

Research Article

CORPORATE ATTRIBUTES AND DISCLOSURE LEVELS OF ENVIRONMENTAL FACTORS IN ANNUAL REPORTS OF CONSUMER GOODS FIRMS IN NIGERIA

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Abstract

A company's inclination to publish environmental data within its yearly financial statements relies heavily on various elements, notably its foundational corporate characteristics. This dependency is especially pronounced given the voluntary nature of such reporting. Consequently, this research explores how specific organizational features impact the volume and quality of ecological disclosures among Nigerian consumer goods companies. The independent variable, corporate structure, was represented by company size, financial leverage, profitability margins, and the diverse backgrounds of board members. Meanwhile, the dependent variable—the extent of environmental reporting—was quantified using a customized disclosure index formulated for this study. Covering a twelve-year span from 2013 to 2024, the research targeted a population of seventeen consumer goods enterprises operating in Nigeria, from which a purposive sample of eight was drawn. An ex post facto research design was utilized, extracting necessary data from the published annual accounts of the chosen entities. The resulting dataset underwent evaluation through descriptive statistics and panel multiple regression modeling via the E-views 10 statistical software. Outcomes indicate that a firm's scale and its profitability metrics possess a statistically significant impact on how much environmental information is shared. Conversely, the analysis demonstrated that neither debt leverage nor the personal backgrounds of the directorial board meaningfully affect these disclosure patterns. The study ultimately deduces that overarching corporate architecture plays a pivotal role in dictating the ecological transparency of

consumer goods businesses in Nigeria. Key recommendations suggest that more massive corporations purposefully allocate a designated fraction of their revenue toward environmental sustainability, codifying and publishing this as an official corporate mandate.

Keywords: Organizational architecture, ecological transparency metrics, sustainability reporting index.

INTRODUCTION

The persistent push for comprehensive environmental transparency within corporate annual reports is steadily producing tangible outcomes. Stakeholders increasingly require detailed accounts of how a business's daily operations affect its surrounding ecosystem, allowing them to gauge the company's commitment to social responsibility and make well-informed investment choices. Furthermore, publishing this ecological data provides regulatory bodies with a practical tool to foster widespread corporate accountability (Xu et al., 2025). This imperative is growing as stakeholders continuously pressure organizations for clearer insights into their operational footprints and their strategic responses to global ecological threats (Dahiru et al., 2024).

The specific catalysts driving the release of sustainability and ecological metrics vary dramatically depending on the organization and its leadership framework. Certain enterprises base their reporting habits on the internal philosophies of their directors, some adhere strictly to prevailing industry norms, and others comply with the specific legal expectations of their geographic headquarters. Unique company characteristics also heavily dictate reporting behaviors. Regardless of the underlying motivation, the ultimate decision regarding what sustainability metrics to publish—alongside the format and depth of that information—rests entirely on the preferences of the board of directors. Consequently, a stark contrast exists in the volume of data shared among different organizations. This inconsistency primarily stems from the voluntary nature of environmental reporting; there remains a notable absence of rigid, standardized regulations dictating the exact contents of sustainability disclosures (Dibia & Onwuchekwa, 2015).

Typically, leadership teams only disseminate ecological data they deem pertinent and beneficial to end-users. Because these disclosures are predominantly discretionary, they encompass a broad spectrum of topics, including raw material consumption, waste mitigation strategies, carbon footprints, and regulatory compliance records (Abidoeye et al., 2024). Dibia and Onwuchekwa (2015) assert that because green reporting evolved organically without strict mandates,

executives retain the autonomy to selectively publish or withhold information. Therefore, transparency fluctuates wildly across different markets and management teams.

Current academic literature suggests that beyond mere managerial discretion, several other structural elements dictate reporting transparency. For example, Usiomon and Iyoha (2024) observe that businesses often release ecological data to align with sector benchmarks, pacify environmental advocacy groups, or satisfy the demands of multinational parent corporations. Variables such as equity distribution, revenue margins, and overall asset size also play critical roles. Conversely, some entities weaponize these disclosures to mask underlying operational deficiencies. Yuan and Bao (2025) suggest that struggling businesses frequently engineer excessively positive sustainability narratives to camouflage poor financial health, attempting to signal an alignment with green initiatives to attract external capital and mitigate financial vulnerabilities.

A thorough review of existing scholarship confirms that a multitude of variables dictates the depth of environmental reporting in annual financial statements. Nguyen et al. (2017) highlight that transparency is shaped by the scale of the enterprise, financial returns, debt reliance, the duration of public listing, independent audit presence, and the sheer number of executive board members. Adding to this, Khalid and Rawat (2025) demonstrate that organizations boasting specialized, board-level sustainability committees achieve superior reporting outcomes. Their research similarly highlights a positive correlation between female board representation and the caliber of green disclosures. This dynamic highlights the critical link between environmental health and long-term corporate viability; an enterprise's financial trajectory is deeply intertwined with the vitality of its operating environment. Therefore, securing future profitability requires proactive engagement in ecosystem preservation.

Further exploration of the literature reveals that the primary drivers of green disclosure consistently revolve around corporate architecture and ownership models. Corporate structure essentially defines the makeup of the directorial board, encompassing specific business attributes and equity distribution. Udosen and Enoidem (2022) define these corporate attributes as the distinct operational and structural traits that dictate a firm's capacity to execute strategic maneuvers. Concurrently, ownership framework is viewed as the mechanism dictating power dynamics within the business, ultimately influencing the quality of sustainability publications (Adejumo et al., 2025). While various facets of ownership have been proposed as drivers of

environmental transparency, this current investigation focuses specifically on firm scale, debt reliance, profit margins, and the professional histories of board members.

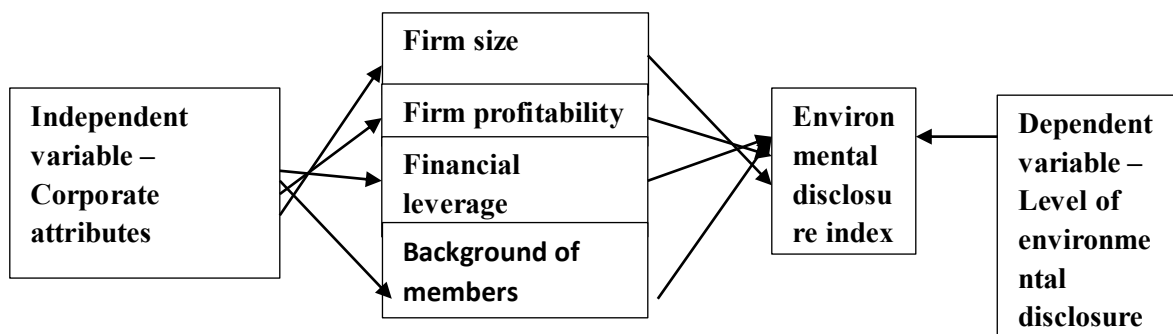
This research enriches the existing body of knowledge through several avenues. First, it establishes empirical linkages between the distinct drivers of sustainability reporting. It reinforces the reality that green transparency is not uniform but varies drastically by industry and leadership style. Crucially, this study bridges a recognized gap in the academic discourse by proving that inherent corporate characteristics fundamentally alter ecological disclosure habits. To ensure a comprehensive analysis, the professional backgrounds of corporate directors were integrated into the study as a vital determinant of transparency.

Independent Variables (Corporate Attributes):

- Firm Size
- Firm Profitability
- Financial Leverage
- Background of Members

Dependent Variable:

Level of Environmental Disclosure (Measured via Environmental Disclosure Index)



(Figure 1 - Interrelationships of variables. Source: Conceptualised by researcher, 2026).

Corporate Attributes

Organizational attributes represent the intrinsic qualities and fundamental nature that distinguish one enterprise from another. These characteristics are the foundational pillars that dictate a business's operational framework, strategic priorities, and behavioral tendencies in the market (Eduviere & Jeroh, 2025). They highlight the unique identity of the corporation. Abidoeye et al. (2024) note that the arrangement of equity ownership dramatically shapes strategic choices, heavily influencing how a company approaches technological investment, forward-thinking

innovation, and eco-friendly practices. They emphasize that institutional shareholders routinely push for heightened environmental transparency, demanding greater corporate accountability. Furthermore, Oyekale et al. (2022) maintain that robust corporate governance frameworks guarantee that sustainability reporting is handled correctly, satisfying the mounting requests from stakeholders who rely on this voluntary data to guide their investment and partnership decisions.

Publishing ecological data is no longer optional in the court of public opinion; relentless stakeholder pressure has made it a corporate necessity. Companies are heavily judged on their willingness to be green. As Khalid and Rawat (2025) report, an escalating demographic of investors now insists on granular environmental metrics—such as greenhouse gas emissions—to formulate effective business strategies and investment blueprints.

Disclosure Level of Environmental Information

Corporate operations impact the natural world through two primary mechanisms. First, businesses extract raw materials, inevitably depleting natural reserves. Second, these entities discharge finished goods and byproducts back into the ecosystem. This resulting waste—whether solid, liquid, or airborne—poses significant hazards to ecological health. Asuelimen (2024) defines environmental impact in the commercial sector as the overarching consequences of business protocols, manufacturing habits, and final products on nature, encompassing resource drain, pollutant release, and climate alteration. Consequently, society expects these corporations to initiate deliberate campaigns to heal and replenish the environment. Crucially, these remedial actions must be communicated outwardly to the public and investors via annual reports, rather than kept as internal secrets. This deliberate communication strategy is defined as environmental disclosure.

According to the Global Reporting Initiative (GRI, 2021), sustainability communication requires the methodical sharing of statistics concerning a firm's attempts to control its ecological shadow, detailing metrics like emission rates, waste generation, and disruptions to local biodiversity. Asuelimen (2024) asserts that publishing this information is vital because it broadcasts the company's future viability while neutralizing investor anxieties regarding the firm's moral compass. Nnedu et al. (2025) explain that the sustainability movement grew out of a vital need for non-financial metrics that illustrate an entity's societal footprint, proving that these disclosures are indispensable for evaluating long-term survival and ethical compliance. Arevalo et al. (2025) add that financial backers view stellar environmental stewardship as a prime

indicator of an organization's longevity, robust risk mitigation, and potential for future expansion.

Environmental Disclosure Index

To evaluate the presence and quality of ecological reporting within the financial statements of the sampled businesses, an environmental disclosure index was utilized. This measurement tool was constructed utilizing the Global Reporting Initiative (GRI) framework alongside comprehensive literature reviews. Employing this index guarantees reporting comparability and transparency across the consumer goods sector. A binary scoring system was applied: a zero (0) indicated an absence of disclosure, while a one (1) denoted comprehensive reporting on a specific metric. The scrutinized categories included emission levels, waste handling protocols, recycling initiatives, compliance adherence, financial penalties incurred, pollution mitigation strategies, and overarching ecological philosophies.

S/N	Subject	Disclosure Items
1	Environmental Disclosure Index	Carbon emissions Waste management Waste recycling Compliance policies Fines and penalties Pollution control policies Environmental policies

Table 1 - Environmental disclosure checklist

Source – Compiled by researcher, 2026.

The cumulative score for the disclosure items is calculated using the following basic formula:
Actual Score divided by Total Expected Score.

Review of Empirical Literature

A multitude of academic inquiries have explored the nexus between organizational architecture and environmental transparency, yielding diverse conclusions.

Adejumo et al. (2025) explored how equity distribution impacts sustainability reporting within Nigerian multinational corporations. Their analysis uncovered that ownership by managers, institutions, foreign entities, and families positively and significantly boosts disclosure rates, whereas state-owned shares demonstrate a notably negative correlation with sustainability transparency.

Eduviere and Jeroh (2025) assessed the link between corporate traits and green data sharing among non-financial businesses listed in Nigeria. They evaluated corporate traits using board architecture (including size, independence, and focus) and gender representation across various committees, alongside firm diversity. Tracking 75 entities over a decade (2014–2023) using logistic regression, they concluded that board structure and female committee presence drastically enhance ecological reporting. Furthermore, the operational sector heavily mediated this relationship.

Usiomon and Iyoha (2024) spent ten years analyzing the drivers of environmental transparency in the Nigerian oil and gas sector. Using an ex post facto framework based on annual reports, they measured predictors like total size, debt ratio, and profit margins. Their outcomes showed that total assets positively correlate with green reporting, financial leverage improves transparency, but net profitability lacks any meaningful statistical relationship to these disclosures.

Soomiyol et al. (2024) scrutinized how inherent characteristics shape the ecological reporting habits of Nigerian manufacturing groups. Using an ex post facto design, they tested size, returns, and leverage. Their results indicated that while a firm's age, debt, and profits exerted a negligible and negative impact, the overall size of the enterprise positively and significantly dictated its environmental transparency.

Abidoeye et al. (2024) researched how equity frameworks alter the green reporting of Nigerian industrial manufacturers. Purposively selecting 10 out of 13 listed groups and reviewing data from 2011 to 2022 via multiple regression, they discovered that foreign and executive ownership heavily fostered positive environmental communication, whereas institutional equity holdings negatively impacted these practices.

Asuelimen (2024) focused on Nigerian deposit money banks, evaluating 24 institutions. Utilizing panel binary logistics regression, the study measured traits like age, size, and profit against natural wealth reporting. Results showed that while size and returns had an inconsequential, negative link to natural wealth data sharing, the operational age of the bank fostered a highly significant, positive connection.

Almaqtari et al. (2023) confirmed that the tenure, size, and meeting frequency of independent boards correspond with superior sustainability scores and greener reporting. Their data

additionally proved that organizations boasting robust revenue surges, vast market capitalization, and elite financial performance deliver the most comprehensive ecological disclosures.

Udosen and Enoidem (2022) revealed that within the Nigerian brewery sector, the scale of operations significantly dictates environmental transparency. However, their debt ratios and profit margins yielded no meaningful impact on how much green data was published. Similarly, Matta (2017) reviewed Indian corporate environments, finding that the depth of ecological sharing is heavily tied to the presence of governmental and institutional shareholders.

Theoretical Perspective

While academics employ numerous frameworks to decode the motivations behind sustainability publishing, this investigation relies on Stakeholder Theory to contextualize how corporate traits dictate transparency. Introduced by Edward Freeman in 1984, this theory argues that commercial entities exist not solely to enrich shareholders, but must integrate the diverse needs of all stakeholders into their strategic choices. It asserts that companies have a moral duty to satisfy community requirements and publicly report their ecological footprints. Nguyen and Nguyen (2023) characterize a stakeholder as any entity or individual invested in or impacted by a corporation's operations. Alhaj and Mansor (2019) argue that immense pressure from these varied community groups compels businesses to release environmental data. Amosh and Khatib (2021) echo this, noting that transparent operational data is a primary stakeholder demand and a vital communication bridge.

Fulfilling this mandate requires the active publication of ecological data. It is entirely justified for community members to demand that corporate directors release accurate environmental performance metrics. Naturally, different stakeholder factions require varying depths of information. As Nguyen and Nguyen (2023) summarize based on this theory, intensified community pressure forces businesses to adopt stricter transparency standards, particularly regarding socio-environmental activities, to satisfy public scrutiny.

Institutional Theory, formulated by John Meyer and Brian Rowan in 1970, provides another vital lens for understanding this dynamic. It suggests that distinct societal institutions harbor unique demands regarding the publication of ecological data. This aligns with Wells and Banaszak-Hall's (2000) assertion that diverse institutional climates breed distinct corporate governance maneuvers. Ilo et al. (2025) note that this theory dictates that companies will mimic accepted societal norms to secure resources, achieve public legitimacy, and guarantee their survival.

Within the Nigerian corporate landscape, regulatory bodies, global investors, and local communities have successfully coerced businesses into detailing their green initiatives within their yearly accounts. Adejumo et al. (2025) highlight that institutional investors are at the forefront of this push, tying their capital allocation directly to the availability of sustainable data.

METHODOLOGY

Hypotheses Development

To thoroughly investigate how organizational architecture sways environmental communication, four primary hypotheses were formulated.

Firm size and environmental disclosure level

A company's magnitude is a paramount variable in determining its ecological transparency. Size translates to the total asset valuation or gross revenue generated, representing the entity's current market worth. It is a foundational pillar of market influence, economic capacity, and operational complexity, dictating a business's ability to navigate regulatory hurdles and launch strategic sustainability campaigns (Nnedu et al., 2025). Udosen and Enoidem (2022) maintain that sheer organizational scale heavily dictates strategic ecological choices.

Massive corporations face intensified public and regulatory scrutiny regarding their environmental habits. Armed with superior financial reservoirs and operational bandwidth, these giants can easily absorb the administrative costs of sustainability reporting, utilizing it as a competitive advantage. Conversely, smaller enterprises frequently lack the fiscal resources and economies of scale required to implement robust green reporting (Nnedu et al., 2025). Salawu (2024) agrees, stating that corporate behemoths possess the capital required for eco-friendly operations and enjoy higher public favor due to their expansive societal footprint. Possessing both the managerial talent and the budget to launch massive ecological restoration projects, large firms eagerly publish these achievements. Arevalo et al. (2025) also suggest that larger corporate boards harbor the diverse educational and industrial acumen needed to aggressively tackle green agendas. Hence, the initial hypothesis is:

H₀₁: There is no significant relationship between firm size and levels of environmental disclosure of consumer goods firms in Nigeria.

Firm profitability and environmental disclosure level

A firm's profit margin fundamentally influences its willingness to publish green data, primarily because financial surplus allows a company to comfortably cover the supplementary costs of this reporting. Udosen and Enoidem (2022) note that highly lucrative businesses eagerly adopt environmental transparency because their robust bottom lines easily absorb the associated expenses. When a corporation achieves stellar profit margins, its leadership is naturally incentivized to broadcast ecological data. This acts as a dual signal to the market, showcasing both their financial supremacy and their dedication to ethical corporate citizenship. Thus, the second hypothesis is:

H₀₂: Firm profitability is not significantly related to the level of environmental disclosure of consumer goods firms in Nigeria.

Financial leverage and environmental disclosure level

Leverage quantifies a business's reliance on borrowed capital to sustain its operations. Soomiyul et al. (2024) observe that debt financing often benefits a company by providing valuable tax shields. It is logical to assume that as a company assumes more debt, its investors will demand heightened operational transparency—including environmental metrics—to monitor performance. This dynamic operates on two fronts. First, creditors require robust information to ensure their capital is secure. Second, equity shareholders demand transparent data to ensure the firm remains an attractive investment. Therefore, both factions drive the need for expanded ecological reporting. Pereira et al. (2023) determined that heavy debt often correlates with sustained earnings, likely because highly leveraged firms are desperate to maintain creditor trust to secure future financing. This leads to the third hypothesis:

H₀₃: Financial leverage and levels of environmental disclosure of consumer goods firms in Nigeria are not significantly related.

Background of board members and disclosure level

The collective professional and personal histories of the board of directors profoundly impact the tone, format, and volume of ecological data released. These backgrounds encompass academic pedigrees, professional affiliations, gender, and specialized expertise. Onaji and Onmonya (2026) emphasize that a board's efficacy is tightly linked to its independence, composition, and diversity. When making environmental decisions, each director relies on their unique worldview. Consequently, executives with backgrounds sympathetic to ecological preservation will champion aggressive transparency. Historical data proves that highly independent boards provide

superior oversight, enforcing high-quality managerial choices. Onaji and Onmonya (2026) explain that while independent directors might push to minimize operational environmental risks, they concurrently demand elevated public transparency regarding those issues.

The immense value of board diversity is universally acknowledged. Xu et al. (2025) suggest that diverse leadership teams effortlessly identify innovative pathways for sustainable development. By amalgamating distinct experiences, these boards engineer creative solutions to ecological hurdles, capitalizing on green market trends. Furthermore, external stakeholders place massive trust in sustainability reports that have been vetted and authorized by a diverse, multi-disciplinary board. Therefore, the final hypothesis is:

H₀₄: There is no significant relationship between background of board membership and disclosure levels of consumer goods firms in Nigeria.

Model Development

To scientifically evaluate the established hypotheses, functional econometric models were constructed to map the interactions between variables.

$$EDL = f(CORPA) \quad (i) \quad CORPA = f(FSIZE, FPROF, FLEV, BBM) \quad (i)$$

The comprehensive econometric equation for this investigation was adapted from models previously utilized by Arevalo et al. (2025) and Udosen and Enoidem (2022): $EDL = \beta_0 + \beta_1 FSIZE + \beta_2 FPROF + \beta_3 FLEV + \beta_4 BBM + \mu$ (ii)

Where:

- EDL = Environmental disclosure level
- CORPA = Corporate attributes
- FSIZE = Firm size
- FPROF = Firm profitability
- FLEV = Firm leverage
- BBM = Background of board members
- μ = Error term capturing variables excluded from the model
- β_0 to β_4 = Coefficients determined via statistical computation

Data Collection and Analysis

This inquiry utilized an ex post facto architectural design, relying entirely on historical data extracted from the official annual publications of eight purposively selected Nigerian consumer goods enterprises. The timeframe spanned from 2013 to 2024 to capture post-meltdown economic realities. Because the data was archival, no manipulation occurred, resulting in exactly ninety-six (96) distinct observations. The analytical framework relied upon descriptive statistics paired with panel multiple regression, executed utilizing E-views 10 software.

RESULTS OF DATA ANALYSIS

The subsequent tables present the detailed outcomes of the descriptive and regression analyses.

Table 2 - Descriptive statistics results

	EDL	FSIZE	FPROF	FLEV	BBM
Mean	118.7972	28.66667	0.48516	17.95867	2.33333
Median	48.53009	66	0.50772	18.39628	0.43336
Maximum	127.8157	43.11111	2.22966	20.53172	1.44356
Minimum	9.7	9	0.03333	14.36926	0.982
Std. Dev.	21.43576	12.12625	0.2556	1.656431	0.01
Skewness	1.819558	-0.763952	2.38792	-0.35296	0.43333
Kurtosis	11.9182	1.832435	19.5608	1.957648	11.2444
Jarque-Bera	555.0335	16.81284	1485.35	7.924155	22.8556
Probability	0	0.002722	0	0.019024	0.00001
Sum	9055.667	6320	58.2196	2155.04	1485
Sum Sq. Dev.	134969.9	10946.67	7.77411	326.5079	144.011
Observations	96	96	96	96	96

Source: Researcher's computation (2026) using E-views 10.0

The data encapsulated in Table 2 reveals that the primary dependent variable (environmental disclosure level) alongside the independent predictors (firm size, returns, leverage, and board background) exhibit mean values of 118.80, 28.67, 0.485, 17.96, and 2.333, respectively. The median outputs, representing the exact midpoint of the data distributions over the examined window (2015-2024), registered at roughly 48.53, 66.00, 0.507, 18.39, and 0.433.

Regarding data dispersion, the standard deviations mapped out at 21.43 for the dependent variable, followed by 12.12, 0.255, 1.656, and 0.0100 for the independent traits, highlighting significant distribution fluctuations. Furthermore, the skewness scores—quantifying distribution asymmetry—landed at 1.819, -0.7639, 2.387922, -0.352964, and 0.433 respectively.

Panel Multiple Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	69.1721	50.4329	3.3544	0.0011
FSIZE	1.71816	0.24096	2.980445	0.0035
FLEV	-2.24778	15.407	-0.79495	0.4283
FPROF	2.588039	2.4522	3.094382	0.0025
BBM	1.024544	0.96668	0.122344	0.4322
R-squared	0.275898	Mean dependent var		58.7972
Adjusted R-squared	0.254585	S.D. dependent var		44.4358
S.E. of regression	40.85711	Akaike info criterion		10.2908
Sum squared resid	193639.2	Schwarz criterion		10.3837
Log likelihood	-613.448	Hannan-Quinn criter.		10.3285
F-statistic	8.253082	Durbin-Watson stat		1.7503
Prob(F-statistic)	0.00005			

Source: Researcher's computation (2026) using E-views 10.0

The formulated predictive equation mapping these interactions is expressed as: $EDL = 69.1721 + 0.7182(FSIZE) + 2.2478(FLEV) - 2.5880(FPROF) + 1.0245(BBM) + \mu$

This regression matrix signifies that an incremental one-unit expansion in company size correlates with a 0.72-unit swell in environmental transparency. Alternatively, a single-unit surge in debt leverage triggers a 2.25-unit decline in disclosure levels, while a one-unit spike in profit margins bolsters reporting levels by 2.59 units. Ultimately, these derived coefficients

mathematically prove that size, profits, and board diversity positively feed into sustainability reporting. Debt leverage operates negatively against transparency, potentially hinting at the superior resource efficiency and economies of scale enjoyed by massive, highly leveraged entities.

Test of Hypotheses

Hypothesis One

Evaluating the first claim (H01) at a 0.05 significance margin, the calculated T-value (2.98044) eclipses the tabulated T-value (2.1788). Consequently, the null hypothesis is invalidated. This rejection is cemented by a p-value of 0.0035, which sits comfortably below the 0.05 threshold. This statistically proves a definitive, meaningful relationship between operational scale and ecological transparency.

Hypothesis Two

Regarding the second assumption (H02), the computed T-statistic of 3.094382 easily surpasses the 2.1788 benchmark. Thus, the null hypothesis collapses. The resulting p-value of 0.0025 ($p < 0.05$) further confirms this rejection. The direct implication is a robust, positive correlation between corporate earnings and the volume of environmental data published.

Hypothesis Three

Analyzing the third postulation (H03), the T-calc (-3.09438) falls beneath the T-tab (2.1788). This forces a rejection of the null hypothesis, heavily supported by a p-value of 0.0025 ($p < 0.05$). This calculation confirms that financial leverage meaningfully dictates the depth of green reporting in the consumer goods sector.

Hypothesis Four

For the final hypothesis (H04), the resulting T-calc of 0.122344 fails to breach the T-tab threshold of 2.1788. As a result, the null hypothesis is upheld and accepted. This acceptance is validated by a p-value of 0.4322, which radically exceeds the 0.05 limit.

DISCUSSION OF FINDINGS

The statistical breakdown produced an adjusted coefficient of determination of 0.2546. This translates to the reality that 25.46% of all fluctuations in environmental transparency are directly caused by variations in corporate attributes. The remaining 74.54% variance stems from external market forces unmapped in this current model.

Firm size and levels of environmental disclosure

This research establishes a formidable, positive link between the sheer scale of a Nigerian consumer goods firm and its willingness to publish green metrics. This proves that organizational magnitude is a dominant catalyst for transparency. Larger corporate machines simply wield the administrative and financial bandwidth necessary to execute high-level environmental audits. This specific finding perfectly mirrors the conclusions drawn by Udosen and Enoidem (2022), Almaqtari et al. (2023), and Usiomon and Iyoha (2024), all of whom determined that corporate behemoths drastically outperform smaller peers in ecological reporting.

Firm profitability and environmental disclosure level

The hypothesis testing confirms an undeniable connection between a company's financial surplus and its green reporting standards. Highly lucrative consumer goods enterprises possess the fiscal flexibility to fund comprehensive environmental assessments. This outcome corroborates earlier studies by Soomiyol et al. (2024) and Almaqtari et al. (2023), who stated that booming revenue directly fuels superior sustainability communication. However, this directly contradicts Asuelimen's (2024) research, which proposed a statistically irrelevant, negative relationship between bottom-line profits and natural wealth reporting.

Firm Leverage and environmental disclosure level

The data definitively illustrates that relying heavily on debt financing significantly alters environmental disclosure habits. Because heavily leveraged organizations owe massive sums, their creditors relentlessly pressure them to maintain exhaustive transparency regarding ecological risks to safeguard capital. This aligns perfectly with Salawu (2023), who recognized that while debt dictates baseline transparency, it doesn't necessarily drive maximum commitment. Ekpulu and Iyoha (2023) also agreed that leverage forces disclosure but doesn't guarantee its quality. Conversely, Wainaina (2022) focused on how debt merely influenced the raw financial outputs of smaller businesses.

Background of board members and Environmental Sustainability

Surprisingly, the analysis proved that the varied histories of corporate directors do not noticeably sway the level of green data published. A highly diverse boardroom does not automatically guarantee superior ecological transparency. It appears that a broad spectrum of past experiences does not necessarily translate into cohesive, pro-environment board mandates. This specific deduction directly clashes with prior scholarship by Eduviere and Jeroh (2025), Adejumo et al.

(2025), and Abidoye (2024), who forcefully argued that diverse managerial and foreign ownership fundamentally enhances sustainability protocols.

CONCLUSION AND RECOMMENDATIONS

This investigation conclusively demonstrates that corporate architecture—specifically size, debt ratios, profit margins, and boardroom diversity—heavily dictates the volume of environmental data a firm publishes. Transparency regarding green initiatives is inextricably tied to these fundamental organizational pillars. The data proves beyond a doubt that massive corporations are uniquely equipped to deliver high-tier ecological reports. Furthermore, a company's debt burden acts as a catalyst, as anxious creditors forcefully lobby for heightened transparency. Profitability serves as the financial engine allowing companies to afford these comprehensive audits, while the makeup of the board room remains a vital, if complex, piece of the puzzle. Ultimately, inherent structural traits undeniably manipulate the environmental transparency of Nigerian consumer goods firms.

Based on these irrefutable conclusions, it is highly recommended that corporations aggressively pursue diverse boardroom representation to organically cultivate superior sustainability practices. Additionally, financial architects should strategically balance their debt-to-equity ratios; utilizing intelligent debt structures can effectively force management into adopting stricter ecological reporting standards. Finally, government regulators must enforce mandates requiring top-tier corporations to legally ring-fence a specific portion of their annual profits exclusively for environmental restoration, simultaneously compelling them to radically upgrade their public disclosure frameworks.

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