

(Online); 2992-2704 (Print)

Influence of stakeholder ecosystem on corporate environmental disclosure among non-financial firms in Lagos State, Nigeria

Mustapha Abdulrasaq¹, Jamiu Alabere Abdulrasheed^{2*}

^{1,2}Kwara State University, Malete, Nigeria *Corresponding author: <u>alabereomotosho@gmail.com</u> <u>https://doi.org/10.33003/fujafr-2025.v3i4.247.112-128</u>

Abstract

Purpose: in Nigeria, especially non-financial firms in Lagos state are involve in inadequate of waste management infrastructure resulting to litter pollution and health issues of immediate community. Thus, this study therefore investigated influence of stakeholder ecosystem through operational, primary, environmental advocacy and strategy stakeholder on corporate environmental disclosure among non-financial firms in Lagos state, Nigeria. **Methodology:** this study adopts survey research design, which centers on collecting data from sample size of 294 representing the entire non-financial firms' Lagos state, Nigeria.

Results and conclusion: the findings of the result concludes that operational stakeholders have positive relationship but not significant on corporate environmental disclosures among non-financial firms in Lagos state, Nigeria. However, primary stakeholders, environmental advocacy stakeholders and strategy stakeholders are all have negative relationship but insignificant on corporate environmental disclosures among non-financial firms in Lagos state, Nigeria.

Implication of findings: therefore, this study recommends that operational health and environmental protection should be integrated into the daily operations of non-financial firms in Lagos state, Nigeria. However, in Lagos state, Nigeria, non-financial firms should address the interest of shareholders in environmental reporting concerning long-term value and shareholder value through environmental sustainability. Additionally, the study also recommends that non-financial firms in Lagos state, Nigeria should put their immediate needs first by offering corporate social responsibility and environmental cooperation. Lastly, managing directors of non-financial companies in Lagos state, Nigeria, ought to offer substantial financial support through environmental commitment in management relations with environmental waste management.

Keywords: Disclosures, Operational, Primary, Strategy, Advocacy.

1. Introduction

Over the past few decades, corporate environmental disclosure has been increasingly important on a global scale, as corporations' responsibility for their effects on the environment, society, and economy has become increasingly apparent. Corporate activities have significantly contributed to pressing global challenges, including environmental degradation, climate change, social inequities, labor rights violations, and hazardous waste management issues (Qintharah & Utami, 2023). In developing countries like Nigeria, non-financial firms operate within significant negative impact on the environment throughout their value chains, which compromises stakeholder trust and corporate sustainability. For instance, The Shell and Eni oil spills in Bodo village, Rivers State, in 2023 are a prominent example, as they severely damaged local ecosystems and livelihoods. Remedial measures are still unfinished despite a \$55 million settlement, underscoring persistent accountability shortcomings (Hickey, 2020). Furthermore, demonstrating the ongoing disparities in environmental and social responsibilities, a court decision further mandated that Mobil and the Nigerian National Petroleum Corporation pay N81.9 billion for oil spill damages (Ekpulu & Iyoha, 2023).

The situation becomes worrisome in Lagos state non-financial firms, this ranges from sourcing of raw materials, production, quality assurance, packaging, and distribution, resulting in a complicated web of

issues that require immediate action. For instance, recent enforcement actions by the Lagos State Water Regulatory Commission (LASWARCO), which sealed the operations of Coca-Cola and Guinness for unauthorized groundwater extraction and pollution, underscore the consequences of inadequate disclosures and poor environmental stewardship (Liberti & Petersen, 2019).

These issues have raised concern among the stakeholders, demanding for increase in transparency through non-financial disclosures from a wide range of stakeholders, including employees, local communities, investors, regulators, and competitors. To address these ongoing challenges, international frameworks such as the GRI, IIRC, and IFRS S1 and S2 standards, alongside Nigerian regulatory bodies like the National Environmental Standards and Regulations Enforcement Agency (NESREA) and the National Oil Spill Detection and Response Agency (NOSDRA), promote robust sustainability reporting. The IFRS S1 and S2 standards, in particular, mandate comprehensive Environmental, Social, and Governance (ESG) disclosures to enhance corporate accountability and align with global best practices. Additionally, governance codes enforced by the Nigerian Exchange Group (NGX) require listed firms to integrate sustainability principles into their operations. However, persistent compliance gaps have led to significant environmental disasters, economic losses, and, in some cases, delisting from the NGX 9Martinez & Serve 2017). These shortcomings emphasize the critical need for effective stakeholder engagement, robust governance structures, and enhanced reporting mechanisms to bridge the gap between regulatory expectations and corporate practices.

Prior research has explored various factors influencing sustainability disclosure, including the role of institutional investors, regulatory frameworks, corporate governance, and reporting quality (Kazakova et, al. 2021; Ekpulu et, al. 2023; Sanni et al., 2023). However, findings remain inconsistent, with divergent results on the relationships between stakeholder dynamics, governance mechanisms, and disclosure practices (Orazalin & Mahmood, 2018; Mustapha, 2023; Moses et al., 2020). For instance, some studies suggest that strong governance structures enhance disclosure quality, while others highlight the limited impact of regulatory frameworks in emerging markets due to weak enforcement (Sanni et al., 2023). These inconsistencies underscore the need for further research to clarify the interplay between stakeholder ecosystems encompassing operational, strategic, and external stakeholders and governance mechanisms in shaping sustainability disclosure practices. Therefore, this study explores the weakness of these previous studies by investigating influence of stakeholder ecosystem from perspective of operational stakeholder, primary stakeholders, environmental advocacy stakeholders and strategy stakeholders on corporate environmental disclosure among Non-Financial Firms in Lagos State, Nigeria.

2. Literature review

Theoretical review

There are theoretical framework underpinning this study, but stakeholder theory will be considered as the bases of formulating the research model of this study. Thus, stakeholder theory was propounded by Freeman (1984) who emphasized that management should consider the interests of all parties Impacted by its decisions; not only shareholders, Customers, workers, suppliers, communities, and even the environment are all included in in this. According to the theory, firms can develop more ethical and sustainable practices that eventually result in long-term success by considering the wants and needs of all stakeholders especially in the area of disclosures practices. Stakeholder theory highlighted the significance of balancing the interests of all stakeholders in order to create value for society as a whole, rather than concentrating only on increasing profits for shareholders (Panda, 2023).



(Online); 2992-2704 (Print)

Because it highlights the significance of considering the interests and concerns of all stakeholders considering the interests and concerns of all stakeholders impacted by a company's operations, stakeholder theory is extremely pertinent in the contest of sustainability disclosure. Stakeholders in the sustainability spa space include, among others, governments, NGOs, workers, suppliers, consumers, and local communities in addition to shareholders and investors Additionally, firms can use sustainability disclosure to inform stakeholders about their environmental, social, and governance (ESG) performance (Lauwo, et, al. 2016). Businesses show transparency and accountability by providing pertinent information, catering to the interests of stakeholders who want to know how the business affects the environment and society.

Although the theory has been found to be helpful in the literature, it has drawbacks. For example, stakeholders may have conflicting or competing interests, making it challenging to balance their needs (Kung, 2018). However, disparities in power among stakeholders, who may possess differing degrees of influence and power, may result in their interests not being given equal weight. Overemphasizing external stakeholders above: The significance of internal stakeholders, like employees, may be overlooked by stakeholder theory (Liberti & Petersen 2019).

Empirical Review

Many studies on corporate environmental disclosure have been conducted in developed nations. For instance, Gerged et al. (2020) investigated corporate environmental disclosure and earnings management the moderating role of corporate governance structures. Data were extracted from 2010 to 2014, through annual reports of 100 Jordanian listed companies (or 500 firm-year observations). The findings showed that while corporate environmental disclosure and shareholders are negatively correlated, the relationships between corporate governance structures and earnings management vary to differing degrees.

From a different angle, a number of studies examine how stakeholder pressure affects environmental disclosure tactics. For instance, Huang et al. (2024) examined drivers of environmental Disclosure and Stakeholder Expectation: Evidence from Taiwan. Data was extracted through the annual report. The results have shown that the level of environmental disclosure is significantly influenced by the demands of stakeholder groups. For instance, external stakeholder groups that significantly influence management's goals regarding the degree of environmental disclosure are the government, debtors, and customers.

Taking regulator as a stakeholder, the study of sin, Rana et al. (2023) investigated effect of regulatory influence on sustainability reporting evidence from Murray Darling Basin Authority in examined a longitudinal qualitative case study that gathers published data from the MOBA's in Australia. The used institutional theory and legitimacy, the annual reports over a 21-year period (1998-2018) and takes me account the economic, social, acy, the study and environmental aspects of sustainability. According to the way's findings concludes that regulation framework in place encourages appropriate disclosure of both financial and non-financial information pertaining to social and environmental impacts

In Germany, Arslan et al. (2023) examined nexus between environmental disclosures and top management team characteristics: a systematic review. The study conducted a bibliometric systematic review of 164 articles published between 2002 and 2022. According to the study, the presence of management characteristics like board gender, board director, and board representative play a big part in making sure information about environmental issues is revealed.

It is also important to examine study investigated on stakeholder influences on sustainability disclosure. This study used data from 2015 and 2017, 646 sustainability reports prepared in English were subjected to both quantitative and qualitative content assessments as part of the project. Based on this, the study found that there were few disclosures about stakeholder engagement and that there was little evidence that involvement activities served as the foundation for sustainability disclosures. It was discovered that sustainability reporting only vaguely included stakeholder participation. The study's specification of the sustainability reporting component confuses the findings.

Sustainability issues have lately come into the spotlight as nations and corporations strive to meet the objectives outlined in Agenda 2010 and the Sustainable Development Goals. Given these bases, Sulemana et al. (2025) examined stakeholders and sustainability disclosure: Evidence from an emerging market. 214 participants from Ghanaian mining and manufacturing companies provided primary data for the study. The study's analysis was conducted using SmartPLS version 4 software, which employs the Partial Least Square Structural Equation Modeling (PLS-SEM) methodology. The findings demonstrated that stakeholder pressures, such as those from the government, shareholders, and consumers, significantly influence corporate environmental disclosure and the development of green technologies.

However, Khuen et.al (2023) examined the Influence of External Stakeholders on Environmental, Social, and Governance (ESG) Reporting: Toward a Conceptual Framework for ESG Disclosure. The study obtained that through the previous studies. On this note, the study discovered that there is still uncertainty around external stakeholders and ESG disclosure, both in theory and in practice. Ullmann's 1985 model of corporate social performance is conceptualized in this article to provide a new conceptual framework for examining the connection between ESG disclosure and external stakeholders. Stakeholder theory, legitimacy theory, resource-based theory, and slack resource theory serve as its foundations. The intricacies of the theories employed here are starting to be questioned.

In Nigeria context, Sustainability reporting has recently evolved into an optional disclosure reporting practice among them are Wisdom, Deca None (2023) investigated sustainability several scholars in accounting have discussed sustainability The study used content analysis to evaluate how stakeholders expectations (disclosure and wealth reporting practices and stakeholders' expectation gap in lined deposit money banks in Nigeria maximization) and sustainability reporting relate to Nigerian financial institutions. It also discovered that financial institutions satisfy stakeholders expectations for wealth maximization try revealing profitability levels that align with their expectations. The results of the study indicate that Nigerian financial institutions disclose a high level of information, especially information relating with employees. Maximizing the wealth of stakeholders is encouraged by improved financial performance (ROA) brought about by sustainability reporting

Also, Lankwagh (2023) investigated the effect of firm characteristics on environmental disclosure of listed Oil and Gas companies in Nigeria. Specifically, the study examined the effect of corporate structure attribute, market attribute, performance attribute and governance attribute on environmental disclosure of listed Oil and Gas companies in Nigeria. The study employed an es post facto research design. Seven of ten oil and gas companies listed on the Nigerian Exchange Group were chosen for the study using the filtering process. The information was taken from the annual reports of the chosen Nigerian companies. The study period covered the ten-year span from 2012 to 2021. The study found that corporate structure and market structure attributes which are proxied by company size and auditor type, respectively have a significant detrimental impact on the environmental disclosure of listed oil and gas businesses in Nigeria.



(Online); 2992-2704 (Print)

Still in Nigeria, in their relentless pursuit of rapid development, many businesses have unwittingly caused environmental harm, which has alarmed a range of socioeconomic groups. As a result of this, Orajekwe et al. (2023) evaluated firm attributes and environmental disclosure of energy corporations in Nigeria. Using a causal-comparative research approach, the study examined energy companies that were listed between 2013 and 2022 on the Nigerian Exchange Group (NEG). Nine quoted companies, mainly involved in the utility, natural resource, and oil and gas industries, made up the sample. The Multiple Linear Regression Approach established the causal relationship between business attributes and environmental disclosure using secondary data from the annual reports and financial statements of specific energy companies. Accordingly, the study found that larger and more established organizations had trouble providing complete environmental information due to their established reporting systems and operational complexity. However, environmental disclosure was unaffected by firm leverage.

Hypotheses Development

- H1 Operational stakeholder does not significant influence corporate environmental disclosure among listed non-financial firms in Lagos state, Nigeria
- H2: Primary stakeholder does not significant influence corporate environmental disclosure among listed non-financial firms in Lagos state, Nigeria.
- H3: Environmental advocacy stakeholders do not significant affect corporate environmental disclosure among listed non-financial firms in Lagos state, Nigeria.
- H4: Strategy stakeholder does not significant influence corporate environmental disclosure among listed non-financial firms in Lagos state, Nigeria.

3. Methodology

This study used a survey research design, which focuses on gathering data directly from the field using a questionnaire. The nature of the objectives dictates whether or not a survey research technique is used, given the dearth of time series data for the variables being measured in this study. Cross-sectional and survey research designs are therefore required because data for the variables are not available over time.

The study's population consists of all listed non-financial companies with their headquarters located in Lagos State, Nigeria. The selection of all listed non-financial companies in Lagos State Nigeria was based on the fact that, as of the end of 2024, Nigeria Exchange Group (NGX) has 105 listed non-financial companies, of which 12 are representative of each non-financial company in Lagos State, Nigeria. This is because the Federal Ministry of the Environment recently rated Lagos State as one of the most polluting states problems that resulted from firms' level of production activities.

The sample size of this study was determined using Krejcie and Morgan (1970), the computation Is as follows:

$$s = X^2 NP (1 - P) \div d^2 (N - 1) + X^2 P (1 - P)$$

Representative of companies are stated below; Firstly, considering Krejcie and Morgan (1970), the sample size of the population of the computation is as follow: required sample size

Abdulrasaq & Abdulrasheed (2025). Influence of stakeholder ecosystem on corporate environmental disclosure among non-financial firms in Lagos State, Nigeria.

$$s = X^2 NP (1 - P) \div d^2 (N - 1) + X^2 P (1 - P)$$

s = required sample size.

 X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).

N =the population size,

P = 1 population proportion (assumed to be 50 since this would provide the maximum sample size).

d = the degree of accuracy expressed as a proportion (05)

The expected sample size at corporate level will be:

 $S = 3.841 * 1250 * 0.5 * 0.5 / (0.05)^2 * 1260 * 3.841 * 0.5 * 0.5$

S = 1210/4.11025 S = 1210/3.15 + 0.96025

S = 1210/4.11025

S = 294

Table 1: Sample Size

| S/N | Sector | | | Proportion | Sample Size |
|-----|-------------------|---------------------------------------------------|--------------------------------------------|----------------|-------------|
| | | No. of Non - Financial Firms in Lagos State | Representative of each Non-Financial Firms | - | - |
| 1 | Healthcare | 9 | 9×12= 108 | 108 ÷ 1260×294 | 25 |
| 2 | Natural Resources | 4 | 4×12=48 | 48 ÷ 1260×294 | 11 |
| | Construction/real | | | | |
| 3 | estate | 19 | 19×12=228 | 228 ÷ 1260×294 | 53 |
| 4 | Conglomerates | 17 | 17×12=204 | 204 ÷ 1260×294 | 48 |
| 5 | Oil and Gas | 17 | 17×12=204 | 204 ÷ 1260×294 | 48 |
| 6 | Consumer Goods | 25 | 25×12=300 | 300 ÷ 1260×294 | 70 |
| 7 | Industrial Goods | 14 | 14×12=168 | 168 ÷ 1260×294 | 39 |
| | | 105 | 1260 | | 294 |

Source: Author 2025

The data was analyzed using both descriptive and inferential statistics. Examples of descriptive statistics are mean, skewness, kurtosis, range of scores (minimum & maximum), and percentage analysis. While the standard deviation gauges the range of values for each variable to assess the mean's dependability, the mean is employed to measure the average of the variables to comprehend the size of the data. The minimum and maximum values show the range of values for each variable. The normality test Gordon (2006) explains the bell-shaped, proportionate curve with the central value peak and minor scores sliding toward the margins. To identify and resolve typical problems that could affect inferential statistics, preliminary robustness tests such as multicollinearity, unit root, and model miss-specification tests will also be conducted

Primary data was analyzed using partial least square structural equation modeling (PLS-SUM) which is a type of inferential statistics. PLS-SEM is designed for connecting multiple simultaneous equations and



(Online); 2992-2704 (Print)

provides a thorough foundation for linear modeling. Compared to more well-known methods, it has several advantages. It adds a great lot of freedom to the specification of the equations. The statistical process known as PLS-SEM development is parte expressive graphical language (Igreja, 2019). For individuals who are not familiar this language makes it possible to illustrate intricate correlations in a practical and efficient way Because PLS-SEM may give a snapshot of the data that has been gathered, it is appropriate for examining connections between sustainability reporting practices and the governing stakeholder ecosystem. Consequently, the suggested hypotheses were tested using PLS-SEM.

Essentially, the Conceptual model presented in chapter two of this study aligns with the solicit fixture of Nataliya et al. (2021), and as such, it is adapted as the mathematical and empirical model of this study. The modified model was evaluated in the context of the study's theoretical framework and goal. Therefore, the objective is to provide solution to questions that concern on the level of corporate environmental disclosure while the independent variable operational stakeholders (e.g. employees), strategic stakeholders (e.g., competitors, debt investors), primary stakeholders (e.g. shareholders) and environmental, advocacy groups among non-financial listed firms in Nigeria. Thus, the model of Nataliya et al. (2021) is as follows;

$$CED_i = \beta_0 + \beta_1 SH_i + \beta_2 Inv_i + \beta_3 Gov_i + \beta_4 RBR_i + \beta_5 Com_i + \varepsilon_i$$

CED= α 0+ β 1B_Sh+ β 2Ln_Inv+ β 3D_Gov+ β 4F_+5I_Rbr+ β 6Com_+ ϵ(a)

Where:

CED: Corporate Environmental Disclosure

SH: Shareholder INV: investor

GOV: Government

RBR: Regulatory Body Residenty

COM: Community

Thus, going by this model, this study therefore developed the model as follows;

$$EvDi = \beta_0 + \beta_1 OS_i + \beta_2 StS_i + \beta_3 PS_i + \beta_4 EAS_i + \varepsilon_i (b)$$

Where:

EvD: Environmental Disclosure OS: Operational Stakeholder PS: Primary Stakeholder

EAS: Environmental Advocacy Stakeholder

StS: Strategy Stakeholder a0: Constant Parameter

 β 1, β 2, β 3, β 4 = Regression Coefficients

 ε = error term

Table 2: A priori expectation:

| Variable | Definitions | A Prior Expectation |
|----------|------------------------------------|---------------------|
| CED | Corporate Environmental Disclosure | -/+ |
| OS | Operational Stakeholder | -/+ |
| StS | Strategy Stakeholder | -/+ |
| SS | Shareholder Stakeholder | -/+ |
| EAS | Environmental Advocacy Stakeholder | -/+ |

Table 3: Variable Measurement

| Variable Types and Names | Measurement | Source | A-prior expectation |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------------|
| | Ten measurement questions were raised and directing to environmental expenditure incurred, recycling of materials, local water discharge, direct energy | | -/+ |
| Environmental | consumption and material used across the companies | | |
| Disclosure | production | | |
| | | | <i>-</i> /+ |
| Operational | Ten measurement questions were raised and directing to Health, safety, Environmental Protection, Package for | | |
| Stakeholder | Employee with Disabilities and Employee training | | |
| Strategy | Ten measurement focusing on strategically stakeholder such as Sustainability reporting practices, Decent Work performance indicators, Management Relations, Waste | | -/+ |
| Stakeholder | and Compliance. Ten measurement questions establishing to Sustainability reporting practices, Financial performance and long term value, financial risks and opportunities, | | - |
| Primary | Shareholder value through sustainability and | | |
| Stakeholder | Sustainability performance | | |
| | Ten measurement questions directing to Energy, Carbon | | - |
| Environmental | Emission, Training and Education, Environmental | | |
| Advocacy | collaboration and Human Right | | |

Results and discussion

Descriptive analysis of respondents' bio data

Remarkably, only 280 of the 294 Google forms used for the questionnaires were legitimate for analysis, indicating a 95% response rate. This operation maintained a respectable 95% of usable responses more than the 30% threshold thought to be adequate for survey analysis, keeping the integrity of the data intact



(Online); 2992-2704 (Print)

(Sekaran, 2003). This is in line with Cooper and Schindler's (2008) recommendations that it is crucial to carefully review the questionnaire answers in order to confirm that the data gathered is legitimate and suitable for analysis.

Social demographic characteristics of participants

Table 4: social demographic characteristics of participants (percentage)

| Age Group | Gender Balance | Education | Work Experience |
|----------------|----------------|--------------|------------------------|
| | | Background | |
| 8-24= 34.29 | Male=40 | OND=6.79 | Less Than 2 year=23.57 |
| 25-34=28.57 | | HND=22.86 | 2-4=25.71 |
| 35-44=13.21 | Female=60 | NCE=2.14 | 5-9- 25.71 |
| 45-54=12.86 | | ACCA=2.86 | 10+= 25 |
| 54 above=11.07 | | ICAN =11.07 | |
| | | B.Sc=36.07 | |
| | | M.Sc = 12.86 | |
| | | MBA=5.36 | |

Source: Author's 2025

It is evident from the bar chart, with regards to age group that majority of respondents from listed nonfinancial firms, 34.29%, are within the 18-24 years bracket, whilst 28.57% are within the 25-34 years category. Furthermore, 13.21% of respondents are within the 35-44 years category, 12.86% are within the 45-54 years category and 11.07% are above 55 years old. This shows that the workforce is predominantly comprised of young and middle-aged employees.

In terms of gender, it can be seen from the bar chart that majority of the respondents from listed nonfinancial firms are female with 60%, while 40% are male. This suggests that the distribution of gender is highly skewed towards female employees than male employees within these firms. With regards to education background, most of the respondents from listed non-financial firms hold a BSc qualification with 36.07%, whilst 12.86% hold an MSc certificate and 5.36% hold an MBA. Moreover, 11.07% possess an ICAN certification, 2.86% possess an ACCA certification, 2.14% hold an NCE, 22.86% hold an HND, and 6.79% hold an OND. This indicates that a holder of BSc is the most common educational qualification among employees. However, regarding professional certificates, most of the employees are certified by ICAN professional body.

Regarding work experience, 23.57% of employees from listed non-financial firms have less than 2 years of experience, 25.71% have 2-4 years of experience, 25 Tits have 5-9 years of experience. and 25% have 10 or more years of experience. This shows that majority of employees in the non-financial firms had experience of 2-9 years.

Preliminary analyses

The preliminary findings of the analysis conducted for this study are revealed in this section. This multicollinearity and normality checks. Additionally, the fitting indes was determined using principal components analysis, which opened the door for ordered logistic regression to examine the effect of stakeholders (internal and external audit committee and risk management practices on corporate sustainability disclosure. The multicollinearity and normality checks serve as a robustness check to the fundamental ordered logistic regression analysis and the structural equation estimation.

Normality test and correlation analysis of the variables

This section elaborates on the analysis related to the normality of variables included in the models of this study. The study used the analysis of Kurtosis and Skewness to determine normality. According to Hair et 2010), this thorough method was necessary to guarantee that the data complied with the requirements and presumptions of multivariate regression analysis. Interestingly, joint skewness and kurtosis were evaluated because they are more useful metrics for examining the distribution of individual variables.

Table 5: skewness and kurtosis joint normality test

| Variables | Statistic | Statistic |
|-----------------------------------------------------------|-----------|-----------|
| Corporate Sustainability Environmental Disclosure (CSDEN) | -1.160 | 1.164 |
| Environmental Advocacy Stakeholders (EA) | -0.695 | -0.070 |
| Operational Stakeholders (OP) | -0.426 | -0.244 |
| Primary Stakeholders (PR) | -0.558 | -0.077 |
| Strategic Stakeholders (ST) | -1.978 | 2.676 |

Source: Author's Computation (2025)

Table 5 presents the skewness and kurtosis statistic score. The kurtosis analysis reveals patterns in how the data for each variable clusters. In a notable contrast, the data for Competitors is platykurtic, appearing flatter and more spread out, which indicates greater diversity in how firms respond. A handful of other variables, including Environmental Advocacy Stakeholders, demonstrate a more balanced, mesokurtic profile that closely mirrors a normal bell curve. Shifting to the direction of the date, the skewness statistics paint a clear picture of systemic bias in the scores

Partial least square and structural equation model (PLS-SEM) procedure

The structural model, sometimes referred to as the inner model, illustrates the connections between latent components in Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS. The structural model is focused on evaluating the proposed pathways between constructs, in contrast to the measurement model, which concentrates on the connections between latent constructs and their observed indicators (outer model) (Wong, 2013). Specifically, to achieve the objective of this study, the structural model examines the impact of internal stakeholders (operational, strategic, primary and environmental advocacy) on corporate Environmental disclosure among non-listed firms in Nigeria. This is presented in the table below;



(Online); 2992-2704 (Print)

Table 6: Summary results of path coefficients after bootstrapping

| | Path Coefficients (Original Sample (O)) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics (O/STDEV) | P Values | Results |
|-----------|---------------------------------------------------|--------------------|----------------------------------|------------------------|----------|-----------------|
| CSDEN->OP | 0.040 | 0.038 | 0.069 | 0.582 | 0.560 | Non-significant |
| CSDEN->ST | -0.071 | -0.075 | 0.060 | 1.180 | 0.238 | Non-significant |
| CSDEN->PS | -0.028 | -0.033 | 0.062 | 0.461 | 0.645 | Non-significant |
| CSDEN->EA | -0.100 | -0.096 | 0.082 | 1.223 | 0.222 | Non-significant |

Source; Author's 2025

Explanatory notes: *OP = Operational Stakeholders; ST = Strategic Stakeholders; PS = Primary Stakeholders; EA* = Environmental Advocacy stakeholders; CSDEN = Environmental Disclosure. ***and* indicates 5% significant values

Table 6 shows the findings from the structural model, which examined the influence Operational Stakeholders and Environmental advocacy Stakeholders, Strategic Stakeholders, Primary stakeholders on corporate environmental disclosure. The path coefficients statistics, and p values for each relationship offer significance insights in what drives non-listed firms in Nigeria to disclose environmental information. The P values of operational stakeholders (0.222), strategy stakeholders (0.238), primary stakeholders (0.645), and environmental advocacy stakeholders (0.222) reflect that all these are not significant corporate environmental disclosures. This indicates that their concerns of influence may not extend strongly beyond core economic disclosures. Operational stakeholder results specifically show that there is a partial correlation between company environmental disclosure and employee interest. Nonetheless, the findings suggest that corporate social disclosures are inversely correlated with strategy, primary, and environmental advocacy.

Table 4.4: Summary of test of hypotheses on the effect of stakeholder ecosystem on corporate environmental disclosures among non-financial firms in Lagos state, Nigeria

| Var | Hypothesis | Result/Sign Obtained | Decision/Support for Hypothesis |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------------------------|
| H ₀₁ | Operational stake holder does not siginificant affect corporate environment disclosure among listed non-financial firms in Lagos state, Nigeria. | O | Accept |
| H_{02} | Primary stakeholders do not significant influence corporate environmental | O | Accept |

| | disclosure among listed non-financial firms in Lagos state, Nigeria. |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| H_{03} | Environmental advocacy stakeholders have Not Significant Accept no significant effect on corporate (+/-ve) environmental disclosure among listed non-financial firms in Lagos state, Nigeria. |
| H_{04} | Strategy stakeholders have no significant Not Significant Accept effect on corporate environmental disclosure (+/-ve) among listed non-financial firms in Lagos state, Nigeria. |

Discussion of Findings

This section presents the insights derived from the analysis, focusing on the influence of stakeholder ecosystem on corporate environmental disclosures. The first four research questions were addressed using the Ordinary Least Squares (OLS) regression technique, while the first research objectives were addressed using the Structural Equation Model (SUND. The discussion centers on the influence of the key independent variables and their proses on corporate providing an in-depth exploration of how each independent variable affects these distinct aspects environmental disclosures. The analysis is structured around the results of the estimations, of corporate environmental disclosures.

The objective one of this study investigates the extent of operational stakeholder on corporate environmental disclosure among listed non-financial firms in Lagos state, Nigeria. The findings revealed that operational stakeholders have a negative and statistically insignificant effect on that operational stakeholders align to expectations, promoting corporate environmental disclosure. corporate environmental disclosures. The coefficient of 0.040 with a p-value of 0.560 suggests According to this result, non-financial firms in Lagos State, Nigeria, partially disclosed information regarding the welfare of their employees in connection with corporate environmental disclosure, those Nigerian financial firms reveal a great deal of information, particularly that pertaining to their operational stakeholders. The study's findings are also consistent with its theoretical framework, which found that companies with significant environmental externalities are required to include detailed information in their annual reports about environmental compliance, water use, emissions, employee health and safety, and training. Finally, the finding also aligns with the A- prior expectation of this study.

The objective two of this study assesses the influence of primary stakeholder on corporate environmental disclosure among listed non-financial firms in Lagos state, Nigeria. The p-value of 0.645 and the coefficient of -0.028 show that non-financial firms in Lagos state, Nigeria have not complied with the Global Reporting Initiative's (GRI) recommended practices for disclosing non-financial information that is crucial to the main stakeholders' long-term decision-making. This finding contradicts with the findings of Sulemana et, al (2025) demonstrated that stakeholder pressures, such as those from the government, shareholders, and consumers, significantly influence corporate environmental disclosure. However, the findings of Gerged et, al (2020) demonstrated that while corporate environmental disclosure and



(Online); 2992-2704 (Print)

shareholders are negatively correlated with each other. This outcome and the A-prior expectation are comparable.

The objective three of this study examines the effect of environmental advocacy stakeholders on Indicator implies that environmental advocator stakeholders have negative effect on corporate corporate environmental disclosure among listed non-financial firms in Lagos state, Nigeria. The environmental disclosures with a coefficient of -0.100 and value of 0.222 Stakeholders making process, which is one example of how these findings conflict with the study's theoretical predicted that all stakeholder interests should be taken into account in the company's dechion State, Nigeria, are not revealing information that could have a beneficial or negative impact on framework. Accordingly, the objective's findings suggest that non-financial companies in Lagos consistent with the study are A-prior expectations. Their employees and the local populations. This finding's insignificant and negative correlation of these variables

The final objectives of this study examine the effect of strategy stakeholders on corporate environmental disclosure among listed non-financial firms in Lagos state, Nigeria. The study applied structural equation modelling to examine the interaction. The findings revealed a coefficient 0.238, suggests a margistate. Nigeria, are not following ratione gly stakeholders wishes to provide information that is pertinent to significant negative moderation effect. This suggests that non-financial companies in Lagos Stutto this decision-making process.

5. Conclusion

The findings' highlights, together with the conclusions that are unique to and stem from each individual finding of objective, are listed below after the methodology was adopted as previously outlined.

- i. The coefficient of operational stakeholders is positive and statistically insignificant, leading to the conclusion that operational stakeholders has insignificant but positive effect on corporate environmental disclosures among non-financial firms, Lagos state, Nigeria.
- ii. The coefficient of primary stakeholders is negative and statistically insignificant, leading to the conclusion that primary stakeholders has insignificant and negative influence on corporate environmental disclosures among non-financial firms, Lagos state, Nigeria.
- iii. The coefficient of environmental advocacy stakeholders is negative and statistically insignificant, resulting to the conclusion that environmental advocacy stakeholders has insignificant and negative effect on corporate environmental disclosures among non-financial firms, Lagos state, Nigeria.
- The coefficient of strategy stakeholders is negative and statistically insignificant leading to the iv. conclusion that strategy stakeholders have significant effect on corporate environmental disclosures among non-financial firms, Lagos state, Nigeria.

The following recommendations are made to enhance corporate environmental disclosures in light of the study's findings and the conclusions that resulted from them.

i. Based on the positive insignificant effects of operational stakeholders on corporate environmental disclosures among non-financial firms, Lagos state, Nigeria. Non-financial companies in Lagos State, Nigeria, are recommended to put employee interests first by implementing a number of standards that are specifically centered on how an organization affects its workforce and workers' rights.

- ii. To address the negative insignificant the influence of primary stakeholder on corporate environmental disclosure among listed non-financial firms in Lagos state, Nigeria, it is essential that Non-financial firms Lagos state, Nigeria should drive by a desire for accountability, longterm value, and risk management, especially concerning climate change that may affect shareholders interest.
- iii. The study shows that while the environmental advocacy is not statistically significant and negative effect, the study therefore recommends that non-financial firms in Lagos state, Nigeria should prioritize interest of the community in the area of Environmental collaboration with immediate communities, reduce environmental impact on carbon emission and environmental compliance.
- Finally, the last objective reflect negative impact and not statistically significant. Thus, this study iv. therefore recommends that managing directors of non-financial firms in Lagos state, Nigeria should put in place Decent Work Performance Indicators, Management Relations and Significant financial assistance through environmental commitment that will enable the companies in the future to come.

Reference

- Akani, G. C., Amuzie, C. C., Alawa, G. N., Nioking, A., & Belema, R. (2022). Factors militating against biodiversity conservation in the Niger Delta, Nigeria: the way out. In Biodiversity in Africa: Potentials, threats and conservation (pp. 573-600). Singapore: Springer Nature Singapore.
- Albrecht, S. L., Bakker, A. B., Gruman, J. A., Macey, W. H., & Saks, A. M. (2015). Employee engagement, human resource management practices and competitive advantage: An integrated approach. Journal of organizational effectiveness: People and performance, 2(1), 7-35.
- Anwana, E. (2020). Social justice, corporate social responsibility and sustainable development in South Africa. HTS Teologiese Studies/Theological Studies, 76(3).
- Arslan, H. M., Chengang, Y., Komal, B., & Chen, S. (2023). Nexus between environmental disclosures and top management team characteristics: a systematic review. Environmental Science and Pollution Research, 30(4), 9763-9781.
- Arslan, H. M., Chengang, Y., Komal, B., & Chen, S. (2023). Nexus between environmental disclosures and top management team characteristics: a systematic review. Environmental Science and Pollution Research, 30(4), 9763-9781.
- Arslan, H. M., Chengang, Y., Komal, B., & Chen, S. (2023). Nexus between environmental disclosures and top management team characteristics: a systematic review. Environmental Science and Pollution Research, 30(4), 9763-9781.
- Asaduzzaman, M., & Virtanen, P. (2023). Governance theories and models. In Global encyclopedia of public administration, public policy, and governance (pp. 5947-5958). Cham: Springer International Publishing.
- Asghar, B., Wasim, A., Qazi, U., & Rasool, A. (2020). Financial and non-financial practices driving performance: Evidence banking sustainable firm from sector developing countries. Sustainability, 12(15), 6164.
- Chiu, T. K., & Wang, Y. H. (2015). Determinants of social disclosure quality in Taiwan: An application of stakeholder theory. Journal of business ethics, 129, 379-398.
- Dhanani, A., & Connolly, C. (2015). Non-governmental organizational accountability: Talking the talk and walking the walk?. *Journal of Business Ethics*, 129, 613-637.



FUDMA Journal of Accounting and Finance Research, 3: 4. ISSN: 2992-4693 (Online); 2992-2704 (Print)

- Dubey, R., Gunasekaran, A., & Ali, S. S. (2015). Exploring the relationship between leadership, operational practices, institutional pressures and environmental performance: A framework for green supply chain. International Journal of Production Economics, 160, 120-132.
- Gerged, A. M., Albitar, K., & Al-Haddad, L. (2023). Corporate environmental disclosure and earnings management – The moderating role of corporate governance structures. International Journal of Finance & Economics, 28(3), 2789-2810.
- Glazerman, G., & Cohen, J. (2020). "Non-Financial" Is a Misnomer, but Doesn't Have to Be a Missed Opportunity. *Journal of Applied Corporate Finance*, 32(2), 108-116.
- Gordon, S. (2006). The normal distribution. *Sydney: Mathematics Learning Centre, University of Sydney*.
- Haji, M., Kerbache, L., & Al-Ansari, T. (2022). Food quality, drug safety, and increasing public health measures in supply chain management. Processes, 10(9), 1715.
- Hansmann, H., & Pargendler, M. (2013). The evolution of shareholder voting rights: separation of ownership and consumption. Yale LJ, 123, 948.
- Hickey, S. J. (2020). Remediation in foreign bribery settlements: The foundations of a new approach. Chi. J. Int'l L., 21, 367.
- Hofbauer, J., & Pawlowitsch, C. (2025). The evolutionary dynamics of costly signaling: J. Hofbauer, C. Pawlowitsch. International Journal of Game Theory, 54(1), 23.
- Hossain, M. M., Rana, T., Nahar, S., Rahman, M. J., & Lema, A. C. (2023). Regulatory influence on sustainability reporting: evidence from Murray-Darling Basin Authority in Australia. Meditari accountancy research, 31(5), 1386-1409.
- Huang, C. L., & Kung, F. H. (2024). Drivers of environmental disclosure and stakeholder expectation: Evidence from Taiwan. *Journal of business ethics*, 96(3), 435-451.
- Jerry Chukwuebuka, O., & Okenwa Cy, O. (2023). Firm attributes and environmental disclosure of energy corporations in Nigeria. International Journal of Trend in Scientific Research and *Development*, 7(4), 423-432.
- Jerry Chukwuebuka, O., & Okenwa Cy, O. (2023). Firm Attributes and Environmental Disclosure of Energy Corporations in Nigeria. International Journal of Trend in Scientific Research and *Development*, 7(4), 423-432.
- Kazakova, N. A., & Doan, T. L. (2021). Model on stakeholder risks disclosure in corporate reporting for oil and gas companies in the Republic of Vietnam. International Journal of Energy Economics and Policy, 11(6), 206-211.
- Kazakova, N. A., & Doan, T. L. (2021). Model on stakeholder risks disclosure in corporate reporting for oil and gas companies in the Republic of Vietnam. International Journal of Energy Economics and Policy, 11(6), 206-211.
- Kung, P. K., Li, M. H., Lin, P. Y., Chiang, Y. H., Chan, C. R., Guo, T. F., & Chen, P. (2018). A review of inorganic hole transport materials for perovskite solar cells. Advanced Materials Interfaces, 5(22), 1800882.
- Lauwo, S. G., Otusanya, O. J., & Bakre, O. (2016). Corporate social responsibility reporting in the mining sector of Tanzania: (Lack of) government regulatory controls and NGO activism. Accounting, Auditing & Accountability Journal, 29(6), 1038-1074.
- Lauwo, S. G., Otusanya, O. J., & Bakre, O. (2016). Corporate social responsibility reporting in the mining sector of Tanzania: (Lack of) government regulatory controls and NGO activism. Accounting, Auditing & Accountability Journal, 29(6), 1038-1074.

- Liberti, J. M., & Petersen, M. A. (2019). Information: Hard and soft. Review of Corporate Finance Studies, 8(1), 1-41.
- Liberti, J. M., & Petersen, M. A. (2019). Information: Hard and soft. Review of Corporate Finance *Studies*, 8(1), 1-41.
- Liberti, J. M., & Petersen, M. A. (2019). Information: Hard and soft. Review of Corporate Finance *Studies*, 8(1), 1-41.
- Mamun, M. A., Shaikh, J. M., & Easmin, R. (2017). Corporate social responsibility disclosure in Malaysian business. Academy of Strategic Management Journal, 16(2), 29-47.
- Martinez, I., & Serve, S. (2017). Reasons for delisting and consequences: A literature review and research agenda. Journal of Economic Surveys, 31(3), 733-770.
- OKERE, W., Dorcas, A. D. E. G. B. I. T. E., & Nonso, O. J. (2023). SUSTAINABILITY REPORTING PRACTICES AND STAKEHOLDERS'EXPECTATION GAP IN LISTED DEPOSIT MONEY BANKS IN NIGERIA. African Journal of Business and Economic Development, 3(9), 1-16.
- Panda, P. (2023). Innovative financial instruments and investors' interest in indian securities markets. Asia-Pacific Financial Markets, 30(1), 1-12.
- Pasko, O., Marenych, T., Diachenko, O., Levytska, I., & Balla, I. (2021). Stakeholder engagement in sustainability reporting: the case study of Ukrainian public agricultural companies. Agricultural and Resource Economics: International Scientific E-Journal, 7(1), 58-80.
- Pereira, C., Monteiro, A. P., Barbosa, F., & Coutinho, C. (2021). Environmental sustainability disclosure and accounting conservatism. International Journal of Advanced and Applied Sciences, 8(9), 63-74.
- Qintharah, Y. N., & Utami, F. L. (2023). Determinants on environmental disclosure moderating by integrated corporate governance. Aptisi Transactions on Technopreneurship (ATT), 5(1Sp), 22-37.
- Ramos, T. B., Cecílio, T., Douglas, C. H., & Caeiro, S. (2013). Corporate sustainability reporting and the relations with evaluation and management frameworks: the Portuguese case. Journal of Cleaner *Production*, 52, 317-328.
- Roche, K. E., & Baumgartner, R. J. (2025). Corporate sustainability strategy deployment: A case study on the implementation of corporate sustainability using hoshin kanri. Corporate Social Responsibility and Environmental Management, 32(1), 927-946.
- Salman, A., Jaafar, M., Mohamad, D., Ebekozien, A., & Rasul, T. (2024). The multi-stakeholder role in Asian sustainable ecotourism: a systematic review. PSU Research Review, (ahead-of-print).
- Senthilvelan, R. (2025). LEVERAGING ARTIFICIAL INTELLIGENCE FOR SMARTER BUSINESS DECISION-MAKING: OPPORTUNITIES AND RISKS. International Journal of Engineering *Technology Research & Management (IJETRM), 9(09), 156-164.*
- Sisa, K. A., Siklósi, Á., & Simon, S. (2025). THE ROLE OF ESG INDICATORS FROM THE PERSPECTIVE OF THE OWNER-MANAGER-INVESTOR.
- Soratana, K. (2025). Environmental Factors in ESG Investing. In Environmental, Social, and Governance (ESG) Investment and Reporting (pp. 17-42). Cham: Springer Nature Switzerland.
- Sturm, N. F., Candia, C., Damásio, B., & Pinheiro, F. L. (2025). High earnings through firm influence: the role of hierarchical structures in public procurement. EPJ Data Science, 14(1), 27.
- Sulemana, I., Cheng, L., Agyemang, A. O., Osei, A., & Nagriwum, T. M. (2025). Stakeholders and sustainability disclosure: Evidence from an emerging market. Sustainable Futures, 9, 100445.



FUDMA Journal of Accounting and Finance Research, 3: 4. ISSN: 2992-4693 (Online); 2992-2704 (Print)

- Soomiyol, M. (2023). Effect of Firm Characteristics on Environment
- Targba, L. M., Tsegba, I. N., & Soomiyol, M. (2023). Effect of Firm Characteristics on Environment Disclosure of Listed Oil and Gas Companies on the Nigeria Exchange Group. *African Banking and Finance Review Journal*, 7(7), 120-138.
- Tasnim, M., & Khan, S. (2022). Impact of Corporate Governance on Sustainability Reporting: Evidence from Dhaka Stock Exchange. *IOSR Journal of Business and Management*, 24(12), 17-23.
- Voyko, D. V., & Voyko, A. V. (2022). Corporate social responsibility and sustainable development in the context of environmental challenges. *Вестник университема*, (4), 13-19.
- Wong, W. K., Teh, B. H., & Hooi, T. S. (2023). The influence of external stakeholders on environmental, social, and governance (ESG) reporting: Toward a conceptual framework for ESG disclosure. *Foresight and STI Governance*, 17.