Innovations

Firm characteristics and environmental performance: a study of listed conglomerates in Nigeria

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Abstract
The study examined the effect of firm characteristics on the environmental performance of quoted conglomerates firms in Nigeria. Ex-post facto research design was adopted for this study. The population of the study was constituted by all the five (5) conglomerate firms listed on the Nigerian Exchange Group as from 2011 to 2020. Data were derived from the financial statements of the selected firms over the years of interest. The descriptive statistical analysis of data for this study was done using mean, correlational analysis and standard deviation while Ordinary Least Square multiple regression analysis was used at 5% level of significance. The findings revealed that firm size and firm leverage has not significantly affects waste management expenditure of quoted conglomerates firms in Nigeria It was recommended that conglomerate firms with larger firm size should be more conscious of the need for preservation and protection of the environment against damages occasioned by firm operations.
Keywords: *1. Firm characteristics 2. Waste management and Environmental performance*

Introduction

Researchers have attempted to explain the significance of corporate environmental reporting or disclosure, which, despite appearing to be outside the traditional domains of accounting disclosures, has led to an increase in environmental consciousness, as evidenced by the various concerns that firms now have about the environmental impact of their activities (Etale, Ikechukwu & Ayaundu, 2021; Atang & Eyisi, 2020). Environmental consciousness and man's potential to harm the environment while utilizing natural resources drew global attention in the nineteenth century. This environmental concern has been expressed in a number of international conferences and accords dating back to the 1960s (Lamidi, Adesola & Tariro, 2020). Concurrently, business issues affecting the natural environment were highlighted, including waste management and disposal, gas emissions, ozone layer safety, and climate change, according to Atang and Eyisi (2020).

Firm characteristics are currently an evolving task in today's company operations and activities, with firms attempting to re-structure their overall performance indicators to include environmental challenges as a relevant part of the firm's usual strategic purpose. There are, however, a number of antecedents that either inspire or demotivate a firm's environmental consciousness or duty (Lamidi, Adesola & Tariro, 2020; Ahmed & Moses, 2020; Indah & Arum, 2020; Kiswanto, Woro & Ulupui, 2020).

The study was inspired by the fact that our current era is marked by a slew of environmental issues such as climate change, global warming, natural catastrophes, pollution, and so on. Day after day, the world becomes more globalized and industrialized, with the goal of enhancing the global economy's position. Profit-making, among other things, is a core goal of businesses. Firms aggressively use natural resources in their operations, resulting in a variety of environmental issues such as resource degradation, pollution, and a slew of other environmental risks. As a result, a firm's environmental performance demonstrates how much it contributes to the global aim of environmental protection and preservation. Environmental performance reports the impacts of the firm's activities on natural environment which could be waste management, carbon management, recycling, emission control, wetland conservation, pollution, and wildlife conservation (Ahmed & Moses, 2020; Gatimbu & Wabwire, 2016).

According to existing literature, firm-intrinsic characteristics have the ability to influence the environmental disclosure of corporate entities that use the resources at their disposal to incorporate practices that help protect and maintain the environment from hazardous corporate operations (Abdulsalam & Auwal, 2020; Shaibu, 2020; Oluwamayowa, 2020). In light of the foregoing, Abdulsalam and Auwal (2020) stated that firm factors such as firm leverage, firm size, firm sales growth, firm profitability, firm industry type, and so on can impact whether or not firms in Nigeria perform exceptionally well in terms of environmental performance. Firms must not compromise the interests of future generations in order to fulfill the demands of shareholders. As a result, it is critical for Nigerian conglomerates to be aware of the environmental implications of their operational engagements in order to avoid causing significant environmental damage and dangers. Environmental protection actions, addressing inequities, poverty eradication, and conservation of sea life and life above sea level, including aquatic and terrestrial species, are among the topics mentioned under corporate environmental performance (Usman, 2019).

There have been numerous research undertaken in the past to investigate the impact of business characteristics on environmental performance. Studies like Jeroh (2020), Atang and Eyisi (2020), Lamidi, Adesola, and Tariro (2020), and others focused on industries such Nigerian manufacturing, finance, and oil and gas. There has not been a research like this nature with the conglomerates firms in Nigeria. The broad objective of the study is to examine the effect of firm characteristics on the environmental performance of quoted conglomerates firms in Nigeria. Specifically, the study examines

the effect of firm leverage and firm size on the waste management expenditure of quoted conglomerates firms in Nigeria.

Review of Related Literature

The level of environmental irresponsibility of corporations appears to be influenced by structural elements inherent in firms. According to Onyali and Okafor (2018), the research has found various potential company attributes for enterprises' different attitudes toward environmental performance. Larger companies are thought to attract more public attention, putting them under more public pressure to engage in and disclose environmental responsibilities. Expenses for community involvement, environmental protection, waste management, employee health and safety, product safety, research and development, and a variety of other environmental disclosures are all antecedents of firm characteristics such as firm size, profitability, leverage, and liquidity (Jeroh & Okoro, 2016).

Conglomerate enterprises' financial capability in respect to executing environmental sustainability actions is directly influenced by their corporate profitability. Capital providers are likewise keeping a close eye on highly leveraged companies. Participation in environmental sustainability reporting lowers the monitoring costs of enterprises with significant leverage, resulting in lower borrowing rates. It is also easier for a more solvent company to engage in environmental responsibility than it is for a less solvent company that is still dealing with liquidity concerns. The current study aims to empirically determine the factors of corporate environmental performance of conglomerates corporations that are listed on the Nigerian Stock Exchange, based on the aforementioned challenges. Firms with a very small size, unhealthy leverage and poor economic performance tend to score low in their environmental responsibleness (Usman, 2019; Onyali & Okafor, 2018). However, conglomerates firms that do not have the structural firm wherewithal for a sound environmental performance are unable to implement a triple bottom line and thus have low score when it comes to environmental and social responsibilities.

Firm Leverage

Firm leverage is a combination of equity and liability that a company uses to finance its assets. Debt and/or equity can be used to fund a company's investments (Arkan, 2016). Preference capital may also be used by the corporation. Regardless of the company's rate of return on assets, the interest rate on debt remains constant. A company's financial leverage is designed to make more on fixed charges funds than it costs. As debt grows, so does financial leverage (Shaibu, 2020).

Financial leverage is used by businesses to boost shareholder returns in times of good economic conditions. It is believed that funds with fixed charges (such as a loan) would be used. Fixed-charges funds (such as loans from financial institutions and other sources or debentures) are considered to be available at a lower cost than the firm's net asset return. Leverage is also defined as the amount of equity debt a company utilizes to

finance its assets. As a result, business leverage represents the amount of debt utilised in the firm's capital structure. It is anticipated that increasing leverage in the capital structure will improve the firm's worth as well as the market price of its shares (Shaibu, 2020).

Leverage is a financial debt ratio that is used to determine the connection between a company's total assets and its external financing (Egbunike & Tarilaye, 2017). In this study, firm leverage is measured as the ratio of total debt to total assets of the firm in an accounting period, $\frac{Total\ Liabilities}{Total\ Equity}$.

Firm Size

The total value of a company's assets that it owns and uses in its operations is referred to as its size. The natural logarithm of the firm's total assets is used to calculate the variable. The amount and variety of manufacturing capacity and services that a company can currently provide to its consumers are also indicators of its size. Because of the concept of economies of scale, which can be found in the traditional neo classical perspective of the firm, the size of a corporation is a main criterion utilized in determining the performance of a company's activities (Ahmad, 2017). When compared to small businesses, large businesses have stronger competitive power during the competition period. Furthermore, because they have more resources, large enterprises have the power to grasp all work possibilities during times of competition that require high capital rates, and this condition offers them with greater work opportunities to maximize their profit with the competition.

Firm size, according to Oluwamayowa (2020), is a scale that shows whether a corporation is huge or tiny. A company's size can be classified as large or small depending on the total assets it owns or the total sales it generates. Assets are economic resources possessed by an entity and whose cost (or fair worth) could be objectively ascertained at the time of purchase (Onyali & Okafor, 2018). The four key points in this definition are (1) (1) An asset must be purchased through a transaction, (2) an asset must be an economic resource, (3) the resource must be held by the entity, and (4) its cost (or fair value) at the time of acquisition must be objectively measured, according to this definition.

Waste Management Costs

Corporate companies are better disposed to acquire customers' goodwill, loyalty, and patronage by disclosing their environmental performance (Ofoegbu, Odoemelam & Okafor, 2018). Costs such as those associated with cleaning up an oil spill or a polluted river are used to gauge this element of environmental performance. The cost of waste management is used to gauge a company's environmental performance in this study. Garbage management expenses are the costs of cleaning up contaminations and waste that a company has released during the production of goods and services. However, the waste or pollution in question has not been discharged into the public environment at this level of environmental management. The company then has to pay for the upkeep of

pollution equipment as well as the treatment of dangerous wastes. Companies' environmental accounting practices include waste management accounting (Obara, Ohaka, & Nangih, 2017), which tries to address trash generated during industrial processes. If garbage is not adequately handled, it will have a significant detrimental influence on the environment. Trash management is expensive, especially when there are rules in place that outline the standards and processes for disposing of industrial waste generated by businesses. Waste, according to Davidson (2011), "includes garbage, refuse, sludge, rubbish, tailings, debris, litter, and other discarded materials resulting from residential, commercial, institutional, and industrial activities that are commonly accepted at a municipal solid waste management facility, but excludes wastes from industrial activities regulated by a Nova Scotia Environment Act approval" (SWRMR, 1996). Spent solvents, Chemical wastes, Industrial effluent sludges, Health care and biological waste, Metallic wastes, Glass waste, Paper and cardboard trash, Rubber wastes, Plastic wastes, Wood wastes, Textile wastes are all classified as waste by Eurostat (2010).

Empirical Review

The quality and extent of environmental disclosure (ED) in ecologically sensitive manufactures were investigated by Badingatus, Ukhti, and Ntim (2021). During the period 2012–2016, 135 manufacturing businesses listed on the Indonesian Stock Exchange were employed in this study. The study hypothesis was tested using partial least squares–structural equation modeling (PLS-SEM). Better financial success, according to the study, can improve the quality of environmental disclosure.. The impact of leverage on the cash ratio of Nigerian conglomerates was investigated by Okeke, Ezejiofor, and Okoye (2021). Data were taken from the sampled firms' annual reports and accounts and analyzed using Pearson correlation and Ordinary Least Square (OLS) regression analysis using E-Views 9.0 statistical software. At a 5% level of significance, the study discovered that leverage has a considerable negative impact on the cash ratio of Nigerian corporations. The relationship between leverage and financial report timeliness in Nigerian quoted businesses was investigated by Aigienohuwa and Ezejiofor (2021). The study used an ex post facto research design. Data was gathered through a content analysis of annual reports and accounts of ten publicly traded Nigerian companies from 2010 to 2019. With the help of the e-view 9.0 program, the panel data regression technique was utilized to estimate the association between the variables. At a 5% level of significance, the study found that firm leverage has no meaningful link with financial report timeliness in Nigerian quoted businesses. From 2014 to 2017, Lamidi, Adesola, and Tariro (2020) examined the factors of environmental costs in Nigerian banking organizations. The population of the study was deposit money banks in Nigeria, and it looked at the impact of profitability, company size, and leverages on environmental costs such as donation, gift, and innovations. The study used STATA 14 software to run diagnostic tests on the data, including heteroskedasticity, multicollinearity, and Pearson correlation. The impact of

profitability, firm size, and leverage on environmental expenses was investigated using multiple regression analysis. Profitability, company size, and leverage all have a positive and significant relationship with the environmental costs recorded by these banks, according to the study's findings. The effects of corporate characteristics, financial performance, and audit firm type on environmental disclosure were investigated by Indah and Arum (2020). The descriptive and inferential statistics were utilized to analyze the research data. The regression research revealed that company size and industry type have a significant positive impact on environmental disclosure, whereas company age, leverage, profitability, and audit firm type have no impact.

The impact of profitability, liquidity, and leverage on environmental sustainable report disclosure was studied by Kiswanto, Woro, and Ulupui (2020). The study's population consists of non-financial enterprises that are listed on the Indonesia Stock Exchange (IDX) and publish annual and sustainable reports. The study's samples were chosen using the purposive sampling method. The hypothesis was tested using the absolute difference value test. Profitability has a large and favorable effect on environmental sustainable report disclosure, according to the study's findings, however liquidity and leverage have no meaningful effect on environmental sustainable report disclosure. Over a ten-year period, Onyekachi, Ihendinihu, and Azubike (2020) examined the impact of environmental performance on the earnings of listed oil and gas corporations in the Nigerian economy (2008-2017). The ordinary least square regression approach was used to analyze the data, and the results show that companies' investments in the environment are associated with their earnings in a significant way.

The effect of corporate governance qualities on environmental disclosure of listed manufacturing businesses in Nigeria was investigated by Ahmed and Moses (2020). The study's data came from the annual reports and accounts of twenty (20) companies registered on the Nigerian Stock Exchange over a seven-year period, from 2012 to 2018. The correlation matrix and regression analysis were used in the empirical analysis. Using Stata 11.0, regression analysis was utilized to evaluate the hypothesis. Independent directors have a considerable favorable effect on listed industrial businesses' environmental disclosure, according to the results of fixed effect regression, while foreign directors, dual-member directors, and directors' educational backgrounds have a positive but small effect on environmental disclosure of listed industrial companies in Nigeria. Usman (2019) investigated the factors that influence corporate environmental disclosure in Nigerian listed manufacturing enterprises. In the examination of data acquired from annual reports and accounts of the sampled listed manufacturing companies for a period of five (5) years, the study used an ex-post facto research design using descriptive and Robust Least Square (RLS) estimate methodologies (2013-2017). For the first four objectives, robust Least Square estimate techniques were used, while the Kruskal Wallis H test was used to assess the extent of variation in corporate environment disclosure among the listed manufacturing businesses' sectors. At a 5% level of significance, the study discovered that environmental certification is an important predictor of corporate environmental

disclosure by listed manufacturing companies. The survey also discovered that there are several types of industries. Nwakoby, Ezejiofor, and Ajike (2018) investigate the association between board traits and directors tunneling in Nigerian conglomerates. The particular aims are to assess whether there is a relationship between board size and related party transactions of listed conglomerates in Nigeria, as well as whether there is a relationship between board independence and related party transactions of quoted conglomerates in Nigeria. Time series data and an ex post fact study design were used. With the help of SPSS Version 20.0, hypotheses were tested using multiple regression and Pearson Coefficient Correlation. According to the findings, board size has a negative significant link with related party transactions in Nigerian conglomerates. Another finding is that independent board members have a positive significant link with related party transactions. Omoye and Wilson-Oshilim (2018) looked at the factors that influence environmental disclosure or accounting information across listed companies on the Nigerian Stock Exchange during a five-year period (2012-2016). The population of this study was made up of a total of 167 enterprises that were listed on the Nigerian Stock Exchange. It used E-views 8.0 computer software to perform descriptive statistics, Pearson correlations, and diagnostic tests such as the Hausman test and Random Effect Panel least square regression. This research found that I firm size and profitability have a significant and positive relationship with environmental disclosure; (ii) managerial shareholding has a significant and negative relationship with environmental disclosure; and (iii) leverage and industry type were statistically insignificant, but leverage was negatively related while industry type was positively related. Uyagu, Okpanachi, Nyor, and Muhammad (2017) investigate the impact of firm characteristics on listed manufacturing firms' environmental reporting procedures in Nigeria. Ex-post facto research design led the study. The study's population consisted of 61 manufacturing companies, with a sample size of 29 companies picked using a judgmental sampling technique. Content analysis was used to collect data from the sampled firms' annual reports and accounts, which were then analyzed using the multiple regression technique. The study discovered that firm size, leverage, return on assets, and firm age have a significant and favorable impact on listed manufacturing enterprises' environmental reporting procedures in Nigeria. For the span of five years, from 2012 to 2016, Ahmad (2017) investigated the impact of business qualities on environmental disclosure of listed brewery companies in Nigeria. Data was gathered from the selected companies' annual reports. The data was analyzed using a multiple regression technique. The study discovered that board size has a negative but significant impact on environmental disclosure with a value of 0.0089, while leverage has a negative but negligible impact with a value of 0.8229. Profitability has a positive significant influence on environmental disclosure of listed breweries businesses in Nigeria, where company size has a positive insignificant influence with a value of 0.1951. The impact of financial leverage on the financial performance of Nigerian food production enterprises was studied by John-Akamelu, Iyidiobi, and Ezejiofor (2017). The study used an ex post facto research design, with data gathered from annual reports and accounts of Nigerian food

producing companies from 2009 to 2014. Statistical Package for Social Sciences (SPSS) version 2.0 was used to assess the three hypotheses using paired sample t-test methodology. Financial leverage has no substantial effect on Earnings Per Share in Nigerian food production enterprises, but it does have an effect on Return on Equity in Nigerian manufacturing firms, according to the findings. Another research revealed that financial leverage had an impact on Nigerian companies' Return on Assets. There have been numerous research undertaken in the past to investigate the impact of business characteristics on environmental performance. The majority of the research concentrated on Nigeria's manufacturing, banking, and oil and gas industries. To the best of the researcher's knowledge, no such analysis has been carried out in Nigeria utilizing the listed conglomerates firms.

Methodology

Research Design

The research design adopted for this study is *Ex-post facto* research design. The reason for adopting this design is because the study analyses data in relation to events that already took place in the past. Thus, the researcher has no control over the events since they already occurred.

Population and Sampling

The population of the study is constituted by all the five (5) conglomerate firms listed on the Nigerian Stock Exchange as from 2011 to 2020. The 5 listed conglomerate firms on Nigerian stock exchange Daily listing as at 31/08/2021 are;

- Transnational Corporation of Nigeria Plc
- U A C N Plc.
- Chellarams Plc.
- S C O A Nig Plc
- John Holt Plc

Sample Size

Because the study's population is manageable and tiny, the researchers used the Census Sampling Technique, which included all of the population's objects in the sample. As a result, the sample size covers all five conglomerate corporations registered on the Nigerian stock exchange.

The information was gathered from secondary sources. The information was gathered from the Nigerian Stock Exchange (NSE) publications, fact books, and the annual reports and accounts of the sampled companies over a ten-year period (2011-2020).

Technique of Data Analysis

The descriptive statistical analysis of data for this study was done using mean and standard deviation. In analyzing the collected data, Ordinary Least Square multiple regression analysis was used at 5% level of significance. Correlational analysis was used

in the study to further analyses the data. The technique was made possible with the use of the E-view 9 package. The multiple regression model of the study is stated below:

WME = f(FSZ + FLEV) …….. 1

The model is expanded into econometric form;

$WME_{it} = \beta_0 + \beta_1 FSZ_{it} + \beta_2 FLEV_{it} + e_{it}$ ……. 2

Where:

B_0 = Intercept

$\beta_1 - \beta_3$ = are the parameters to be estimated in the equation

WME = Waste Management Expenditure

FPRO = Firm Profitability

FSZ = Firm Size

FLEV = Firm Leverage

i = Firm intercept

t = time intercept

e = Stochastic error term

Data Analyses

Table 1 Descriptive Analysis of Data

	WME	FLEV	FSZ
Mean	4.324650	3.692240	7.082680
Median	4.145450	3.689750	7.091300
Maximum	5.382300	10.35990	7.224600
Minimum	3.214600	-4.597500	6.918000
Std. Dev.	0.747205	3.851357	0.096885
Skewness	0.316354	-0.513203	-0.410268
Kurtosis	1.840760	3.813863	2.330807
Jarque-Bera	0.726732	0.714951	0.467124
Probability	0.695332	0.699440	0.791708
Sum	43.24650	36.92240	70.82680
Sum Sq. Dev.	5.024838	133.4966	0.084480
Observations	10	10	10

Source: Extract from E-View Output, 2022

Table 1 presents the descriptive statistics for the dependent and explanatory variables. The table also shows that the mean of the firm size (FSZ) of the sampled firms is 7.082 with standard deviation of 0.097, and minimum and maximum values of 6.918 and 7.225, respectively. This implies that the firm size of the firms in terms of natural logarithm of total assets is on average 7.1, and the standard deviation value indicates that the firm size of the sampled firms deviates from the mean value from both sides by 0.1, implying that there is an insignificant dispersion of the data from the mean because the standard deviation is lower.

Moreover, the table shows that the mean of the firm leverage (FLEV) of the firms is 3.692 with standard deviation of 3.851. The minimum and maximum values are -4.598 and 10.360 respectively. This implies that firm leverage of the sampled firms is on average 3.7, and the standard deviation value indicates that the value deviates from the mean from both sides by 3.9, implying that there is significant dispersion of the data from the mean because the standard deviation is larger.

Finally, the table portrays that waste management expense (WME) has an average value of 4.325 with standard deviation of 0.747. The minimum and maximum values are 3.215 and 5.382 respectively. This further implies that there is no wide dispersed data from the mean because the standard deviation is small.

Test of Hypotheses

For the purpose of this study, three null hypotheses were formulated. They were tested using Ordinary Least Square (OLS) regression analysis computed with the aid of E-View at 5% level of significance. The model used was:

$WME_{it} = \beta_0 + \beta_1 + FSZ_{it} + \beta_2 FLEV_{it} + e_{it}$

The result of the analysis is shown in Table 4.3 below.

Table 2: Regression Result for Test of Hypotheses

Dependent Variable: WME
Method: Least Squares
Date: 02/02/22 Time: 08:59
Sample: 2011 2020
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-17.69437	21.45460	-0.824735	0.4367
FLEV	0.043289	0.076815	0.563547	0.5906
FSZ	3.086287	3.053537	1.010725	0.3458

R-squared	0.320066	Mean dependent var	4.324650
Adjusted R-squared	0.125799	S.D. dependent var	0.747205
S.E. of regression	0.698627	Akaike info criterion	2.363926
Sum squared resid	3.416560	Schwarz criterion	2.454702
Log likelihood	-8.819630	Hannan-Quinn criter.	2.264346
F-statistic	1.647556	Durbin-Watson stat	1.761544
Prob(F-statistic)	0.259200		

Interpretation of Regression Result

Table 2 above shows the result of the multiple OLS regression that examined the extent to which firm characteristics (proxies by firm size and firm leverage) on the

environmental performance (waste management expense) of conglomerate firms that are quoted on the Nigerian Stock Exchange. The result shows that R^2 = 0.32007, which implies that about 32 % variations in waste management expense can be explained by joint changes in FLEV and FSZ.

Additionally, the *F*-statistic shows that the model is not statistically significant at 5% level using FLEV and FSZ. The model is re-written using the coefficients of the predictors thus:

Test of Hypothesis One

The hypothesis to be tested in this section is restated as follows:

H_{01}. Firm size does not significantly affect waste management expenditure of quoted conglomerates firms in Nigeria.

According to Table 2, the size of a company has a negative and considerable impact on the waste management expense of listed conglomerate companies in Nigeria. This can be seen in the beta coefficient of 3.0863 with a p-value of 0.346, which indicates that the p-value is not statistically significant at 5%. This means that business size, as one of the proxies for firm characteristics, has a favorable impact on listed conglomerate enterprises' environmental performance in Nigeria. The null hypothesis, that business size does not significantly effect waste management expense of quoted conglomerates enterprises in Nigeria, is accepted because the p-value of 0.346 is greater than 0.05.

Hypothesis Two

The hypothesis to be tested in this section is restated as follows:

H_{02}. Firm leverage has no significant effect on the waste management expenditure of quoted conglomerates firms in Nigeria.

According to Table 2, firm leverage has a favorable but negligible impact on the waste management expense of Nigerian listed conglomerate enterprises. This can be seen in the beta coefficient of 0.043 with a p-value of 0.591, which indicates that the p-value is not statistically significant at 5%. This means that company leverage, as a proxy for business characteristics, has no bearing on the environmental performance of Nigerian listed conglomerate firms. The null hypothesis, that firm leverage has no significant influence on waste management spending of quoted big enterprises in Nigeria, is accepted because the p-value of 0.591 is greater than 0.05.

Discussion of Findings

The result of the regression analysis that tested the effect of firm size and firm leverage on waste management expense revealed that the joint interaction of FSZ and FLEV insignificantly influence the environmental performance of firms under the Nigerian conglomerate sector.

FSZ has a positive association with WME, which means that as the size of the firms increases, the expense incurred on waste management reduces correspondingly. Apparently, this result supports the argument of the study that larger firms tend to be

environmentally conscious, and so do not incur much expense in waste disposal. The negative effect of FSZ on WME is significant, just like the studies of Shaibu (2020) but the findings contradicted the findings of Lamidi, Adesola and Tariro (2020); Indah and Arum (2020).

Firm leverage has a positive association with WME, which means that as the gearing of the firm's increases, the expense incurred on waste management also increases. Apparently, this result does not support the argument of the study that highly-levered firms tend to be environmentally conscious, and so do not incur much expense in waste disposal. However, the positive effect of FLEV on WME is not significant, just like the studies of Lamidi, Adesola and Tariro (2020); Kiswanto, Woro and Ulupui (2020); but the findings disagreed with the findings of Shaibu (2020).

Conclusion and Recommendations

Conglomerate enterprises are expected to meet society's demands in Nigeria, through a variety of sustainability practices, including practices that limit environmental damage, pollution, and dangers. Environmental protection actions, addressing inequities, poverty eradication, and conservation of sea life and life above sea level, including aquatic and terrestrial species, are among the topics mentioned under corporate environmental performance. This study, on the other hand, concentrated on the waste management element of environmental performance. The study's hypotheses were based on the idea that businesses with a small size, unhealthy debt, and poor economic performance have a low level of environmental irresponsibility. The study was carried out using data from five listed conglomerate firms on the Nigerian Exchange Group, over a period of ten years, from 2011-2020. Company size is favorably related to environmental performance, whereas firm leverage is positively related to environmental performance, according to the findings. However, only the effect of business size on environmental performance is statistically significant among the findings. As a result, it is claimed that larger businesses are more ecologically sensitive and so spend less money on garbage disposal.

The following two recommendations are made based on the study's findings for consideration.

1. Conglomerate firms with a higher company size should be more aware of the need for environmental preservation and protection from harm caused by firm operations.
2. Leveraged firms should embrace environmental sustainability reporting through the disclosure of firm environmental performance in order to minimize monitoring costs and acquire customers' goodwill, loyalty, and patronage.

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