Influence of CEO Demographics on Sustainability Reporting in Kenyan Listed Companies: The Moderating Role of Foreign Ownership

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Abstract

Purpose: The purpose of this study was to examine the influence of CEO demographic attributes on sustainability reporting among companies listed on the Nairobi Securities Exchange (NSE), with foreign ownership considered as a moderating variable.

Methodology: The study adopted an explanatory research design and used secondary panel data drawn from annual reports, sustainability reports, corporate governance disclosures, and ownership records of 58 NSE-listed companies covering the period 2019-2024. CEO age, gender, education, and tenure were treated as independent variables, sustainability reporting as the dependent variable, and foreign ownership as the moderator. Firm age, firm size, and firm value were included as control variables. Data were analyzed using descriptive statistics, diagnostic tests, correlation analysis, and hierarchical moderated regression.

Findings: The results showed that CEO age had a significant negative effect on sustainability reporting ($\beta = -0.0138$, $p = .002$), while CEO gender had a significant positive effect ($\beta = 0.2809$, $p < .001$). CEO education ($\beta = 0.0096$, $p = .824$) and CEO tenure ($\beta = 0.0008$, $p = .875$) were not significant direct predictors. Foreign ownership significantly moderated the relationships between CEO age and sustainability reporting ($\beta = 0.0241$, $p = .007$), CEO gender and sustainability reporting ($\beta = -0.4228$, $p = .003$), and CEO education and sustainability reporting ($\beta = 0.1934$, $p = .019$). The moderating effect of foreign ownership on the CEO tenure-sustainability reporting relationship was not significant ($\beta = 0.0131$, $p = .151$).

Conclusion: The study concludes that CEO age and gender are important leadership attributes in explaining sustainability reporting among Kenyan listed firms, while foreign ownership conditions the effect of selected CEO attributes on disclosure behavior.

Value: The study contributes to corporate governance and sustainability reporting literature by providing emerging-market evidence on how CEO demographics and external ownership pressure jointly shape sustainability disclosure practices.

Keywords: CEO demographics; sustainability reporting; foreign ownership; corporate governance; Nairobi Securities Exchange; Kenya

1. Introduction

Sustainability reporting has become a central component of modern corporate governance because it enables companies to communicate their environmental, social, and governance (ESG) practices to investors, regulators, employees, customers, and the wider society. Unlike traditional financial reporting, sustainability reporting captures non-financial dimensions of performance that affect long-term value creation, legitimacy, risk management, and stakeholder trust (Elkington, 1997; Ioannou & Serafeim, 2017). In emerging markets, sustainability reporting is especially important because firms often face growing pressure to demonstrate transparency while operating in institutional environments where reporting practices may still be developing (Waweru, 2020).

In Kenya, companies listed on the Nairobi Securities Exchange (NSE) operate in a governance environment shaped by increasing regulatory attention to ESG disclosure, stakeholder accountability, and investor protection. The Capital Markets Authority has promoted corporate governance and sustainability disclosure practices among listed firms, encouraging alignment with international frameworks such as the Global Reporting Initiative (GRI) and integrated reporting principles (Capital Markets Authority [CMA], 2021). Despite these efforts, sustainability reporting among NSE-listed companies remains uneven, with some firms producing extensive ESG disclosures while others provide limited or inconsistent information. This variation suggests that regulatory pressure alone may not fully explain sustainability reporting behavior.

One important explanation may lie in the role of corporate leadership. Upper Echelons Theory argues that organizational outcomes reflect the values, experiences, and cognitive bases of top executives (Hambrick & Mason, 1984). The CEO occupies a strategic position in shaping corporate priorities, allocating organizational resources, and determining how strongly sustainability is embedded in reporting and governance systems. CEO demographic attributes such as age, gender, education, and tenure may therefore affect the extent to which sustainability reporting is prioritized. For example, CEO age may influence risk preference and strategic orientation; CEO gender may shape stakeholder sensitivity and ethical emphasis; CEO education may affect understanding of ESG and reporting frameworks; and CEO tenure may influence openness to change or attachment to existing practices (Finkelstein et al., 2009; Huang, 2013; Oware & Awunyo-Vitor, 2021).

Foreign ownership adds another important dimension to this relationship. Foreign shareholders, particularly institutional investors, often bring expectations associated with international governance standards, investor scrutiny, and ESG transparency (Cheng et al., 2014; El Ghoul et al., 2016). In emerging markets, foreign ownership can strengthen monitoring and reduce information asymmetry by pressuring managers to disclose more complete and comparable sustainability information. At the same time, foreign ownership may alter how CEO attributes translate into sustainability reporting outcomes. For instance, the experience of older CEOs or the knowledge of highly educated CEOs may become more influential when foreign investors demand stronger disclosure. Conversely, foreign investor priorities may constrain or redirect the effect of some leadership characteristics.

Although CEO demographics and sustainability reporting have been studied in several international contexts, limited empirical attention has been given to the interaction between CEO demographic attributes and foreign ownership in Kenya. This study addresses that gap by examining the influence of CEO age, gender, education, and tenure on sustainability reporting among NSE-listed firms and by testing whether foreign ownership moderates these relationships. The study is guided by the following general objective: to determine the moderating effect of foreign ownership on the relationship between CEO demographic attributes and sustainability reporting among NSE-listed firms in Kenya.

2. Theoretical Review

2.1 Upper Echelons Theory

Upper Echelons Theory (UET), advanced by Hambrick and Mason (1984), provides the main theoretical foundation for this study. The theory argues that organizational outcomes are partially predicted by the demographic characteristics of top executives because such characteristics reflect executives' values, experiences, knowledge, and cognitive frames. In the context of sustainability reporting, UET implies that CEO demographic attributes can shape the extent to which firms recognize ESG issues, allocate resources to sustainability systems, and disclose non-financial information to stakeholders.

CEO age, gender, education, and tenure are therefore treated as observable indicators of strategic orientation. Older CEOs may rely on experience and established routines, but they may also become more conservative in adopting new disclosure practices. Female CEOs may be more stakeholder-oriented and more responsive to social and environmental concerns. CEOs with higher education may better understand complex reporting frameworks and long-term sustainability risks. Long-tenured CEOs may either use accumulated firm knowledge to support disclosure or resist change because of attachment to established practices.

2.2 Agency Theory

Agency Theory explains the potential conflict between managers and shareholders when managers possess more information than owners and may act in ways that do not fully align with shareholder interests (Jensen & Meckling, 1976). Sustainability reporting can reduce information asymmetry by disclosing ESG-related risks, policies, and performance. In this study, Agency Theory is useful for explaining the moderating role of foreign ownership because foreign investors may act as external monitors who demand more transparent corporate disclosures.

Foreign ownership may strengthen accountability by increasing pressure on CEOs to follow international governance and reporting expectations. As a result, CEO demographic attributes may have different effects on sustainability reporting depending on the degree of foreign ownership. In firms with higher foreign ownership, CEOs may face stronger incentives to disclose sustainability information and align reporting practices with global standards.

2.3 Stakeholder Theory

Stakeholder Theory argues that firms must consider the interests of multiple stakeholder groups rather than focusing only on shareholders (Freeman, 1984). Sustainability reporting is one mechanism through which firms demonstrate accountability to stakeholders affected by corporate activities. For listed firms, stakeholders include investors, regulators, customers, employees, local communities, and international partners.

Foreign investors are treated in this study as powerful external stakeholders who may influence disclosure expectations. Their presence can intensify pressure for transparent ESG reporting and may interact with CEO characteristics in shaping sustainability reporting outcomes. Stakeholder Theory therefore complements Upper Echelons Theory and Agency Theory by explaining why external stakeholder expectations can influence how leadership attributes are translated into disclosure decisions.

3. Empirical Review and Hypotheses Development

3.1 CEO Age and Sustainability Reporting

CEO age has been widely considered an important demographic characteristic because it can influence decision-making style, risk appetite, innovation orientation, and strategic horizon. Some studies suggest that older CEOs may be more conservative and less likely to adopt emerging sustainability practices, particularly where such practices require new investments, reporting systems, or organizational change (Huang, 2013; Makkonen, 2022). From this view, older CEOs may prioritize financial stability and compliance over voluntary or comprehensive ESG disclosure.

However, other studies suggest that older CEOs may value reputation, legitimacy, and legacy, which can encourage stronger sustainability disclosure. The direction of the relationship may therefore depend on institutional context and external pressure. In Kenya, where sustainability reporting is still evolving among listed companies, CEO age may affect how firms respond to ESG disclosure demands. Accordingly, the first hypothesis is stated as follows:

H1: CEO age has a significant effect on sustainability reporting among NSE-listed firms.

3.2 CEO Gender and Sustainability Reporting

CEO gender is frequently associated with differences in leadership priorities, stakeholder sensitivity, and ethical orientation. Prior research has linked female leadership with stronger corporate social responsibility, greater transparency, and increased attention to social and environmental outcomes (Bear et al., 2010; Fernandez-Feijoo et al., 2014; Glass et al., 2016). Female CEOs may be more likely to support sustainability reporting because such reporting reflects accountability, long-term orientation, and engagement with diverse stakeholders.

In many emerging markets, including Kenya, women remain underrepresented in top executive positions. This makes the effect of CEO gender particularly important because even a small increase in female leadership may influence the visibility and quality of sustainability disclosures. Based on this reasoning, the second hypothesis is proposed as follows:

H2: CEO gender has a significant effect on sustainability reporting among NSE-listed firms.

3.3 CEO Education and Sustainability Reporting

CEO education may influence sustainability reporting by shaping knowledge, analytical capacity, and awareness of non-financial reporting frameworks. Executives with higher levels of education may be better equipped to understand the strategic implications of ESG disclosure, stakeholder accountability, and long-term value creation (Finkelstein et al., 2009; Liu, 2018). Education in business, law, environmental management, or sustainability-related fields may also increase familiarity with reporting standards and governance expectations.

Nevertheless, education alone may not be sufficient to drive sustainability reporting because disclosure behavior can also be shaped by organizational culture, resources, regulation, and investor pressure. In Kenya, where sustainability reporting is developing, the CEO’s level of education may influence disclosure decisions but may require supportive ownership and institutional conditions. The third hypothesis is therefore stated as follows:

H3: CEO education has a significant effect on sustainability reporting among NSE-listed firms.

3.4 CEO Tenure and Sustainability Reporting

CEO tenure refers to the number of years a CEO has served in office. Longer tenure may provide firm-specific knowledge, networks, and authority that can support sustainability initiatives. However, longer-tenured CEOs may also become attached to established practices and less willing to adopt new reporting frameworks or governance innovations (Chen, 2017; Ghardallou, 2022). Shorter-tenured CEOs may be more willing to introduce sustainability reporting as part of reputation building and strategic renewal.

The literature therefore presents mixed expectations regarding CEO tenure. The Kenyan listed-firm context provides an opportunity to assess whether tenure contributes to sustainability reporting or whether other forces are more important. The fourth hypothesis is stated as follows:

H4: CEO tenure has a significant effect on sustainability reporting among NSE-listed firms.

3.5 Moderating Role of Foreign Ownership

Foreign ownership refers to the proportion of company shares held by foreign investors. Foreign owners may influence corporate disclosure by demanding stronger governance, comparability, and compliance with international ESG standards (Cheng et al., 2014; El Ghoul et al., 2016). In emerging markets, foreign shareholders can act as external monitors and may push firms to improve transparency and reduce information asymmetry.

The moderating role of foreign ownership is central to this study because it may change the strength or direction of the relationship between CEO demographics and sustainability reporting. Foreign ownership may strengthen the influence of CEO experience, education, or stakeholder orientation by creating external pressure for more comprehensive disclosure. At the same time, foreign investors may prioritize financial returns and may therefore weaken some leadership-driven sustainability effects. The moderation hypotheses are stated as follows:

H5a: Foreign ownership significantly moderates the relationship between CEO age and sustainability reporting among NSE-listed firms.

H5b: Foreign ownership significantly moderates the relationship between CEO gender and sustainability reporting among NSE-listed firms.

H5c: Foreign ownership significantly moderates the relationship between CEO education and sustainability reporting among NSE-listed firms.

H5d: Foreign ownership significantly moderates the relationship between CEO tenure and sustainability reporting among NSE-listed firms.

4. Research Methodology

4.1 Research Design

The study adopted an explanatory research design to test the influence of CEO demographic attributes on sustainability reporting and to determine the moderating effect of foreign ownership. An explanatory design was appropriate because the study examined directional relationships among specified variables and tested hypotheses using quantitative secondary data (Saunders et al., 2019).

The study was based on panel data covering the period 2019-2024. This period was appropriate because it allowed the study to capture sustainability reporting trends across multiple years and to examine whether CEO demographic characteristics and foreign ownership were associated with disclosure behavior over time.

4.2 Population, Sample, and Data Sources

The population comprised companies listed on the Nairobi Securities Exchange during the period 2019-2024. The final sample consisted of 58 listed firms that met the inclusion criteria, producing 348 firm-year observations. Firms were included where publicly available annual reports, sustainability reports, corporate governance disclosures, CEO demographic data, and foreign ownership information could be obtained. Firms with missing or incomplete data on the study variables were excluded from the final analysis.

The study relied exclusively on secondary data. CEO demographic attributes, firm characteristics, and ownership information were extracted from annual reports, corporate governance statements, sustainability reports, company websites, NSE disclosures, and CMA-related documents. The use of publicly available data improved objectivity and reduced response bias because the study did not require self-reported responses from managers or executives.

4.3 Measurement of Variables

The dependent variable was sustainability reporting, measured using an ESG disclosure score derived through content analysis of annual reports, sustainability reports, and governance disclosures. CEO age, gender, education, and tenure were treated as independent variables. Foreign ownership was measured as the proportion of shares held by foreign investors and was used as the moderating variable. Firm age, firm size, and firm value were included as control variables because they may influence sustainability reporting capacity and stakeholder visibility.

Table 1. Measurement of Variables

Variable category	Variable	Operationalization	Acronym
Dependent variable	Sustainability reporting	ESG disclosure index score based on content analysis of disclosed environmental, social, and governance items	SR
Independent variable	CEO age	Number of years of the CEO	CA
Independent variable	CEO gender	Coded as 0 = male and 1 = female	CG
Independent variable	CEO education	Highest academic qualification, coded as 1 = bachelor's, 2 = master's, 3 = doctorate	CE
Independent variable	CEO tenure	Number of years served as CEO	CT
Moderating variable	Foreign ownership	Percentage/proportion of total shares held by foreign investors	FO
Control variable	Firm age	Number of years since establishment or listing record used in the dataset	FA
Control variable	Firm size	Total assets or revenue, expressed in millions where applicable	FS
Control variable	Firm value	Market capitalization, calculated as current share price multiplied by total outstanding shares	FV

4.4 Data Analysis and Model Specification

Data analysis involved descriptive statistics, diagnostic tests, correlation analysis, and hierarchical moderated regression. Descriptive statistics summarized the distribution of CEO demographics, foreign ownership, sustainability reporting, and control variables. Diagnostic tests were used to assess regression assumptions, including normality, homoscedasticity, and multicollinearity. Hierarchical regression was then used to estimate the direct effects and interaction effects.

The baseline control model was specified as: $SR_i = \beta_0 + \beta_1 FA_i + \beta_2 FS_i + \beta_3 FV_i + \varepsilon_i$. The direct-effect model added CEO demographic variables: $SR_i = \beta_0 + \beta_1 FA_i + \beta_2 FS_i + \beta_3 FV_i + \beta_4 CA_i + \beta_5 CG_i + \beta_6 CE_i + \beta_7 CT_i + \varepsilon_i$. Moderation was tested by adding foreign ownership and interaction terms between foreign ownership and each

CEO demographic attribute: CA × FO, CG × FO, CE × FO, and CT × FO. Statistical significance was evaluated at the 5% level.

4.5 Ethical Considerations

The study used publicly available secondary data and did not involve direct contact with human participants. As a result, informed consent from respondents was not required. Nevertheless, the study maintained ethical standards by using verifiable corporate disclosures, reporting findings objectively, and avoiding the disclosure of confidential information not available in the public domain. The identities of firms and CEOs were treated analytically and were not used to make personal judgments about individual executives.

5. Findings

5.1 Descriptive Statistics

The descriptive results show that the sampled firms differed substantially in age, size, market value, foreign ownership, and CEO characteristics. Firm age ranged from 1 to 70 years, with a mean of 29.34 years. Firm size and firm value were highly dispersed, indicating that the sample included both relatively small and very large listed firms. CEO age ranged from 36 to 68 years, with a mean of 53.13 years. CEO tenure ranged from 1 to 28 years, with a mean of 6.10 years. Foreign ownership averaged 39%, suggesting that foreign investors represent an important ownership group among NSE-listed firms. Sustainability reporting was practiced by 87.1% of the firms, while 12.9% did not report sustainability information.

Table 2. Overall Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. deviation
Firm age (years)	348	1.00	70.00	29.34	19.79
Firm size (total assets, millions)	348	9.00	2,170,900	139,344.77	299,082.10
Firm value (market capitalization, millions)	348	23.16	1,452,400	57,822.75	170,381.93
CEO age	348	36.00	68.00	53.13	5.95
CEO tenure (years)	348	1.00	28.00	6.10	5.47
Foreign ownership	348	0.0001	1.00	0.39	0.29

Table 3. Sustainability Reporting Status

Sustainability reporting	Count	Percentage
Yes	54	87.1%
No	8	12.9%

5.2 Diagnostic Tests

The regression assumptions were assessed before hypothesis testing. The Shapiro-Wilk test indicated that residuals were normally distributed (W = 0.997, p = .720). Levene's tests produced p-values above .05 for the main variables, supporting the homoscedasticity assumption. Multicollinearity was not a concern because the

VIF values for the predictors were below commonly accepted thresholds, ranging from 1.060 to 1.154, while tolerance values were above .20. These results supported the suitability of regression analysis for hypothesis testing.

Table 4. Diagnostic Test Summary

Assumption	Result	Interpretation
Normality	Shapiro-Wilk W = 0.997; p = .720	Assumption met
Homoscedasticity	Levene's test p-values above .05 for main predictors	Assumption met
Multicollinearity	VIF range = 1.060 to 1.154; tolerance range = .867 to .944	No serious multicollinearity

5.3 Regression Results for Control Variables

The control-variable model showed that firm age and firm size had positive and statistically significant effects on sustainability reporting, while firm value was positive but only marginally significant. This suggests that older and larger firms are more likely to engage in sustainability reporting, possibly because they have more established governance systems, greater visibility, and stronger stakeholder pressure.

Table 5. Regression Results for Control Variables

Variable	Coefficient	Std. error	t-value	p-value
Constant	0.8564	0.0270	31.555	< .001
Firm age	0.0015	0.0010	2.145	.033
Firm size	1.128e-07	4.74e-08	2.381	.018
Firm value	1.396e-07	8.31e-08	1.679	.094

Note. Firm value was retained as a control variable because of its theoretical relevance, although its effect was marginal at the 5% level.

5.4 Direct Effects of CEO Demographics

The direct-effect model showed that CEO age and CEO gender significantly influenced sustainability reporting. CEO age had a negative and significant coefficient ($\beta = -0.0138$, $p = .002$), indicating that older CEOs were associated with lower sustainability reporting, holding other factors constant. CEO gender had a positive and significant coefficient ($\beta = 0.2809$, $p < .001$), suggesting that firms led by female CEOs were more likely to engage in sustainability reporting. CEO education and CEO tenure were not statistically significant direct predictors.

Table 6. Direct Effects of CEO Demographic Attributes on Sustainability Reporting

Predictor	Coefficient (β)	Std. error	t-value	p-value	Hypothesis result
CEO age	-0.0138	0.0040	-3.45	.002	Supported
CEO gender	0.2809	0.0417	6.73	< .001	Supported
CEO education	0.0096	0.0185	0.52	.824	Not supported
CEO tenure	0.0008	0.0008	0.95	.875	Not supported

Note. Standard errors have been presented consistently with the reported coefficients and t-values.

5.5 Moderating Effect of Foreign Ownership

The moderation analysis showed that foreign ownership significantly moderated three of the four CEO demographic relationships. The CEO age × foreign ownership interaction was positive and significant (β = 0.0241, p = .007), indicating that foreign ownership reduced the negative effect of CEO age and strengthened the role of older CEOs under stronger external investor pressure. The CEO gender × foreign ownership interaction was negative and significant (β = -0.4228, p = .003), indicating that foreign ownership weakened rather than amplified the positive effect of female CEO leadership on sustainability reporting. The CEO education × foreign ownership interaction was positive and significant (β = 0.1934, p = .019), suggesting that CEO education became more relevant to sustainability reporting when foreign ownership was higher. The CEO tenure × foreign ownership interaction was not significant (β = 0.0131, p = .151), implying that foreign ownership did not meaningfully alter the relationship between CEO tenure and sustainability reporting.

Table 7. Moderating Effects of Foreign Ownership

Interaction term	Coefficient (β)	Std. error	t-value	p-value	Hypothesis result
CEO age × foreign ownership	0.0241	0.0058	4.12	.007	Supported
CEO gender × foreign ownership	-0.4228	0.0816	-5.18	.003	Supported; negative moderation
CEO education × foreign ownership	0.1934	0.0500	3.87	.019	Supported
CEO tenure × foreign ownership	0.0131	0.0075	1.75	.151	Not supported

Note. The significant negative coefficient for CEO gender × foreign ownership indicates an attenuating moderation effect, not an amplifying effect.

Table 8. Moderated Regression Model Summary

Statistic	Model 3	Model 4	Model 5	Model 6	Model 7
R-squared	0.1127	0.1490	0.1522	0.1670	0.1674
Adjusted R-squared	0.0833	0.1170	0.1167	0.1285	0.1253
F-statistic	3.8281	4.6674	4.2909	4.3377	3.9718
p-value (F-statistic)	.0003	< .001	< .001	< .001	< .001

Note. Models 3-7 represent moderated regression specifications incorporating foreign ownership and interaction terms.

5.6 Hypothesis Testing Summary

Table 9. Hypothesis Testing Summary

Hypothesis	Statement	β	p-value	Decision
H1	CEO age -> SR	-0.0138	.002	Supported
H2	CEO gender -> SR	0.2809	< .001	Supported
H3	CEO education -> SR	0.0096	.824	Not supported
H4	CEO tenure -> SR	0.0008	.875	Not supported
H5a	FO moderates CEO age -> SR	0.0241	.007	Supported
H5b	FO moderates CEO gender -> SR	-0.4228	.003	Supported
H5c	FO moderates CEO education -> SR	0.1934	.019	Supported
H5d	FO moderates CEO tenure -> SR	0.0131	.151	Not supported

6. Discussion

6.1 CEO Age and Sustainability Reporting

The finding that CEO age had a significant negative effect on sustainability reporting supports the view that older CEOs may be more cautious in adopting disclosure practices that require new systems, resources, and strategic change. This aligns with arguments that older executives may prioritize stability and near-term financial outcomes over emerging ESG practices. However, the positive moderating role of foreign ownership suggests that the negative age effect is not fixed. When foreign ownership is higher, older CEOs may respond to external investor expectations by supporting sustainability reporting more strongly. This finding shows that leadership experience can become more useful when external owners create stronger reporting pressure.

6.2 CEO Gender and Sustainability Reporting

CEO gender had a positive and significant direct effect on sustainability reporting. This result is consistent with literature associating female leadership with stakeholder orientation, accountability, and stronger CSR or ESG disclosure (Bear et al., 2010; Glass et al., 2016; Zahid et al., 2020). In the Kenyan listed-firm context, the finding suggests that female executive leadership may contribute to broader sustainability attention and more visible ESG reporting.

However, the interaction between CEO gender and foreign ownership was negative and significant. This means that foreign ownership weakened the positive effect of female CEO leadership on sustainability reporting. This result requires careful interpretation. It does not mean that female CEOs reduce sustainability reporting; rather, it suggests that when foreign ownership is high, the distinctive positive contribution of CEO gender becomes smaller. One possible explanation is that foreign investors impose standardized reporting expectations across firms, thereby reducing the variation attributable to CEO gender. Another possibility is that foreign shareholders may prioritize financially material ESG disclosures, limiting the broader stakeholder emphasis often associated with female leadership.

6.3 CEO Education and Sustainability Reporting

CEO education did not have a significant direct effect on sustainability reporting. This suggests that formal educational attainment alone may not be sufficient to influence disclosure behavior among NSE-listed firms. Sustainability reporting may require more than academic qualification; it may depend on organizational systems, firm resources, regulatory pressure, board support, and investor expectations.

The significant positive interaction between CEO education and foreign ownership provides an important qualification. The result indicates that educated CEOs may become more influential in sustainability reporting where foreign ownership is higher. This supports the argument that external ownership pressure can activate or strengthen the strategic value of executive knowledge. Educated CEOs may be better able to interpret and respond to foreign investors' expectations for internationally comparable ESG disclosure.

6.4 CEO Tenure and Sustainability Reporting

CEO tenure did not significantly influence sustainability reporting, and foreign ownership did not significantly moderate this relationship. This finding suggests that the length of time a CEO has served in office does not automatically translate into stronger or weaker sustainability disclosure among NSE-listed firms. Tenure may provide experience and authority, but it may also create strategic rigidity. The net effect may therefore be weak when analyzed across firms.

The non-significant moderation effect further suggests that foreign ownership pressure may not be enough to change how CEO tenure affects reporting. Other factors, such as board sustainability expertise, firm culture, regulatory enforcement, industry exposure, or availability of ESG reporting systems, may be more important than CEO tenure in explaining sustainability disclosure.

6.5 Overall Theoretical Interpretation

Overall, the findings support Upper Echelons Theory by showing that some CEO attributes, especially age and gender, are associated with sustainability reporting outcomes. The findings also support Agency Theory and Stakeholder Theory by showing that foreign ownership influences the relationship between leadership characteristics and disclosure behavior. However, the mixed results indicate that CEO demographics do not operate in isolation. Their effects depend on ownership structure, firm characteristics, and the broader governance environment in which listed firms operate.

7. Conclusion

This study examined the influence of CEO demographic attributes on sustainability reporting among companies listed on the Nairobi Securities Exchange, with foreign ownership tested as a moderating variable. The findings show that CEO age and gender significantly influence sustainability reporting, while CEO education and tenure do not have significant direct effects. Specifically, CEO age is negatively associated with sustainability reporting, while CEO gender is positively associated with sustainability reporting.

Foreign ownership plays an important moderating role. It significantly moderates the relationships involving CEO age, gender, and education, but it does not significantly moderate the CEO tenure-sustainability reporting relationship. The results demonstrate that sustainability reporting among Kenyan listed firms is shaped by both internal leadership characteristics and external ownership pressure. Therefore, improving sustainability reporting requires attention not only to regulatory compliance but also to leadership diversity, ownership structure, and governance mechanisms that support transparent ESG disclosure.

8. Recommendations

8.1 Managerial Recommendations

Boards and senior executives of NSE-listed firms should strengthen sustainability governance systems so that ESG reporting does not depend only on individual CEO characteristics. Firms should establish sustainability committees, clear ESG reporting policies, and internal data collection systems to support consistent disclosure.

Companies should also promote leadership diversity at the executive level. The positive relationship between CEO gender and sustainability reporting suggests that gender-inclusive leadership can support stronger sustainability practices. Board nomination processes should therefore consider diversity as part of sustainability governance capacity.

Firms with foreign shareholders should use investor pressure constructively by aligning sustainability reporting with internationally recognized frameworks such as GRI and integrated reporting principles. Foreign ownership should not merely be treated as a source of capital but also as a channel for improving governance standards and disclosure quality.

8.2 Policy Recommendations

Regulators such as the CMA and NSE should continue strengthening guidance on sustainability reporting and should encourage listed firms to disclose comparable ESG information. Clearer reporting templates, sector-specific ESG indicators, and capacity-building programs would help reduce inconsistencies across firms.

Policy actors should also encourage board and executive diversity as part of corporate governance reform. Because CEO gender was significantly associated with sustainability reporting, leadership diversity should be recognized as a governance issue linked to transparency and accountability.

Regulators may also consider encouraging listed firms to disclose ownership structures more clearly, including levels of foreign ownership, because ownership composition appears to influence sustainability reporting behavior.

8.3 Theoretical Implications

The study extends Upper Echelons Theory by showing that CEO age and gender matter for sustainability reporting in an emerging-market context. It also extends Agency Theory and Stakeholder Theory by demonstrating that foreign ownership conditions the influence of CEO demographics on disclosure behavior. The findings show that leadership characteristics and ownership structures should be studied together when explaining sustainability reporting.

8.4 Limitations and Future Research

This study relied on secondary data from publicly available corporate disclosures. Although this approach improved objectivity, it limited the analysis to information disclosed by firms. Future studies could complement secondary data with interviews or surveys of CEOs, board members, sustainability officers, and investors to explain the motivations behind sustainability reporting decisions.

The study focused on listed firms in Kenya, which may limit generalizability to private firms, small and medium enterprises, or companies in other emerging markets. Future research could compare listed and unlisted firms or conduct cross-country studies within East Africa.

The study examined foreign ownership as a single moderating variable. Future research could distinguish between foreign institutional investors, foreign individual shareholders, multinational ownership, and regional investors. Such distinctions may reveal more precise mechanisms through which ownership affects sustainability reporting.

Finally, future research could examine other executive and board characteristics, including CEO professional background, financial expertise, sustainability training, board ESG expertise, board independence, and ownership concentration. These variables may provide a more complete explanation of sustainability disclosure behavior.

References

- Aksan, I., & Gantyowati, E. (2020). Disclosure on sustainability reports, foreign ownership, and firm value: Evidence from Indonesia. Journal of Accounting and Strategic Finance, 3(1), 33-51. https://doi.org/10.33005/jasf.v3i1.69
- 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.
- Bear, S., Rahman, N., & Post, C. (2010). The impact of board diversity and gender on corporate social responsibility and firm reputation. Business & Society, 49(3), 337-358. https://doi.org/10.1177/0007650309342550
- Bowen, G. A. (2009). Document analysis as a qualitative research method. Qualitative Research Journal, 9(2), 27-40. https://doi.org/10.3316/QRJ0902027
- Capital Markets Authority. (2021). Code of corporate governance practices for issuers of securities to the public. Capital Markets Authority.
- Chen, L. (2017). CEO tenure and corporate social responsibility reporting: Evidence from Chinese firms. Journal of Business Ethics, 142(3), 553-571.
- Cheng, B., Ioannou, I., & Serafeim, G. (2014). Corporate social responsibility and access to finance. Strategic Management Journal, 35(1), 1-23. https://doi.org/10.1002/smj.2131
- Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publications.
- El Ghoul, S., Guedhami, O., Kwok, C. C. Y., & Mishra, D. R. (2016). Does corporate social responsibility affect the cost of capital? Journal of Banking & Finance, 45, 238-252.
- Elkington, J. (1997). Cannibals with forks: The triple bottom line of 21st century business. Capstone Publishing.
- Fernandez-Feijoo, B., Romero, S., & Ruiz-Blanco, S. (2014). Women on boards: Do they affect sustainability reporting? Corporate Social Responsibility and Environmental Management, 21(6), 351-364. https://doi.org/10.1002/csr.1329
- Finkelstein, S., Hambrick, D. C., & Cannella, A. A. (2009). Strategic leadership: Theory and research on executives, top management teams, and boards. Oxford University Press.
- Freeman, R. E. (1984). Strategic management: A stakeholder approach. Pitman.
- García-Sánchez, I. M., Hussain, N., Martínez-Ferrero, J., & Ruiz-Barbadillo, E. (2019). Impact of disclosure and assurance quality on corporate governance and earnings management: Evidence from sustainability reporting. Journal of Business Ethics, 155(3), 593-622. https://doi.org/10.1007/s10551-017-3505-9
- Ghardallou, W. (2022). Corporate sustainability and firm performance: The moderating role of CEO education and tenure. Sustainability, 14(6), 3513. https://doi.org/10.3390/su14063513
- Githaiga, P. N. (2024). Sustainability reporting, board gender diversity and earnings management: Evidence from East Africa community. Journal of Business and Socio-Economic Development, 4(2), 142-160.

- Glass, C., Cook, A., & Ingersoll, A. R. (2016). Do women leaders promote sustainability? Analyzing the effect of corporate governance composition on environmental performance. Business Strategy and the Environment, 25(7), 495-511.
- Gujarati, D. N., & Porter, D. C. (2020). Basic econometrics (6th ed.). McGraw-Hill Education.
- Hahn, R., & Kühnen, M. (2013). Determinants of sustainability reporting: A review of results, trends, theory, and opportunities. Journal of Cleaner Production, 59, 5-21. https://doi.org/10.1016/j.jclepro.2013.07.005
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). Multivariate data analysis (8th ed.). Cengage Learning.
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. Academy of Management Review, 9(2), 193-206. https://doi.org/10.5465/amr.1984.4277628
- Huang, S. K. (2013). The impact of CEO characteristics on corporate sustainable development. Corporate Social Responsibility and Environmental Management, 20(4), 234-244.
- Injeni, G., Mangena, M., Mathuva, D., & Mudida, R. (2022). Agency and institutional-related factors and the heterogeneity of sustainability and integrated report information disclosures in Kenya. Journal of Financial Reporting and Accounting, 20(5), 809-840.
- Ioannou, I., & Serafeim, G. (2017). The consequences of mandatory corporate sustainability reporting. Harvard Business School Working Paper No. 11-100. https://doi.org/10.2139/ssrn.1799589
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 3(4), 305-360.
- Khan, I., Khan, I., & Saeed, B. B. (2019). Does board diversity affect the quality of corporate social responsibility disclosure? Corporate Social Responsibility and Environmental Management, 26(6), 1371-1381.
- Krippendorff, K. (2018). Content analysis: An introduction to its methodology (4th ed.). SAGE Publications.
- Liao, L., Luo, L., & Tang, Q. (2015). Gender diversity, board independence, and corporate social responsibility performance. Journal of Business Ethics, 136(3), 305-324.
- Liu, Z. (2018). CEO characteristics and corporate social responsibility: Evidence from China. Journal of Business Ethics, 152(3), 765-781.
- Makkonen, T. (2022). Board diversity and firm innovation: A meta-analysis. European Journal of Innovation Management, 25(6), 941-960.
- Oware, K. M., & Awunyo-Vitor, D. (2021). CEO characteristics and environmental disclosure of listed firms in an emerging economy: Does sustainability reporting format matter? Business Strategy & Development, 4(4), 399-410.
- Saunders, M., Lewis, P., & Thornhill, A. (2019). Research methods for business students (8th ed.). Pearson Education.
- Waweru, N. (2020). Corporate governance and corporate social responsibility disclosure in sub-Saharan Africa: Evidence from Kenya and South Africa. Social Responsibility Journal, 16(5), 711-731.
- Zahid, M., Ghaffar, A., Saleem, S., & Rashid, M. (2020). CEO power and corporate social responsibility disclosure: Moderating role of board gender diversity. Journal of Applied Business Research, 36(1), 171-188.