environmental performance and policies via these reports. Transparency, accuracy, and consistency in the disclosure of environmental performance metrics are essential components of environmental reporting (Patten, 2002). Transparency guarantees that stakeholders may easily obtain information about the company's environmental effect, objectives, and strategy. Environmental reporting is essential for increasing stakeholder participation, strengthening corporate accountability, and building credibility. Companies may reduce the risk of environmental liabilities, strengthen their relationships with stakeholders, and stand out as socially conscious businesses in the marketplace by being open and honest about their environmental policies.

Environmental Reporting Index

According to Grey *et al.* (1995), consumer products companies can assess the extent and caliber of their environmental reporting processes using the environmental reporting index, which is a complete indicator. The purpose of this index is to give stakeholders

uniform frameworks for evaluating how much information businesses reveal about their environmental performance and policies. It essentially provides a comprehensive overview of a business's environmental reporting initiatives. The environmental reporting index consists of a number of variables that when taken as a whole evaluate how thorough, transparent, and compliant environmental disclosures are (Patten, 2002). The index first assesses the comprehensiveness of environmental disclosures by examining the volume and range of data that businesses disclose about their environmental efforts, strategies, and performance measures. This contains information on sustainability objectives, environmental management systems, and the status of reaching environmental targets.

Managerial Ownership

Managerial Ownership ordinarily represents the proportion of shares owned by the firm's directors to total number of shares issued. Warfield et al (1995) posited that corporations exhibit a myriad of manager- ownership structure extending from owner manager holding the vast majority of equity shares to professional managers whose ownership share is negligible. The separation of ownership and control begets questions of managers' incentives to take action in the best interest of owners. The extent of proportion of share held by management may affect control over the firms' decision (Jensen & Meckling, 1976). Managerial ownership refers to an ownership fraction or stake in a firm that is held by managers. Managerial ownership is not only meant to increase the equity of the organization but also to serve as incentives to managers to align managers' interests with those of the interests of the organization.

Emperical Review

Ibrahim *et al.* (2022) examined the impact of corporate social responsibility (CSR) programs and stakeholder demands. Their study examined information from CSR disclosures, sustainability reports, and annual reports to gauge how much information listed companies disclosed about their environmental practices. The study looked at how legislative requirements, CSR initiatives, and stakeholder demands affected environmental reporting procedures using a mixed-methods methodology. The results underscored the significance of stakeholder engagement and corporate social responsibility (CSR) initiatives in advancing transparency and accountability in the consumer goods sector, as they showed that companies subject to increased regulatory scrutiny and stakeholder pressure were more likely to report on the environment in detail.

Ogundipe and Ogundipe (2021) looked into how firm-specific characteristics affected environmental reporting procedures in the consumer goods sector of Nigeria. Their study examined the association between characteristics such business size, firm age, and environmental disclosure using data from listed companies' annual reports and sustainability reports. The researchers looked at factors impacting the quantity and caliber of disclosure while examining the determinants of environmental reporting using regression analysis. The findings suggested that larger businesses often exhibited more comprehensive reporting methods since there was a positive correlation between firm size and environmental reporting. The study also discovered that the age of the organization had a favorable impact on environmental reporting, meaning that older businesses were more likely to prioritize sustainability projects and use transparent reporting procedures.

Olawale and Adegboye (2021) looked into the factors influencing Nigerian consumer goods businesses' environmental reporting policies. To evaluate the volume and caliber of environmental disclosures, their research examined information from corporate websites, sustainability reports, and annual reports. The researchers used regression analysis to look at how firm-specific factors, such as profitability, growth, and size, affected environmental reporting. The findings showed that there is a positive correlation between firm size and environmental reporting, with larger businesses showing higher disclosure levels. The study also discovered a strong correlation between environmental reporting and profitability, indicating that profitable businesses were more willing to fund transparency and sustainability programs.

Onugu and Musa (2020) examined how Nigerian consumer products companies reported on their environmental impact, paying particular attention to the role that corporate governance processes played. Their study examined information from corporate governance disclosures, sustainability reports, and annual reports to gauge how much information listed firms disclosed about their environmental practices. The presence of environmental reporting components and the efficiency of corporate governance systems in fostering accountability and transparency were both investigated in this study using qualitative content analysis. Results showed that businesses with more robust corporate governance systems also tended to report on the environment more thoroughly, underscoring the importance of stakeholder involvement and board supervision in promoting sustainability measures. This study didn't make use of some of the variables such as firm growth.

Adebayo *et al.* (2020) examined how consumer products companies listed on the Nigerian Stock Exchange (NSE) reported on environmental issues. Using a mixed-methods approach, the study combined qualitative content analysis of sustainability reports with quantitative analysis of financial data. The study investigated the elements such as stakeholder pressure, industry competition, and regulatory compliance that affect decisions about environmental reporting. Although the majority of businesses agreed that environmental sustainability was important, the degree of transparency differed greatly between them, according to the findings. The study emphasized the necessity of industry and governmental actions to support uniform environmental reporting standards and improve openness in the consumer goods industry. This study requires that a research be carried out to test the extent of transparency that has been achieved in recent times.

Akinlo *et al.* (2019) looked at how consumer products companies listed on the Nigerian Stock Exchange (NSE) reported on the environment. Their study concentrated on the factors that influence environmental disclosure, such as industry and firm-specific traits. The study utilized regression analysis to examine the effects of industry competitiveness, firm size, profitability, and sustainability on environmental reporting using a sample of annual reports and sustainability reports. The results showed a positive correlation between the size of the company and the level of environmental disclosure, with bigger businesses displaying more open reporting procedures. The study also discovered a positive correlation between industry competitiveness and environmental reporting; indicating that businesses in competitive marketplaces were more likely to prioritize sustainability programs and reveals environmental performance measures. The period covered in this study needs to be updated by current research.

Osemeke and Zakari (2018) investigated the connection between corporate attributes and environmental reporting procedures. They examined data from listed firms' annual reports and sustainability reports with a focus on the consumer products industry. The researchers investigated the effects of variables like industry competition, firm size, and profitability on the volume and caliber of environmental disclosures using regression analysis. The findings suggested that larger businesses tended to engage in more thorough reporting processes since there was a positive correlation between firm size and environmental reporting. The study also discovered a strong link between profitability and environmental reporting, emphasizing how financial performance influences disclosure policies and sustainability measures. This study does not apply factor in consumer goods company.

Adegbite *et al.* (2016) carried out research on Nigerian listed firms' environmental reporting methods. Their study looked into the quantity and caliber of environmental disclosures made by businesses across a range of industries, including consumer goods. In order to evaluate the existence and comprehensiveness of environmental reporting components in the selected annual reports, the study used content analysis. The results showed that, although several businesses showed a strong dedication to environmental sustainability by means of thorough reporting, there was a significant degree of heterogeneity in the degree of transparency across these businesses. The study proposed that industry features, corporate governance frameworks, and legislative frameworks affected Nigerian consumer goods businesses' environmental reporting methods.

Theoretical Framework

Legitimacy Theory

According to this theory, businesses aim to follow societal norms and expectations in order to remain legitimate and function within the social structure (Suchman, 1999). Global concern about environmental issues is expanding, and social norms around business environmental responsibility are changing. Companies may show stakeholders that they are committed to sustainability and establish credibility in the eyes of environmentalists by participating in thorough environmental reporting. Gaining access to resources, holding onto market share, and luring investment may all depend on this.

Resource Dependency Theory:

According to Pfeffer and Salancik (1978), this theory highlights the significance of resources for the survival and success of organizations. Listed consumer products firms depend on a range of resources, such as raw materials, labor, and financial capital. Possible hazards to resource acquisition include environmental legislation, resource scarcity, and climate change. Detailed environmental reporting is a tactical instrument for risk management. Companies may be able to acquire eco-friendly resources, lower regulatory risks, and enhance their brand's reputation by exhibiting proactive environmental management, all of which can support the long-term success of their businesses.

Stakeholder Theory

According to this idea, businesses must take into account the interests of all parties involved, including the environment (Freeman, 1984). Listed consumer products firms work with a wide range of stakeholders in a complex ecosystem, including regulators,

investors, consumers, and environmental non-governmental organizations. Regarding environmental effect, these stakeholders have higher expectations than ever for accountability and transparency. Companies can address stakeholder concerns and demonstrate their environmental stewardship by using environmental reporting as a strategy (Deegan & Rankin, 2016).

METHODOLOGY

This study adopted the ex post facto research design and secondary data for the study. Population of the study consists of twenty one (21) listed consumer goods firms operating on the Nigeria, Nigeria Exchange Group (NGX) as at 31st May 2024. The sample size is fifteen (15) and Judgemental sampling techniques was adopted. Data required for this study were obtained from audited financial statements and annual reports of the listed consumer goods firms in Nigeria 10 years (2010-2023). The inferential analyses also involve the application of the appropriate statistical technique of Panel Regression Analysis. The study adapting the model of Antara *et al.* (2020)

The Panel regression model

$$ERI = \beta_0 + \beta_1 FS_{it} + \beta_2 FG_{it} + \beta_3 MO_{it} + \epsilon_{it} \quad \text{..... (1)}$$

Where:

β_0	=	The autonomous parameter estimate (Intercept or constant term)
$\beta_1 - \beta_3$	=	Parameter coefficient of Firm Specific Attribute
ER	=	Environmental Reporting Index
FS	=	Firm Size
FG	=	Firm Growth
MO	=	Managerial Ownership
ϵ_{it}	=	Stochastic Error term

Study Variables and their Measurement

Variable Acronym	Variable Name	Variable types	Measurement	Source
ERI	Environmental Reporting Index	Dependent	GRI 300 (Actual environmental disclosure/Expected environmental disclosure)	Global Reporting Initiative (2021)
FS	Firm Size	Independent	Natural log of company Total Assets	Abdusalam & Babangida (2020)
FG	Firm Growth	Independent	Current sale minus previous sale	Antara *et al.* (2020)
MO	Managerial Ownership	Control	The proportion of shares owned by the firm's directors to total number of shares issued.	Adebayo *et al.* (2020)

Source: Author's Compilation, (2024)

RESULT AND DISCUSSION

Descriptive Statistics

Descriptive statistics gives a presentation of the mean, maximum and minimum values of variables applied together with their standard deviations obtainable.

Table 4.1: Descriptive Statistics Result

	ERI	FS	FG	MO
Mean	0.380433	7.324143	0.703905	0.031714
Median	0.333000	7.700000	0.650000	0.030000
Maximum	0.916667	8.680000	1.990000	0.090000
Minimum	0.083333	5.020000	0.030000	0.010000
Std. Dev.	0.196000	0.963400	0.516835	0.021183
Skewness	0.891445	-1.001523	0.805228	0.961026
Kurtosis	2.828932	2.872542	2.730200	3.111699
Jarque-Bera	28.06968	35.24882	23.33065	32.43415
Probability	0.000001	0.000000	0.000009	0.000000
Sum	79.89100	1538.070	147.8200	6.660000
Sum Sq. Dev.	8.028975	193.9813	55.82780	0.093783
Observations	210	210	210	210

Source: E-View 12 Output, (2024)

Table 4.1 presents the descriptive statistics effect of firm size and firm growth on environmental reporting of listed consumer goods firms in Nigeria during the period of 2010 to 2023. The table shows that environmental reporting index (ERI) as a measure of environmental reporting has a mean of 0.3843, with a standard deviation of 0.196000 as well as a minimum value of 0.08333 and maximum value of 0.91666 respectively. Given that the range between the minimum and maximum is not quite wide, it implies a stable environmental disclosure as the standard deviation indicated that there is no much slightly wide dispersion of the data from the mean value. For the other measure of firm size and firm growth shows a mean of value of 7.32414 and 0.70390 with standard deviation of 0.96340, 0.51683 and a minimum and maximum value of 5.02000, 0.03000, 8.680000 and 1.99000 respectively. This implies firm size and firm growth witnessed a marginal increase during the study period, as the standard deviation is not so large compared to the mean, together with the low range between the minimum and maximum values. Managerial ownership as control variable has a mean of 0.031714 with minimum value of 0.01000 and maximum value of 0.09000.

Table 4.2: Correlation Matrix

The correlation matrix table presents correlation relationship between dependent and independent variables and the correlation among the independent variables themselves.

Covariance Analysis: Ordinary
Date: 05/31/24 Time: 20:54
Sample: 2010 2023
Included observations: 210

Correlation Probability	ERI	FS	FG	MO
ERI	1.000000			
	—			
FS	-0.043894	1.000000		
	0.5270	-----		
FG	0.275616	-0.075212	1.000000	
	0.0001	0.2779	—	
MO	0.105489	0.013835	0.190980	1.000000
	0.1276	0.8420	0.0055	-----

Source: E-View 12 Output, (2024)

In table 4.2 correlation analysis, which is used to quantify the association between two continuous variables. In correlation analysis, we estimate a sample correlation coefficient, more specifically the Pearson Product Moment correlation coefficient. The result presented above confirms that firm size and firm growth has a negative and positive correlation which are -0.04389 and 0.275616 with environmental reporting index while managerial ownership as control variable has a positive correlation with environmental reporting at value of 0.105489.

Multicollinearity Test (VIF)

The Multicollinearity test was carried out to check if there is strong correlation among the independent variables that may produce misleading result.

Table 4.3: Multicollinearity Test (VIF)

Variance Inflation Factors
Date: 05/31/24 Time: 20:57
Sample: 2010 2023
Included observations: 210

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.010923	63.93421	NA
FS	0.000186	59.45825	1.006524
FG	0.000671	2.991014	1.044426
MO	0.397375	3.378106	1.038716

Source: E-View 12 Output (2024)

*Decision rule: Centred VIF of less than 10 is an indication of absence of multi-collinearity, while the centred VIF of more than 10 is an indication of presence of multi-collinearity. As stated above, the decision rule for the multicollinearity test using the variance inflation factor is that Centred VIF of less than 10 shows the absence of multi-collinearity, while the centred VIF of more than 10 is an indication of presence of multi-collinearity. Table above clearly shows that there is absence of multicollinearity among the independent variables, given that all the independent variable (FS, FG and MO) have a center VIF that is less than 10.

Heteroskedasticity Test

In order to validate the robustness of the estimates, the Heteroskedasticity test was conducted as a diagnostic check. Heteroskedasticity happens when the standard errors of a variable, monitored over a specific amount of time, are non-constant.

Table 4.4: Heteroskedasticity Test

Panel Cross-section Heteroskedasticity LR Test
Null hypothesis: Residuals are homoscedastic
Equation: UNTITLED
Specification: ERI C FS FG MO

	Value	df	Probability
Likelihood ratio	80.36680	15	0.0000

LR test summary:

	Value	df
Restricted LogL	53.44374	206
Unrestricted LogL	93.62714	206

Source: E-View 12 Output, (2024).

Table 4.4 shows the results of the panel cross-section Heteroskedasticity regression test. The decision rule for the panel cross-section Heteroskedasticity test is stated thus:
*Decision Rule: At 5% level of Significance

H_0: No conditional Heteroskedasticity (Residuals are homoskedastic)

H_1: There is conditional Heteroskedasticity

The null hypothesis of the test states that there is no Heteroskedasticity, while the alternate hypothesis states that there is Heteroskedasticity. The null hypothesis is to be accepted if the P value is greater than 5% level of significance. From the result in table 4.4 above with a ratio value of 80.36680 and a corresponding probability value of 0.0000 which is less than 5%, the study therefore posits that, there is reason to reject the null hypothesis, while the alternative hypothesis that states there is conditional Heteroskedasticity problem is accepted. Consequently, based on the diagnostic probability 0.0000 the null hypothesis is rejected, thus there is conditional heteroskedasticity, indicating that residuals are not homoskedastic and as such the samples does not give a true reflection of the population. This is corrected by logging dependent variable as independent variable to correct the present of heteroscedasticity

Hausman Test

The Hausman test is a test for model specification in panel data analysis and this test is employed to choose between fixed effects model and the random effects model. Due to the panel nature of the data set utilized in this study, both fixed effect and random effect regressions were run. Hausman specification test was then conducted to choose the preferred model between the fixed effect and the random effect regression models. The test basically checked if the error terms were correlated with the regressors. Thus, the decision rule for the Hausman specification test is stated thus; at 5% Level of significance.

Table 4.5: Hausman Test

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	4.522138	3	0.2103

Source: E-View 12 Output, (2024)

The Result of Hausman test shows that chi-square statistics value is 4.52213 while the probability values of it is 0.2103. This implies that there is enough evidence to accept the null hypothesis which states that random effect is most appropriate for the Panel Regression analysis. It thus stands that error component model (Fixed effect) estimator is not most appropriate because the fixed effects are not well correlated with the regressors. Thus, the most consistent and efficient estimation for the study is the random effect cross-sectional model. Consequently, the result suggests that the random effect regression model is most appropriate for the sampled data because the Hausman test statistics as represented by corresponding probability value is greater than 5%.

Langranger Multiplier Test

The langranger multiplier test is a test for model specification in panel data analysis and this test is employed to choose between pooled effect model and the random effects model.

Table 4.6: Breusch-Pagan Langranger Multiplier Tests

Residual Cross-Section Dependence Test
Null hypothesis: No cross-section dependence (correlation) in residuals
Equation: Untitled
Periods included: 14
Cross-sections included: 15
Total panel observations: 210
Note: non-zero cross-section means detected in data
Cross-section means were removed during computation of correlations

Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	118.2367	105	0.0001

Source: E-View 12 Output, (2024)

***Decision Rule: At 5% level of Significance, if probability value is less than 5% we accepted random but greater than 5% is pooled will be accepted**

H_0: Pooled Effect is more appropriate

H_1: Random Effect is more appropriate

Based on the probability value of the Breusch-Pagan Langranger Multiplier Test at 0.0001, the null hypothesis is rejected, thus random effect is most appropriate when compared to pooled effect.

Table 4.7: Panel Regression Result (Random Effect)

Dependent Variable: ERI
Method: Panel EGLS (Cross-section random effects)
Date: 05/31/24 Time: 21:08
Sample: 2010 2023
Periods included: 14
Cross-sections included: 15
Total panel (balanced) observations: 210
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.748210	0.035300	21.19561	0.0000
FS	0.004531	0.004528	1.000756	0.3181
FG	0.001414	0.007712	0.183327	0.8547
MO	0.002987	0.174980	0.017069	0.9864
LOGERI	0.367586	0.007476	49.17160	0.0000

Effects Specification		
	S.D.	Rho
Cross-section random	0.022407	0.1783
Idiosyncratic random	0.048095	0.8217

Weighted Statistics			
R-squared	0.925630	Mean dependent var	0.189301
Adjusted R-squared	0.924179	S.D. dependent var	0.173745
S.E. of regression	0.047842	Sum squared resid	0.469210
F-statistic	637.8752	Durbin-Watson stat	1.531417
Prob(F-statistic)	0.000000		

Source: E-View 12 Output, (2024)

This study examined effect of firm size and firm growth on environmental reporting of listed consumer goods firms in Nigeria. From table 4.7 above, the coefficient of multiple determinations (R^2) is 0.92 and in line with the panel nature of the data used in this study, the regression model shows that the range of values between adjusted R^2 and R^2 falls between 92%, and 92% respectively. This indicates that about 92% of the total variations in environmental reporting index (ERI) is explained by the variations in the

independent variables (FS, FG and MO), while the remaining 8% of the variation in the model is captured by the error term, which further indicates that the line of best fit is highly fitted. The panel regression result for the sampled consumer goods firm showed that there is a positive and insignificant relationship between firm size, firm growth and environmental reporting index with a corresponding negative probability value of 0.3181 and 0.8547 which is greater than 5%. However, when taken collectively, the regressors (OC and BGD) against the regressed (ER), the value of F-statistic is 637.8752 and the value of the probability of F-statistic is 0.00000. This result implies that the overall regression is both positive and statistically significant at 5%.

Discussion of Findings

This study examines effect of firm size and firm growth on environmental reporting of listed consumer good firms in Nigeria. The findings of this study is on the basis of formulated hypotheses, models and analysis carried out. This study found that generally, both firm size and firm growth negative significant effect on environmental reporting index of listed consumer goods firm in Nigeria and the findings from this study are compared with that of previous studies.

Firstly, assess effect of firm size on environmental reporting of listed consumer goods firm in Nigeria revealed that a negative have significant on environmental reporting index of listed consumer goods firm in Nigeria, The findings do disagree with the findings of Ogundipe and Ogundipe (2021) looked into how firm-specific characteristics affected environmental reporting procedures in the consumer goods sector of Nigeria but agree with the work of Ohiani *et al* (2019) which find negative effect of firm size on environmental disclosure in Nigeria. Secondly, examine on effect of firm growth on environmental disclosure of listed consumer goods firm in Nigeria revealed that firm growth has a negative significant effect on environmental reporting index of listed consumer goods firm in Nigeria. The result disagrees to the findings of Olawale and Adegboye (2021) looked into the factors influencing Nigerian consumer goods businesses' environmental reporting policies.

Conclusion and Recommendations

The study was undertaken to examine effect of firm size and firm growth on environmental reporting of listed consumer good firms in Nigeria from 2010-2023 in Nigeria. The study conclude that firm size and firm growth has insignificant influence on environmental reporting of consumer goods firm in Nigeria. Based on the findings of this study and the conclusion made, the following recommendations are made to management of manufacturing firm in Nigeria:

i. Management of consumer goods firm should not increase firm size of firm because it not enhance the environmental reporting of consumer goods firms in Nigeria
ii. Management of consumer goods firms should maintain or not increase firm growth in the firm as a result is insignificant on the environmental reporting of the firm in Nigeria.

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