



EFFECT OF FIRM ATTRIBUTES ON SUSTAINABILITY REPORTING DISCLOSURE OF LISTED INDUSTRIAL GOODS FIRMS IN NIGERIA: A PROPOSED MODEL

By

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Abstract

Sustainability reporting in Nigeria remains weak, with industrial goods firms showing low compliance despite their significant environmental and social impacts. Prior studies on disclosure drivers have produced inconsistent results, focusing mainly on firm size, leverage, profitability, and age while neglecting firm growth. This study proposes a model, grounded in stakeholder theory, that integrates these five firm attributes as determinants of sustainability reporting. The model provides both a theoretical contribution by clarifying disclosure drivers and a practical relevance by emphasizing stronger regulation and corporate accountability. Future studies are encouraged to collect empirical data and test hypotheses to validate the proposed framework.

Keywords: Sustainability Reporting, firm attribute, Stakeholder theory.

1. INTRODUCTION

Sustainability reporting, often referred to as the triple bottom line, has gained global recognition as a tool to address environmental, social, and economic challenges while ensuring long-term development (Choudhuri & Chakraborty, 2009). The United Nations Assembly on Climate Change, in partnership with non-governmental organizations, issued regulations and guidelines for reporting sustainability actions and released the influential report, which motivated the study. Corporate sustainability reporting has become increasingly popular over time, particularly in industrialized nations (Klynveld Peat Marwick Goerdeler (KPMG 2013). Johari and Komathy (2019) observed that Europe had the highest sustainability disclosure rate of about forty-nine percent, followed by Asia with fifteen percent, and North America with fourteen percent. They also observed the following disclosure rate: Latin America, twelve percent (12%), Oceania, six percent (6%), and Africa, with the least disclosure rate of only four percent (4%). The low compliance and disclosure rate could be attributed to the nature of the report, which is voluntary. The nature of this report also makes the enforcement lack regulatory and legal backing. In Nigeria, it is the same scenario: low compliance and disclosure rate of social and environmental issues among firms in the community where they operate (Adeniyi & Fadipe 2018; Awodiran 2019).

In Nigeria, sustainability is not as novel as some think it is. This is supported by the introduction of agencies such as the Federal Environmental Protection Agency (FEPA) in 1988 and the National Environmental Standards and Regulation Enforcement Agency (NESREA) in 2007 to strengthen environmental regulations in Nigeria (Collins, 2009). However, the implementation and recognition of sustainability reporting or corporate social and environmental reporting is comparatively new but is becoming prominent in annual reports of Nigerian companies today (Akinlo & Iredele, 2014).



Nigeria's industrial goods sector, especially cement producers such as Dangote Cement Plc, BUA Cement Plc, and Lafarge Africa Plc, continues to generate significant environmental externalities, undermining the country's sustainable development goals. These companies operate in highly energy-intensive industries where cement production alone is estimated to contribute more than 60% of industrial carbon dioxide emissions (Abubakar et al., 2021). In practice, host communities surrounding cement plants experience high levels of dust emissions, particulate matter, and noise pollution that threaten public health and agricultural productivity. For example, residents in Okpella, Edo State, where BUA Cement and Dangote Cement both operate, have reported severe air pollution characterized by silica dust, which has been linked to respiratory diseases, eye irritation, and impaired visibility (Nigeria Grassroot News, 2023). Similarly, research on the Ibese plant of Dangote Cement Plc in Ogun State found that cement dust had contaminated groundwater, reduced soil fertility, and caused a rise in diarrheal diseases among local residents (Ojo & Oguntimehin, 2018). These realities underscore the intensity of industrial pollution in the cement sector, where economic expansion is pursued at the expense of environmental stewardship and community health.

Despite Nigeria's comprehensive legal framework for environmental protection, including the NESREA Act, the Environmental Impact Assessment (EIA) Act, and regional regulations, industrial firms still show weak compliance.

The National Environmental Standards and Regulations Enforcement Agency (NESREA, 2022) report major gaps in monitoring and enforcement, highlighting issues such as underfunding, political interference, and limited institutional capacity to regulate large multinational firms. Industrial clusters in Ogun, Kogi, and Edo states, where these cement plants are concentrated, have become hotspots for industrial waste discharge, greenhouse gas emissions, and ecological damage. This situation reveals a systemic failure in governance to balance industrial growth with environmental responsibility. For communities near these factories, the impacts include deteriorating public health, loss of arable land, and contaminated water, underscoring the urgent need for stricter environmental compliance by industrial firms.

Beyond cement production, other industrial goods firms in Nigeria also contribute significantly to environmental degradation through poor waste management, chemical discharges, and unsustainable production practices. For example, Beta Glass Plc, which operates glass manufacturing plants in Agbara (Ogun State) and Ughelli (Delta State), has been reported for releasing industrial effluents into nearby rivers, contaminating water sources and endangering aquatic life (Federal Ministry of Environment, 2020). Similarly, Cutix Plc, a leading cable and wire manufacturing company in Anambra State, has faced criticism from environmental regulators and local communities over improper disposal of heavy-metal-containing waste such as copper residues and plastic byproducts, which pose risks of soil contamination and long-term health hazards (NESREA, 2022). Other firms like Premier Paints Plc and Paints and Coatings Manufacturers Plc contribute to pollution through volatile organic compound (VOC) emissions, which degrade air quality and exacerbate urban smog in industrial clusters.

The above cases illustrate how industrial goods companies beyond cement also generate localized pollution problems that threaten environmental quality and community well-being. Therefore, increasing Sustainability reporting Disclosure among listed industrial goods firms can bridge the gap among the host communities and companies that operate within. Hence the situation 1 requires comprehensive model to investigate the effect of firm specific attribute on the sustainability reporting disclosure of listed industrial goods in Nigeria. The next section of the paper provides summary of related literature



review to guide the development of the proposed model of the study. Section three discusses the development of the proposed mode which is based on Stakeholders and Legitimacy theories. The section also discusses the contribution of the study to corporate sustainability reporting. The final section provides a conclusion of the paper.

2. LITERATURE REVIEW

Empirical evidence on firm attributes and sustainability reporting in Nigeria has been largely inconsistent, creating a clear findings gap. For instance, Uwuigbe, Uwuigbe, and Ajayi (2020) reported that firm size positively and significantly influences sustainability reporting among Nigerian listed firms. In contrast, Olayinka and Temitope (2021) argued that firm age does not significantly affect sustainability practices. Similarly, Okafor et al. (2021) found leverage to have a negative impact on sustainability reporting, noting that highly indebted firms disclose less to avoid scrutiny. On the other hand, Nnamani and Ajibo (2022) concluded that leverage was insignificant, implying that financial pressure may not always influence reporting behavior. Equally, while Oluwagbemiga and Ayodele (2023) observed that profitability encourages higher disclosure, Abubakar and Nasiru (2023) found no significant link between profitability and sustainability reporting. These divergent results indicate that the relationship between firm attributes and sustainability reporting in Nigeria is not settled, hence a clear gap exists that justifies further inquiry.

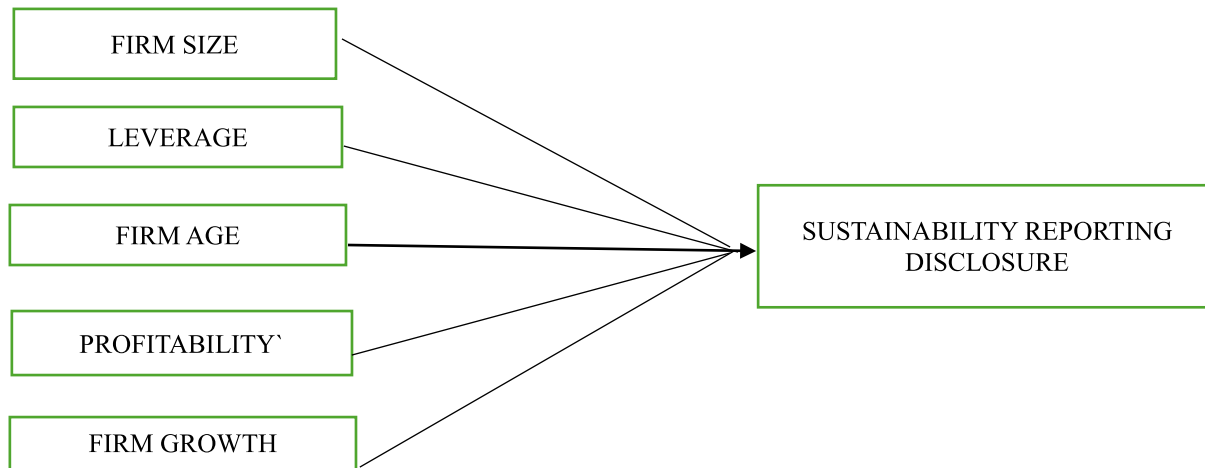
A further gap in Nigerian literature on sustainability reporting lies in the neglect of firm growth as an explanatory variable. Most studies have concentrated on firm attributes such as size, leverage, profitability, age, and ownership structure (Uwuigbe et al., 2020; Olayinka & Temitope, 2021; Adegbe & Oyewo, 2022; Oluwagbemiga & Ayodele, 2023), while overlooking the potential effect of firm growth. In contrast, evidence from outside Nigeria shows that growth-oriented firms tend to disclose more sustainability information. For example, Li and Zhang (2021) in China and Khan and Ahmed (2022) in Pakistan found that high-growth firms increase their sustainability disclosures to attract capital, manage investor expectations, and enhance legitimacy in competitive markets. The omission of firm growth from Nigerian studies is significant because industrial goods firms often expand aggressively in terms of sales, assets, and market coverage, which could influence how they approach sustainability reporting. Therefore, by not including firm growth, prior Nigerian studies leave an important variable gap that new research can address.

Another critical gap in the literature arises from the limited attention given to industrial goods firms in Nigeria, despite their significant environmental and social impacts. Prior studies have largely focused on financial institutions, such as banking, insurance, and oil and gas sectors (Onyali & Okafor, 2020; Okafor et al., 2021; Abubakar & Nasiru, 2023), mainly because of their regulatory exposure and disclosure requirements. However, industrial goods firms, including cement, construction, steel, and chemical companies, are among the largest contributors to Nigeria's carbon emissions, waste generation, and environmental degradation. From the aforementioned studies, it has been clearly shown that there is a need for a study that will combine all the variables on a single model and test the validity of Sustainability reporting in Nigeria.

3. PROPOSED MODEL AND CONTRIBUTION

The current study proposed a model to investigate the effect of firm attributes on sustainability reporting disclosure of listed industrial goods firms in Nigeria. The model consists of 5 variables that will be used to check their influence on sustainability reporting in Nigerian listed industrial firms. The variables

consist of firm size, leverage, firm age, profitability, and firm growth as firm attribute variables to sustainability reporting. Figure 3.1 represents the model of the study.



4. THEORITICAL FRAMEWORK

Stakeholder Theory, originally proposed by R. Edward Freeman in 1984, provides a framework for understanding how firms operate within a network of relationships involving various stakeholders, not just shareholders, but also employees, customers, suppliers, communities, regulators, and others affected by the firm's actions. The central idea of the theory is that a business should create value for all its stakeholders, not merely maximize profits for owners. Freeman argued that the long-term success and legitimacy of an organization depend on how well it manages these stakeholder relationships through accountability, transparency, and ethical practices.

In the context of Sustainability Reporting Disclosure (SRD), stakeholder theory is particularly relevant, as SRD serves as a communication tool that helps firms demonstrate their environmental, social, and governance (ESG) performance to stakeholders. Various firm attributes can influence how and why companies engage in SRD. For instance, larger firms face more public scrutiny and thus are more likely to disclose sustainability information. Highly leveraged firms may use SRD to reassure creditors and reduce perceived financial risk. Older firms tend to have established reputations and long-term stakeholder relationships, prompting them to sustain legitimacy through comprehensive reporting. Profitable firms often have the resources to invest in sustainability initiatives and use SRD to showcase responsible performance. Similarly, growing firms face expanding stakeholder expectations and adopt SRD to build trust and support. Overall, stakeholder theory explains how these firm attributes drive sustainability reporting as a strategy to manage stakeholder relationships and enhance corporate legitimacy.

5. CONCLUSION

This paper examined the influence of firm-specific attributes on sustainability reporting disclosure among listed industrial goods firms in Nigeria, filling gaps in the literature and advancing the discussion on corporate transparency. The review revealed inconsistencies in previous findings regarding the effects of firm size, leverage, profitability, and age, while also highlighting the neglect of firm growth as a key omission. To address this gap, the study proposed a comprehensive model based on stakeholder theory, including five firm attributes: size, leverage, age, profitability, and growth, as factors influencing sustainability disclosure. This model underscores the significance of industrial goods firms, which,



despite their considerable environmental and social impacts, have received limited scholarly attention. By offering a theoretical framework, the study contributes to ongoing debates and provides a foundation for regulators, corporate managers, and investors to better understand how firm characteristics influence sustainability reporting practices.

The contribution of this study is two-fold. Theoretically, it enriches sustainability reporting literature by advancing a multidimensional model that explains the drivers of disclosure practices in the Nigerian industrial goods sector. Practically, it highlights the urgent need for policymakers, regulators, and firms to prioritize sustainability reporting, not only as a compliance mechanism but also as a tool for fostering accountability, legitimacy, and long-term stakeholder trust.

Future research should focus on empirically testing the proposed model by collecting primary and secondary data from listed industrial goods firms in Nigeria. Specifically, scholars are encouraged to formulate testable hypotheses that link firm size, leverage, profitability, age, and growth to the level of sustainability reporting disclosure. Longitudinal data analysis would also provide valuable insights into how these relationships evolve, particularly in response to changes in regulatory frameworks and market expectations.

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