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## FIRM AGE, FIRM SIZE AND ENVIRONMENTAL, SOCIAL AND GOVERNANCE DISCLOSURE IN NIGERIA

### ABSTRACT

*This study examines the effect of firm-specific characteristics on Environmental, Social, and Governance (ESG) disclosure among companies listed on the Nigerian Exchange Group. Drawing on legitimacy and stakeholder theories, the study focuses on firm size and firm age as key explanatory variables, while controlling for profitability. Using panel data from 41 listed firms over the study period, panel regression techniques are employed, including pooled ordinary least squares (OLS), random effects (RE), and fixed effects (FE) models. Post-estimation diagnostics indicate that the fixed effects model, corrected using panel-corrected standard errors (PCSE), provides the most appropriate specification. The empirical findings reveal a strong and positive relationship between firm size and ESG disclosure, suggesting that larger firms are more responsive to stakeholder pressure and regulatory expectations. Conversely, firm age exhibits a negative and statistically significant effect on ESG disclosure in the fixed effects models, indicating that older firms may rely more on established reputational capital rather than expanding sustainability reporting practices. Therefore, the results highlight that while firm size aligns with global evidence as a key driver of ESG disclosure, firm age displays contrasting effect in the Nigerian context. The study contributes to the limited literature on ESG disclosure in emerging markets and provides relevant insights for policymakers, investors, and corporate managers seeking to strengthen sustainability reporting practices in Nigeria.*

**Keywords:** Environmental Social and Governance (ESG) Disclosure, Firm Size, Firm Age, Nigeria

### Introduction

The history of Environmental, Social, and Governance (ESG) is traceable back to the long-standing literature on Corporate Social Responsibility (CSR) (Husted & De Sousa-Filho, 2018). Consequently, the emergence of CSR in the business sphere has resulted in the generation of the ESG criteria notion. In recent years, ESG has become an issue of vital interest to individual and institutional shareholders, communities, regulators, suppliers, and employees (Brovo & Reguera-Alvarado, 2019). Hence, matters relating to ESG are crucial in today's business environment. Given the increasing attention on sustainability and the societal impact of investing, Caporale, Gil-Alana and Plastum (2022) noted that ESG analysis has become a vital part of business investment. In the early period of 2018, around \$11.6 trillion was available in the ESG incorporated Assets under Management (AuM) in the United States (Trends, 2018).

Similarly, backdated to December 2016, AuM in Europe's socially responsible investment (SRI) amounted to about 11 trillion euros, indicating an increase of 110% compared to its value in 2013. There has been a significant rise in the influx of such funds over the passage of every year. The proof is an increase in the subsequent year, 2017. A report shows that the AuM in Europe had reached about 25.2 trillion Euros (European Fund and Assets under Management Association [EFAMA] n.d.). Thus, it is reliable to state that ESG integration in the investment process is snowballing.

Again, the Global Sustainable Investment Alliance (2018) reported that ESG integration in SRI has moved from fourth to third place, and the AuM that used this strategy expanded by 60%. Thus, achievements in adopting sustainability reporting, including ESG, remain consistent and reliable for the US's largest and most influential companies. This achievement is visible as 86% of S&P 500 companies had already embraced sustainability reporting in 2018, which was only 20% in 2011 (Governance and Accountability, 2020).

More recently, Morgan Stanley Capital International surveyed 200 institutions with assets worth about \$18 trillion and found that up to 77% of investors increased ESG investment either significantly or moderately (Caporale et al., 2022); according to Yu, et al (2018), ESG investing supports the notion that firms are environmentally friendly, socially conscious, and have strong corporate governance. As a result, such firms are better positioned to take advantage of future opportunities and avoid potential risks than non-ESG firms. Nevertheless, it is essential to note that apart from just investors, other categories of stakeholders also require ESG reports from companies to make informed decisions.

Nigeria is experiencing a growing regulatory and market-driven shift toward enhanced environmental, social, and governance (ESG). The Financial Reporting Council of Nigeria has introduced a phased road map toward compulsory ESG disclosure, while the adoption of IFRS S1 and S2 sustainability disclosure standards is currently in a voluntary implementation phase from 2024 to 2027. The financial services sector leads ESG integration and reporting practices, with major banks demonstrating structured and transparent sustainability disclosures, while the oil and gas sector is progressively adapting in response to the Petroleum Industry Act 2021 and international investor expectations. There are many factors could affect ESG disclosure in different countries. However, there is paucity of research in the Nigerian context in this area. Therefore, this study was undertaken to achieve the following objectives: (i) examine the effect of firm size on ESG disclosure in Nigeria and (ii) determine the effect of firm age on ESG disclosure in Nigeria.

## **Literature Review and Hypotheses Development**

There have been many studies on ESG disclosure in both developed and developing economies, see for example (Dicko, Khemakhem & Zogning, 2019; Alazzani, Wan-Hussin & Jones, 2019; Manita, Bruna, Dang & Houanti, 2018; Chong, Ong & Tan, 2018; Aboud & Diab, 2018; Friede, Busch & Bassen, 2015). However, despite these studies and the increasing rate of ESG disclosure globally, there is still a need to understand whether or not firms' size and age affect ESG disclosure in the Nigerian context. Large companies are typically long-established, having operated for many years. Such older firms tend to possess greater legitimacy and well-developed goodwill, and they are more likely to engage in societal responsibilities, which in turn motivates more extensive ESG disclosure. In addition, their substantial capital bases and extensive branch networks heighten public visibility, prompting these firms to seek organisational legitimacy through increased engagement in, and disclosure of, ESG-related activities. Large companies are typically long-established, having operated for many years. Such older firms tend to possess greater legitimacy and well-developed goodwill, and they are more likely to engage in societal responsibilities, which in turn motivates more extensive ESG disclosure. In addition, their substantial capital bases and extensive branch networks heighten public

visibility, prompting these firms to seek “organisational legitimacy” (Tamimi & Sebastianelli, 2017) through increased engagement in, and disclosure of, ESG-related activities. Such companies disclose more ESG information than mid-capital companies. For example, Giannarakis (2014) found that firm size is positively associated with the extent of CSR disclosure. In the same vein, Drempetic, Klein, and Zwergel (2019) and Baldini et al. (2016) document that firm size positively affects ESG disclosure. Therefore, this study hypothesises that:  $H_{01}$  firm size does not have significant effect on ESG disclosure in Nigeria and  $H_{02}$  firm age does not have significant effect on ESG disclosure in Nigeria.

## Methodology

The sample size of this study consisted of 41 companies listed on the Nigerian Exchange Group, selected based on the availability of ESG data. The data were analysed using panel regression, where the fixed effect model was selected as the most appropriate model for the data set. Post estimation tests were carried out, and the FE model was corrected using panel corrected standard errors, as seen in the regression result below.

## Model Specification

To examine the effects of firm size and age on ESG disclosure the study specifies the following panel regression model:

$$ESGD_{it} = \beta_0 + \beta_1 FSIZE_{it} + \beta_2 FAGE_{it} + \beta_3 ROA_{it} + \mu_i + \varepsilon_{it}$$

where:

- \*  $ESGD_{it}$  represents the ESG disclosure score of firm i at time t;
- \*  $FSIZE_{it}$  is firm size, measured as the natural logarithm of total assets;
- \*  $FAGE_{it}$  denotes firm age, measured as the number of years since listing;
- \*  $ROA_{it}$  is return on assets, included as a control variable for profitability;
- \*  $\beta_0$  is the intercept term;
- \*  $(\beta_1, \beta_2, \beta_3)$  are the coefficients of the explanatory variables;
- \*  $\mu_i$  captures unobserved firm-specific effects; and
- \*  $\varepsilon_{it}$  is the idiosyncratic error term.

## Results and Discussion

### Regression Results

| Variable    | OLS<br>esg_d         | RE<br>esg_d           | FE<br>esg_d           | FE(PCSE)<br>esg_d    |
|-------------|----------------------|-----------------------|-----------------------|----------------------|
| firmsizelog | 4.027***<br>(0.510)  | 4.815***<br>(1.002)   | 18.52***<br>(2.847)   | 18.52***<br>(5.007)  |
| firmage     | 0.0334<br>(0.0365)   | -0.0744<br>(0.0663)   | -0.830***<br>(0.142)  | -0.830***<br>(0.255) |
| Roa         | -0.00746<br>(0.0330) | -0.0722**<br>(0.0298) | -0.111***<br>(0.0295) | -0.111*<br>(0.0553)  |
| Constant    | 18.50***<br>(3.871)  | 16.39**<br>(7.502)    | -57.01***<br>(18.13)  | -57.01*<br>(29.98)   |
| Obs         | 437                  | 437                   | 437                   | 437                  |
| R-squared   | 0.130                |                       | 0.125                 | 0.125                |
| No. of f_id |                      | 41                    | 41                    | 41                   |

The empirical results provide new insights into the relationship between firm characteristics (size and age) and ESG disclosure among Nigerian listed companies. Using OLS, random effects, and fixed effects specifications, with further corrections for panel-specific heteroskedasticity and serial correlation, two core findings emerge.

First, firm size shows a strong and consistent positive association with ESG disclosure. Across all models, the coefficients remain statistically significant, though the magnitude varies. In the pooled (OLS) and random effects estimations, the effect of firm size is positive and moderate, while in the fixed effects models, the effect becomes substantially larger. This suggests that within-firm increases in size over time are accompanied by a strong rise in ESG disclosure, reinforcing the idea that larger firms experience greater pressure from stakeholders and regulators to be transparent. This finding is consistent with prior studies. For example, Giannarakis (2014), Drempetic, Klein, and Zwergel (2019), and Baldini et al. (2016) found a similar positive relationship between firm size and CSR/ESG disclosure in different contexts. Tamimi and Sebastianelli (2017) also argue that large firms, due to their visibility and legitimacy concerns, are more inclined to adopt ESG disclosure as a signalling strategy. Thus, the Nigerian evidence supports the international literature by confirming that larger firms in emerging markets, much like their global counterparts, disclose significantly more ESG information.

Second, firm age demonstrates a negative and statistically significant effect on ESG disclosure in the fixed effects models, though no clear relationship emerges in OLS and random effects estimations. This implies that while cross-sectional variation may mask the role of age, within-firm changes over time reveal that older firms tend to disclose less ESG information. This contradicts the expectation that older firms, having accumulated legitimacy and reputational capital, would disclose more ESG information (as suggested by legitimacy theory). Some earlier studies report a positive relationship between firm age and disclosure (e.g., Haniffa & Cooke, 2005; Reverte, 2009), because older firms are under pressure to maintain social contracts with stakeholders. However, the negative effect observed here aligns with the argument of Ntim and Soobaroyen (2013), who found that older firms may become complacent, relying on established reputation rather than engaging actively in new disclosure practices. In the Nigerian context, this may reflect a situation where mature firms focus more on

financial stability and rely on brand recognition, while younger firms may be more aggressive in adopting ESG disclosure as a competitive and legitimacy-enhancing tool.

In addition to the above, the control variable (ROA) is also negatively associated with ESG disclosure. While insignificant in the pooled model, both the random effects and fixed effects results confirm a statistically significant negative effect. This suggests that highly profitable firms may feel less need to rely on ESG disclosure to attract investors or legitimise operations, possibly because strong financial performance already serves as a signal of corporate strength. These results are consistent with the findings of Alotaibi and Hussainey (2016), who noted that in certain emerging markets, profitable firms tend to emphasise financial performance over non-financial disclosures. The negative relationship in the Nigerian case may be explained by differences in institutional pressures, regulatory enforcement, and market maturity, where profitability reduces rather than increases the incentive to engage in ESG disclosure.

Therefore, the findings suggest that firm-specific characteristics matter for ESG disclosure in Nigeria, but the patterns are not always consistent with expectations from developed economies. While firm size follows the global evidence and supports legitimacy and stakeholder theories, the effects of firm age diverge from conventional assumptions. Age appears to reduce disclosure intensity, pointing to the unique dynamics of disclosure practices in emerging markets.

## Conclusion

This study set out to examine the influence of firm age, firm size, and profitability on ESG disclosure among companies listed on the Nigerian Exchange Group. Using panel regression techniques, with the fixed effects model (and its correction for panel-specific standard errors) identified as the most appropriate specification, the results provide clear evidence that firm-specific characteristics matter in explaining disclosure behaviour of firms.

The findings reveal that firm size is a consistent and positive driver of ESG disclosure. Larger firms are more likely to engage in sustainability reporting, reflecting their greater visibility, resource capacity, and heightened exposure to stakeholder scrutiny. This outcome aligns with the broader international literature, confirming that size remains one of the most reliable determinants of ESG disclosure across different contexts.

In contrast, firm age displays a negative relationship with ESG disclosure once unobserved heterogeneity is controlled for. Older firms appear to disclose less ESG information, which may indicate a reliance on established legitimacy rather than a proactive approach to transparency. This challenges earlier assumptions in the literature that maturity fosters greater disclosure and suggests that in Nigeria, younger firms may be more motivated to adopt ESG reporting as a means of building reputation and securing investor confidence.

Therefore, the study underscores that ESG disclosure in Nigeria is shaped by firm-specific dynamics, but in ways that do not always conform to established global patterns. While size emerges as a robust determinant, age and profitability exhibit contrasting effects that reflect the institutional, regulatory, and cultural realities of the Nigerian market. These results contribute to the limited but growing body of literature on ESG practices in Africa, offering valuable insights for regulators, investors, and corporate managers.

### *Acknowledgements*

*We wish to acknowledge and thank the Tertiary Education Trust Fund (TETFund) for sponsoring this study.*

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