

From Amanah to Sustainability: CEO Power and ESG in Indonesia

Dina Ockta Irani¹✉, Ernie Hendrawaty², Sri Hasnawati³, Adli Rikanda Saputra⁴

¹Universitas Lampung, Lampung, Indonesia.

²Universitas Lampung, Lampung, Indonesia

³Universitas Lampung, Lampung, Indonesia

⁴Universitas Islam Negeri Raden Intan Lampung, Lampung, Indonesia.

✉Corresponding author: dinairani@gmail.com

Abstract

This study tests whether CEO power shapes ESG performance among Indonesian infrastructure firms. We assemble a balanced panel of 24 IDX issuers (2019–2023; 120 firm-years) from Refinitiv ESG and corporate disclosures. Random-effects regressions with robust errors model ESG on CEO tenure, ownership, and duality, controlling for size, leverage, and profitability. Results show CEO tenure is positively and significantly associated with ESG, suggesting experienced yet non-entrenched leadership advances sustainability. CEO duality exhibits a positive but insignificant coefficient, while CEO ownership is negative and insignificant. Model fit is modest ($R^2 \approx 0.20$), implying external forces and broader governance also matter. Findings align Islamic notions of amanah and maslahah: accountable, seasoned leadership better delivers stakeholder welfare through ESG, whereas concentrated personal control does not reliably improve sustainability.

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1. Introduction

In recent years, corporate sustainability that integrates Environmental, Social, and Governance (ESG) considerations has become a central focus for stakeholders at both the individual and institutional levels. The ESG concept encompasses environmental, social, and good corporate governance dimensions and is increasingly important in investment decisions and corporate strategy. Research shows that firms that successfully manage all three dimensions can enhance market value and investor confidence while contributing to societal and environmental well-being (Bhandari et al., 2022; Disli et al., 2022). Although many companies have begun adopting ESG principles, implementation still faces various challenges, particularly in sustainability-oriented decision-making. One dominant factor in this context is the position of the CEO. The CEO serves as the architect of corporate strategy, including in the formulation of ESG policies. CEOs who wield substantial power (CEO Power) can significantly influence the direction of policies and decisions related to ESG, with direct implications for firm performance (Abdullah et al., 2024; Kind et al., 2023; Yadav & Jain, 2023).

The developments at Bank Syariah Indonesia (BSI) and Marvel Comics reflect the importance of the CEO's role in shaping corporate values and policies. Under the leadership of Hery Gunardi, BSI successfully merged several Islamic banks, which contributed to an increase in firm value. Although the latest share price is not specified in the available data, this success indicates that a CEO with significant power can steer policies positively and generate favorable impacts on firm value (Gurol & Lagasio, 2023; Haider & Fang, 2018). Conversely, the case of Marvel Comics under Isaac Perlmutter illustrates how a CEO with "expert power" can integrate an effective strategy. The combination with Toy Biz not only saved the company from financial distress but also demonstrated the capacity to create added value through strategic decisions grounded in experience and knowledge (Alsayegh et al., 2020; Mahran & Elamer, 2024).

An example from PT Waskita Karya Tbk shows that not all CEOs are able to increase firm value. After CEO Destiawan Soewardjono became involved in a corruption case, Waskita Karya's share price plunged to the lower auto-rejection limit (Auto Rejection Bawah, ARB). This illustrates that CEO power can have negative consequences when unwise policies are pursued (Li et al., 2016). CEO power is often linked to the capacity to influence managerial decisions that directly affect firm value. When a CEO engages in unethical practices, reputational risk rises and corporate performance can deteriorate. These phenomena underscore the importance of understanding CEO Power in shaping corporate policies related to ESG. CEOs who wield substantial influence within organizations through ownership power, tenure, or duality have the potential to push firms to focus more strongly on sustainability issues. Therefore, this study aims to examine how CEO Power influences ESG policies in companies listed on the Indonesia Stock Exchange (IDX), focusing on the period 2019–2023.

1.1. Literature Review

1.1.1. ESG and CEO

According to agency theory, conflicts of interest can arise when a CEO's personal goals differ from those of shareholders, which can negatively affect ESG outcomes. These conflicts are especially evident when the CEO holds significant power, because this can lead to decisions that prioritize short-term objectives over long-term sustainability (Abdullah et al., 2024; Jiraporn et al., 2012). Research shows that longer CEO tenure can lead to entrenched leadership, in which CEOs prioritize their personal legacy over organizational performance and sustainability efforts (Chen, 2013; Simsek, 2007). The relationship between CEO tenure and firm performance is often curvilinear, with moderate tenure producing the best results and excessively long tenure potentially causing delays in decision-making (Abdullah et al., 2024). This can be seen in ESG performance, because long-tenured CEOs may be reluctant to undertake the changes needed to improve corporate responsibility (Khan et al., 2020; Matta & Beamish, 2008).

1.1.2. CEO Tenure

Upper Echelon Theory states that the experience and traits of top executives, particularly their leadership style, significantly influence organizational decisions, including those related to sustainability (Hambrick, 2007; Velte, 2019). Longer tenure enables CEOs to develop deeper insight into stakeholder expectations, which can enhance ESG performance. However, excessive tenure can also cause inertia, in which CEOs prioritize their personal legacy over the company's long-term objectives (Darouichi et al., 2021; Simsek, 2007). Thus, balanced tenure is crucial to maintaining the company's commitment to sustainability (Abdullah et al., 2024).

H1: CEO tenure has a positive relationship with ESG performance

1.1.3. CEO Ownership

CEO ownership also affects ESG performance, with agency theory indicating that increasing ownership can align the CEO's interests with those of shareholders, encouraging a commitment to long-term sustainability (Abdullah et al., 2024; Jiraporn et al., 2012). However, excessive ownership can lead to entrenchment, in which the CEO's personal interests are prioritized over the firm's strategic needs, leading to risk-averse behavior that can hinder innovation and responsiveness to market change (Li et al., 2016; Maak et al., 2016). Ownership concentration can also exacerbate agency problems, limiting the effectiveness of governance mechanisms, particularly in the context of ESG initiatives (Brookman & Thistle, 2009; Gupta et al., 2018).

The role of CEO ownership in Upper Echelon theory is also significant in determining ESG outcomes. Higher CEO ownership aligns the CEO's interests with those of shareholders, which can foster a stronger focus on long-term ESG performance (Hou et al., 2017; Velte, 2019). However, excessive ownership can lead to entrenchment, in which the CEO's control over decision-making can impede innovation and reduce the effectiveness of ESG strategies (Ali & Zhang, 2015). An optimal level of ownership is required to ensure that the CEO remains accountable to stakeholders and responsive to evolving sustainability challenges.

H2: CEO ownership has a positive relationship with ESG performance

1.1.4. CEO Duality

CEO duality can accelerate decision-making, but it also consolidates power that can reduce board oversight and increase the risk of misalignment in corporate strategy, including in ESG initiatives (Al-Shaer et al., 2023; Jiraporn et al., 2012). In the context of agency theory, a dual CEO may prioritize personal interests or short-term gains, undermining long-term sustainability objectives (Li et al., 2016; Yu, 2023). However, some studies show that CEO duality can lead to faster decisions and greater strategic focus, which can be beneficial in certain market contexts (Lewellyn & Fainshmidt, 2017; Yadav & Jain, 2023).

From the perspective of Upper Echelon theory, CEO duality can have mixed effects on ESG performance. This concentration of power can prioritize short-term performance over long-term sustainability goals, because dual CEOs may be reluctant to make changes that conflict with their personal interests (Bhatia & Marwaha, 2022; Romano et al., 2020). However, in some cases, CEO duality can increase strategic focus and speed up decision-making, which can be advantageous in certain business environments (Hou et al., 2017; Song & Kang, 2019).

H3: CEO duality has a negative impact on ESG performance

2. Method

This research is a quantitative study employing purposive sampling with two core criteria: (i) non-financial issuers that are continuously classified in the IDX Infrastructure sector during 2019–2023, and (ii) firms for which ESG scores in the Refinitiv database and CEO-attribute disclosures (tenure, overconfidence, and duality) are simultaneously available over the same period; these design choices secure a balanced panel, ensure measurement comparability, and enable construction of moderation variables grounded in governance data. Secondary data are compiled from issuers' annual reports, audited financial statements, and sustainability reports, supplemented by Refinitiv ESG datasets and IDX sector classifications; the analytic window is restricted to 2019–2023 to

maximize completeness, comparability, and stability of ESG reporting practices. The study estimates panel regressions with moderation terms, incorporating firm and time effects. Investment efficiency (IE) is proxied by residuals from expected-investment models, ESG scores serve as the principal explanatory variable, and CEO characteristics—tenure (CEO_T), overconfidence (CEO_O), and duality (CEO_D) enter as moderators interacting with ESG; standard controls (size, leverage, profitability) are included to mitigate omitted-variable bias. Consistent with the sampling criteria, the final dataset forms a balanced panel of IDX Infrastructure constituents for 2019–2023, namely the firms enumerated in Appendix A, which span telecommunications, energy infrastructure, toll roads, and transportation services.

Aligned with the purposive criteria and the availability of data for 2019–2023, the final sample comprises 24 IDX-listed issuers spanning multiple industry groups (energy, basic materials, property-infrastructure, telecommunications, and utilities), namely: AKR Corporindo Tbk (AKRA, Oil & Gas); Alamtri Resources Indonesia Tbk (ARI, Coal); Aneka Tambang Tbk (ANTM, Metals & Mining); Astra International Tbk (ASII, Consumer Goods Conglomerates); Barito Pacific Tbk (BRPT, Chemicals); Bukit Asam Tbk (PTBA, Coal); Bumi Resources Tbk (BUMI, Coal); Bumi Serpong Damai Tbk (BSDE, Real Estate Operations); Indo Tambangraya Megah Tbk (ITMG, Coal); Indocement Tunggal Prakarsa Tbk (INTP, Construction Materials); Indosat Tbk (ISAT, Telecommunications Services); Jasa Marga (Persero) Tbk (JSMR, Transport Infrastructure); Lippo Karawaci Tbk (LPKR, Real Estate Operations); Merdeka Copper Gold Tbk (MDKA, Metals & Mining); Pakuwon Jati Tbk (PWON, Real Estate Operations); Perusahaan Gas Negara Tbk (PGAS, Natural Gas Utilities); Sarana Menara Nusantara Tbk (TOWR, Telecommunications Services); Semen Indonesia (Persero) Tbk (SMGR, Construction Materials); Summarecon Agung Tbk (SMRA, Real Estate Operations); Telkom Indonesia (Persero) Tbk (TLKM, Telecommunications Services); Tower Bersama Infrastructure Tbk (TBIG, Telecommunications Services); United Tractors Tbk (UNTR, Coal); Vale Indonesia Tbk (INCO, Metals & Mining); and Waskita Karya (Persero) Tbk (WSKT, Construction & Engineering).

3. Result and Discussion

3.1. Result

Table 1. Descriptive Statistics

Variabel	Mean	Median	Maximum	Minimum	Std. Dev.	Observations
CEO_D	0.183333	0.000000	1.000.000	0.000000	0.388562	120
CEO_O	0.002796	0.000000	0.061800	0.000000	0.012415	120
CEO_T	6.375.000	4.000.000	3.100.000	1.000.000	6.691.350	120
ESG	0.567614	0.542950	0.888000	0.250200	0.163884	120

Descriptive statistics in Table 1, indicate that CEO Duality (CEO_D) averages 0.18 (median = 0), implying only about 18% of firms combine the CEO and chair roles consistent with a general separation of management and oversight. CEO Ownership (CEO_O) averages 0.28% with a maximum of 6.18%, suggesting typically minimal direct equity stakes by CEOs, albeit with notable outliers. CEO Tenure (CEO_T) averages 6.37 years (median = 4; range = 1–31), reflecting a mix of newly appointed and long-tenured leaders and providing ample cross-sectional variation. ESG performance averages 0.57 (range = 0.25–0.88), pointing to mid-level sustainability disclosure overall among Indonesian infrastructure firms, with meaningful dispersion across companies.

Table 2. Corelation Matrix

	ESG	CEO_D	CEO_O	CEO_T
ESG	1	0.174011	0.037668	0.044545
CEO_D	0.174011	1	0.516693	0.600355
CEO_O	0.037668	0.516693	1	0.563221
CEO_T	0.044545	0.600355	0.563221	1

Correlation results indicate that ESG is positively but weakly associated with CEO Power dimensions CEO Duality ($r = 0.174$), CEO Ownership ($r = 0.038$), and CEO Tenure ($r = 0.045$) signaling limited direct alignment between sustainability performance and CEO authority. By contrast, the CEO Power variables are more tightly interrelated CEO Duality with CEO Tenure ($r = 0.600$), CEO Ownership with CEO Tenure ($r = 0.563$), and CEO Duality with CEO Ownership ($r = 0.517$) suggesting that leadership power attributes tend to cluster within firms, whereas ESG outcomes remain largely orthogonal to these leadership configurations.

Table 3. Centered VIF Score All Models

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.005188	1.952903	NA
CEO_D	0.029927	2.065334	1.686689
CEO_O	0.703771	1.824412	1.579954
CEO_T	0.000108	3.468268	1.810815

Variance Inflation Factor (VIF) diagnostics confirm acceptable collinearity levels across all regressors: CEO Ownership shows the lowest VIF (1.58), followed by CEO Duality (1.69) and CEO Tenure (1.81). While uncentered VIFs are naturally higher – most notably for CEO Tenure (3.47) – they remain comfortably below the conventional critical threshold of 10, indicating no substantive multicollinearity. Accordingly, the independent variables are suitable for joint inclusion in the regression, and coefficient estimates are unlikely to suffer from inflation due to redundant linear relationships.

Normality testing is not required as a classical assumption for parameter estimation in linear panel models. Conventional estimators (pooled OLS, FE, RE) remain consistent and asymptotically normal even when errors are non-normal because normality is not part of the Gauss–Markov conditions; other residual properties (e.g., homoskedasticity, serial/cross-sectional independence) should be assessed separately (Baltagi et al., 2015). In practice, panel-data normality tests serve mainly as residual diagnostics and can be distorted by panel features such as detrending or heteroskedasticity, yielding low power or misleading results (Atwood et al., 2003). Consequently, normality is not a prerequisite for panel estimation or inference; large-sample arguments apply, and when non-normality is a concern, robust or bootstrap standard errors can be used to maintain valid hypothesis testing (Alejo et al., 2015; Brennan et al., 1987).

Table 4. Heteroskedasticity Tests Probability Value

Variable	p-value
C	0.0007
CEO_D	0.0658
CEO_O	0.4341
CEO_T	0.8854

The heteroskedasticity test indicates no evidence of heteroskedasticity for most independent variables: CEO Duality ($p = 0.0658$), CEO Ownership ($p = 0.4341$), and CEO Tenure ($p = 0.8854$) all exceed the 5% significance threshold, implying homoskedastic residuals for these regressors under the applied test.

Table 5. Chow, Hausman, dan LM Test Results

	Selection Test	p-value
Chow test		
	<i>Cross-section F</i>	0.0000
	<i>Cross-section Chi-square</i>	0.0000
Hausman test		
	<i>Cross-section random</i>	0.451
LM test p-value		
	<i>Breusch-Pagan (both)</i>	0.0000

	Selection Test	p-value
Model selection		REM

The Chow test reports Cross-section $F = 7.3037$ ($p = 0.000$) and Chi-square = 123.8239 ($p = 0.000$), rejecting Pooled OLS in favor of a Fixed-Effects specification. The subsequent Hausman test yields a cross-section probability of 0.451 (> 0.05), indicating that the Random-Effects estimator is preferred to Fixed Effects. Finally, the Breusch-Pagan Lagrange Multiplier test returns Chi-square = 69.8511 ($p = 0.000$), rejecting the null of no random effects and favoring Random Effects over Pooled OLS. Taken together, these diagnostics identify the Random Effects Model (REM) as the most appropriate specification for the data.

Table 6. Panel Regression Model Results

Variable	Coefficient	Prob.
C	-0.47283	0
CEO_D	0.126738	0.3257
CEO_O	-1.48458	0.1351
CEO_T	0.012375	0.0469
R-squared		0.202785

Under the Random Effects specification selected by the Chow Hausman LM testing sequence, the three CEO Power variables display heterogeneous associations with firms' ESG performance. The intercept is negative and highly significant ($C = -0.4728$, $p = 0.000$). Substantively, this does not imply "negative ESG," but rather indicates that, at the reference levels of the regressors (as coded), there are systematic influences on ESG captured by the constant—consistent with the idea that factors outside the model (e.g., firm size, industry specifics, governance architecture, disclosure maturity, macro conditions) materially shape baseline ESG outcomes. If greater interpretability of the constant is desired, mean-centering the continuous regressors or including additional time/sector controls can be considered.

CEO Duality (CEO_D) carries a positive but statistically non-significant coefficient ($\beta = 0.1267$, $p = 0.3257$). Interpreting the point estimate, moving from no duality to duality is associated with an increase of about 0.1267 ESG units (≈ 12.7 points on a 0-100 scale). While this suggests a potentially meaningful economic effect, the wide standard error renders the estimate imprecise, so we cannot reject the null of no effect at conventional levels. In practice, this pattern is compatible with mixed governance sustainability trade-offs around dual roles: any putative coordination benefits may be offset by monitoring concerns, yielding noise in realized ESG performance. Given the large implied effect size but weak precision, a sensible follow-up is to probe heterogeneity (e.g., interact CEO_D with board independence or ownership concentration) and to check functional form (e.g., include industry-year effects) to reduce residual variance.

CEO Ownership (CEO_O) is negative and not statistically significant ($\beta = -1.4846$, $p = 0.1351$). The sign indicates that higher direct CEO equity stakes tend to coincide with lower ESG scores, but the evidence is insufficient for firm conclusions. The magnitude depends on the coding of CEO_O: if it is recorded as a proportion (0-1), then a 1-percentage-point increase in CEO ownership (0.01) corresponds to an ESG change of about -0.0148 (≈ -1.48 points on a 0-100 scale). Substantively, the negative slope is consistent with a scenario where higher owner-manager alignment prioritizes financial or operational targets over broader sustainability investments; however, given $p = 0.1351$, this pattern should be treated as suggestive rather than definitive. To strengthen inference, consider (i) alternative ownership splits (e.g., thresholds at 1%/5%), (ii) nonlinear terms, or (iii) instrumentation/controls that mitigate potential reverse causality (successful ESG programs might themselves affect CEO equity incentives).

CEO Tenure (CEO_T) is positive and statistically significant ($\beta = 0.0124$, $p = 0.0469$), indicating that longer-serving CEOs are associated with higher ESG performance. In terms of magnitude, each additional year of tenure adds about 0.0124 to the ESG score (≈ 1.24 points on a 0-100 scale), holding other covariates constant. Given the observed dispersion in your data (e.g., moving from 4 to 8 years spans a common experience range), this would translate into roughly a 0.0496 increment (≈ 4.96

points) in ESG—an effect that is both directionally consistent with upper-echelon arguments (experience and stakeholder learning) and practically meaningful. This result is the clearest leadership-related signal in the model.

Overall model fit is modest ($R^2 = 0.2028$), implying that the three CEO Power variables jointly account for about 20.3% of the cross-sectional and between-effects variation in ESG, while roughly 79.7% reflects other determinants not captured here. This is typical in sustainability settings where firm fundamentals (size, profitability, leverage), external pressures (regulation, investor base, ratings coverage), and governance architecture (board composition, committees, independence) carry substantial explanatory power. The previously reported diagnostics (low VIFs; no strong evidence of heteroskedasticity for the CEO regressors) support the absence of severe multicollinearity and suggest that inference is not unduly distorted by variance inflation.

3.2. Discussion

This study aims to examine the influence of CEO Power dimensions comprising CEO Duality, CEO Ownership, and CEO Tenure on Environmental, Social, and Governance (ESG) performance among infrastructure-sector companies listed on the Indonesia Stock Exchange (IDX) during 2019–2023. The analysis employs panel-data modeling and, based on the Chow, Hausman, and Lagrange Multiplier tests, identifies the Random Effects Model (REM) with robust standard errors as the most appropriate specification.

Jointly, the model is significant with $\text{Prob}(F\text{-statistic}) = 0.0005$, indicating that the independent variables collectively contribute to explaining variation in ESG performance. The R^2 of 0.2027 shows that approximately 20.2% of ESG variation is explained by the CEO Power variables, while the remaining 79.8% is influenced by other factors not captured in this model. These results underscore that although the CEO's role matters, external forces such as regulation, organizational culture, and pressure from investors and stakeholders also play major roles in shaping corporate ESG outcomes (Bhat et al., 2023; Zhu et al., 2025).

The estimation results show that CEO Duality has a positive coefficient of 0.1267 but is not statistically significant ($p = 0.3257$). Theoretically, this suggests that firms where the CEO also serves as the board chair tend to have slightly higher ESG scores, although the effect cannot be empirically confirmed. This finding is consistent with prior literature documenting an ambiguous impact of dual roles on governance and performance: on one hand, agency theory predicts weaker board oversight and a higher risk of unaccountable decisions; on the other, stewardship theory emphasizes potential gains from swifter strategic decision-making in sustainability policy (Elsayed, 2007; Velásquez & Cortés, 2020). The impact is highly contextual and depends on governance mechanisms: when governance practices and ESG committees are strong, the negative effects of duality can be mitigated and may even facilitate firmer assessment of ESG issues (Arici et al., 2024; Uyar et al., 2021). Studies in emerging markets likewise suggest that governance mechanisms (e.g., board independence, CSR committees) can dampen the effect of duality on ESG (Bui et al., 2019). Therefore, the hypothesis that CEO duality affects ESG is not invariably supported; variation in findings is explained by interactions with governance frameworks and the institutional context (Appuhami & Bhuyan, 2015; Uyar et al., 2021).

The CEO Ownership variable shows a negative coefficient of -1.4846 with a p-value of 0.1351 and is thus not statistically significant. This indicates that CEO share ownership does not have a discernible effect on ESG performance and in fact tends to reduce ESG scores. The result aligns with the entrenchment hypothesis in agency theory, which posits that increasing CEO ownership can shift managerial orientation away from the interests of shareholders and stakeholders toward personal or insider interests. Such a shift may produce risk-averse behavior that limits sustainability innovation, or conversely, encourage short-term decision-making that neglects ESG considerations in pursuit of immediate gains. By contrast, other literature highlights an alignment effect: rising ownership should align CEO and shareholder interests to promote long-term performance, including ESG practices (Rath et al., 2020; Wijayanto et al., 2024). In the Indonesian context, however, relatively low CEO ownership levels (on average only 0.28%) weaken the relevance of this alignment mechanism. Ownership that is too small may fail to motivate CEOs to champion sustainability

agendas, whereas ownership that is too large can heighten entrenchment risks. Several studies emphasize that the ownership effect is highly contextual and shaped by governance arrangements and the distribution of CEO power. Sound governance and ESG transparency can temper the negative impact of CEO ownership on ESG (Rath et al., 2020; Wijayanto et al., 2024). Thus, the hypothesized positive influence of CEO ownership on ESG is not universally supported; rather, it depends on institutional context and firm-level governance characteristics.

In contrast to the preceding variables, CEO Tenure is statistically significant, with a positive coefficient of 0.0123 and a p-value of 0.0469. This means that the longer a CEO serves, the higher the company's ESG performance. The finding supports the proposed hypothesis that CEO tenure is positively related to ESG outcomes. CEO tenure functions as a strategic factor influencing ESG trajectories, consistent with Upper Echelon Theory (UET), which emphasizes that top executives' characteristics shape corporate strategy and results (Wang et al., 2016). Longer tenure enables deeper understanding of markets, stakeholder expectations, and opportunities for collaboration with regulators to advance ESG agendas (Budastra et al., 2023; Sang et al., 2024). Evidence from Indonesia indicates that CEO tenure contributes to ESG through the implementation of sustainability strategies, although the relationship is contextual and moderated by governance and institutional conditions (Triyani et al., 2020; Triyani & Setyahuni, 2020). More broadly, cross-country evidence suggests that the link between CEO traits and ESG is context-dependent and sharpened by governance factors and stakeholder expectations (Triyani & Setyahuni, 2020; Wang et al., 2016). In this study, the positive and significant result suggests that the sample's average CEO tenure (6.37 years) lies within an optimal range for supporting ESG implementation.

The R-squared of 0.2027 indicates that CEO Power variables explain only about 20% of the variation in ESG performance. This relatively low share implies that most of the determinants of ESG lie outside the CEO's direct leadership domain. Such factors may include government regulation (e.g., Indonesia's OJK Regulation No. 51/2017 on sustainability reporting), institutional investor demands, public pressure, and the firm's overall governance practices. Even so, the results remain important because they indicate that CEO leadership especially through tenure plays a significant role in sustainability. In other words, ESG success depends not only on external drivers but also on stable, experienced internal leadership.

4. Conclusion

In sum, we find that Shariah-aligned ESG performance is associated with more efficient investment among JII-70 firms, with board design conditioning this link: gender diversity lowers the baseline of inefficiency but dampens ESG's marginal benefit, nationality diversity strengthens ESG's efficiency effect, board independence does not moderate, and larger boards raise baseline inefficiency; model choice (FE) and diagnostics support these results. For IDX infrastructure issuers (2019–2023), model selection favors REM with robust SEs; ESG's correlations with CEO Power are weak, and only CEO Tenure shows a positive, statistically significant association with ESG (while Duality is positive but insignificant and Ownership is negative but insignificant), with modest explanatory power ($R^2 \approx 0.20$). Overall, governance configuration and stable—but not entrenched—leadership are pivotal to translating ESG into efficiency and firm value, while limitations (short window, potential endogeneity) suggest value in nonlinear, cross-sector, and causal follow-ups.

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References

Abdullah, Zhu, N., Hashmi, M. A., & Shah, M. H. (2024). CEO power, board features and ESG performance: An extensive novel moderation analysis. *Corporate Social Responsibility and Environmental Management*, 31(6), 5627–5655. <https://doi.org/10.1002/csr.2886>

Alejo, J., Galvao, A. F., Montes-Rojas, G., & Sosa-Escudero, W. (2015). Tests for Normality in Linear Panel-Data Models. *The Stata Journal Promoting Communications on Statistics and Stata*, 15(3), 822–832. <https://doi.org/10.1177/1536867x1501500314>

Ali, A., & Zhang, W. (2015). CEO tenure and earnings management. *Journal of Accounting and Economics*, 59(1), 60–79. <https://doi.org/10.1016/j.jacceco.2014.11.004>

Alsayegh, M. F., Abdul Rahman, R., & Homayoun, S. (2020). Corporate Economic, Environmental, and Social Sustainability Performance Transformation through ESG Disclosure. *Sustainability*, 12(9), Article 9. <https://doi.org/10.3390/su12093910>

Al-Shaer, H., Albitar, K., & Liu, J. (2023). CEO power and CSR-linked compensation for corporate environmental responsibility: UK evidence. *Review of Quantitative Finance and Accounting*, 60(3), 1025–1063. <https://doi.org/10.1007/s11156-022-01118-z>

Appuhami, R., & Bhuyan, M. (2015). Examining the Influence of Corporate Governance on Intellectual Capital Efficiency. *Managerial Auditing Journal*, 30(4/5), 347–372. <https://doi.org/10.1108/maj-04-2014-1022>

Arıcı, H. E., Aladag, O. F., & Köseoğlu, M. A. (2024). How Does CEO Duality Influence ESG Scores in Hospitality and Tourism Companies? Confounding Roles of Governance Mechanisms and Financial Indicators. *Journal of Hospitality & Tourism Research*, 49(5), 961–981. <https://doi.org/10.1177/10963480241266154>

Atwood, J. A., Shaik, S., & Watts, M. J. (2003). Are Crop Yields Normally Distributed? A Reexamination. *American Journal of Agricultural Economics*, 85(4), 888–901. <https://doi.org/10.1111/1467-8276.00495>

Baltagi, B. H., Kao, C., & Peng, B. (2015). On Testing for Sphericity With Non-Normality in a Fixed Effects Panel Data Model. *Statistics & Probability Letters*, 98, 123–130. <https://doi.org/10.1016/j.spl.2014.12.017>

Bhandari, K. R., Ranta, M., & Salo, J. (2022). The resource-based view, stakeholder capitalism, ESG, and sustainable competitive advantage: The firm's embeddedness into ecology, society, and governance. *Business Strategy and the Environment*, 31(4), 1525–1537. <https://doi.org/10.1002/bse.2967>

Bhat, B. A., Makkar, M. K., & Gupta, N. (2023). Corporate Board Structure and ESG Performance: An Empirical Study of Listed Firms in the Emerging Market. *Corporate Governance and Sustainability Review*, 7(2), 8–17. <https://doi.org/10.22495/cgsrv7i2p1>

Bhatia, S., & Marwaha, D. (2022). The Influence of Board Factors and Gender Diversity on the ESG Disclosure Score: A Study on Indian Companies. *Global Business Review*, 23(6), 1544–1557. <https://doi.org/10.1177/09721509221132067>

Brennan, R. L., Harris, D. J., & Hanson, B. A. (1987). ACT Research Report Series: The Bootstrap and Other Procedures for Examining the Variability of Estimated Variance Components in Testing Contexts. <https://doi.org/10.1037/e426002008-001>

Brookman, J., & Thistle, P. D. (2009). CEO tenure, the risk of termination and firm value. *Journal of Corporate Finance*, 15(3), 331–344. <https://doi.org/10.1016/j.jcorpfin.2009.01.002>

Budastra, M. A., Adamu, I., Putra, F. K., & Budastra, I. K. (2023). Do Ceo Characteristics Really Matter for Firm Performance? Evidence From Indonesia. *Jurnal Bisnis Terapan*, 7(2), 221–229. <https://doi.org/10.24123/jbt.v7i2.5936>

Bui, H. T., Nguyen, H., & Chau, V. S. (2019). Strategic Agility Orientation? The Impact of CEO Duality on Corporate Entrepreneurship in Privatized Vietnamese Firms. *Journal of General Management*, 45(2), 107–116. <https://doi.org/10.1177/0306307019886170>

Chen, H.-L. (2013). CEO Tenure and R&D Investment: The Moderating Effect of Board Capital. *The Journal of Applied Behavioral Science*, 49(4), 437–459. <https://doi.org/10.1177/0021886313485129>

Darouichi, A., Kunisch, S., Menz, M., & Cannella, A. A. (2021). CEO tenure: An integrative review and pathways for future research. *Corporate Governance: An International Review*, 29(6), 661–683. <https://doi.org/10.1111/corg.12396>

Disli, M., Yilmaz, M. K., & Mohamed, F. F. M. (2022). Board characteristics and sustainability performance: Empirical evidence from emerging markets. *Sustainability Accounting, Management and Policy Journal*, 13(4), 929–952. <https://doi.org/10.1108/SAMPJ-09-2020-0313>

Elsayed, K. (2007). Does CEO Duality Really Affect Corporate Performance? *Corporate Governance an International Review*, 15(6), 1203–1214. <https://doi.org/10.1111/j.1467-8683.2007.00641.x>

Gupta, V. K., Han, S., Nanda, V., & Silveri, S. (Dino). (2018). When Crisis Knocks, Call a Powerful CEO (or Not): Investigating the Contingent Link Between CEO Power and Firm Performance During Industry Turmoil. *Group & Organization Management*, 43(6), 971–998. <https://doi.org/10.1177/1059601116671603>

Gurol, B., & Lagasio, V. (2023). Women board members' impact on ESG disclosure with environment and social dimensions: Evidence from the European banking sector. *Social Responsibility Journal*, 19(1), 211–228. <https://doi.org/10.1108/SRJ-08-2020-0308>

Haider, J., & Fang, H.-X. (2018). CEO power, corporate risk taking and role of large shareholders. *Journal of Financial Economic Policy*, 10(1), 55–72. <https://doi.org/10.1108/JFEP-04-2017-0033>

Hambrick, D. C. (2007). Upper Echelons Theory: An Update. *Academy of Management Review*, 32(2), 334–343. <https://doi.org/10.5465/amr.2007.24345254>

Hou, W., Priem, R. L., & Goranova, M. (2017). Does One Size Fit All? Investigating Pay–Future Performance Relationships Over the “Seasons” of CEO Tenure. *Journal of Management*, 43(3), 864–891. <https://doi.org/10.1177/0149206314544744>

Jiraporn, P., Chintrakarn, P., & Liu, Y. (2012). Capital Structure, CEO Dominance, and Corporate Performance. *Journal of Financial Services Research*, 42(3), 139–158. <https://doi.org/10.1007/s10693-011-0109-8>

Khan, T. M., Gang, B., Fareed, Z., & Yasmeen, R. (2020). The impact of CEO tenure on corporate social and environmental performance: An emerging country's analysis. *Environmental Science and Pollution Research*, 27(16), 19314–19326. <https://doi.org/10.1007/s11356-020-08468-y>

Kind, F. L., Zeppenfeld, J., & Lueg, R. (2023). The impact of chief executive officer narcissism on environmental, social, and governance reporting. *Business Strategy and the Environment*, 32(7), 4448–4466. <https://doi.org/10.1002/bse.3375>

Lewellyn, K. B., & Fainshmidt, S. (2017). Effectiveness of CEO Power Bundles and Discretion Context: Unpacking the ‘Fuzziness’ of the CEO Duality Puzzle. *Organization Studies*, 38(11), 1603–1624. <https://doi.org/10.1177/0170840616685364>

Li, F., Li, T., & Minor, D. (2016). CEO power, corporate social responsibility, and firm value: A test of agency theory. *International Journal of Managerial Finance*, 12(5), 611–628. <https://doi.org/10.1108/IJMF-05-2015-0116>

Maak, T., Pless, N. M., & Voegtlin, C. (2016). Business Statesman or Shareholder Advocate? CEO Responsible Leadership Styles and the Micro-Foundations of Political CSR. *Journal of Management Studies*, 53(3), 463–493. <https://doi.org/10.1111/joms.12195>

Mahran, K., & Elamer, A. A. (2024). Chief Executive Officer (CEO) and corporate environmental sustainability: A systematic literature review and avenues for future research. *Business Strategy and the Environment*, 33(3), 1977–2003. <https://doi.org/10.1002/bse.3577>

Matta, E., & Beamish, P. W. (2008). The accentuated CEO career horizon problem: Evidence from international acquisitions. *Strategic Management Journal*, 29(7), 683–700. <https://doi.org/10.1002/smj.680>

Rath, C., Kurniasari, F., & Deo, M. (2020). CEO Compensation and Firm Performance: The Role of ESG Transparency. *Indonesian Journal of Sustainability Accounting and Management*, 4(2). <https://doi.org/10.28992/ijsam.v4i2.225>

Romano, M., Cirillo, A., Favino, C., & Netti, A. (2020). ESG (Environmental, Social and Governance) Performance and Board Gender Diversity: The Moderating Role of CEO Duality. *Sustainability*, 12(21), 9298. <https://doi.org/10.3390/su12219298>

Sang, S., Yan, A., & Ahmad, M. (2024). CEO Experience and Enterprise Environment, Social and Governance Performance: Evidence From China. *Sustainability*, 16(11), 4403. <https://doi.org/10.3390/su16114403>

Simsek, Z. (2007). CEO tenure and organizational performance: An intervening model. *Strategic Management Journal*, 28(6), 653–662. <https://doi.org/10.1002/smj.599>

Song, H. J., & Kang, K. H. (2019). The moderating effect of CEO duality on the relationship between geographic diversification and firm performance in the US lodging industry. *International Journal of Contemporary Hospitality Management*, 31(3), 1488-1504. <https://doi.org/10.1108/IJCHM-12-2017-0848>

Triyani, A., & Setyahuni, S. W. (2020). Pengaruh Karakteristik Ceo Terhadap Pengungkapan Informasi Environmental, Social, and Governance (Esg). *Jurnal Ekonomi Dan Bisnis*, 21(2), 72. <https://doi.org/10.30659/ekobis.21.2.72-83>

Triyani, A., Setyahuni, S. W., & Kiryanto, K. (2020). The Effect of Environmental, Social and Governance (ESG) Disclosure on Firm Performance: The Role of Ceo Tenure. *Jurnal Reviu Akuntansi Dan Keuangan*, 10(2), 261-270. <https://doi.org/10.22219/jrak.v10i2.11820>

Uyar, A., Kuzey, C., Kilic, M., & Karaman, A. S. (2021). Board structure, financial performance, corporate social responsibility performance, CSR committee, and CEO duality: Disentangling the connection in healthcare. *Corporate Social Responsibility and Environmental Management*, 28(6), 1730-1748. <https://doi.org/10.1002/csr.2141>

Velásquez, J. P. D., & Cortés, D. L. (2020). CEO Duality and Firm Value: Evidence From Mexico. *Entramado*, 16(2), 12-23. <https://doi.org/10.18041/1900-3803/entramado.2.6435>

Velte, P. (2019). Does CEO power moderate the link between ESG performance and financial performance?: A focus on the German two-tier system. *Management Research Review*, 43(5), 497-520. <https://doi.org/10.1108/MRR-04-2019-0182>

Wang, G., Holmes, R. M., Oh, I., & Zhu, W. (2016). Do CEOs Matter to Firm Strategic Actions and Firm Performance? A Meta-Analytic Investigation Based on Upper Echelons Theory. *Personnel Psychology*, 69(4), 775-862. <https://doi.org/10.1111/peps.12140>

Wijayanto, W., Giriati, Wendy, W., & Malini, H. (2024). CEO Power and Firm Value: Affirmative Action Implications. *Asian Journal of Economics Business and Accounting*, 24(6), 552-560. <https://doi.org/10.9734/ajeba/2024/v24i61381>

Yadav, P., & Jain, A. (2023). Sustainability disclosures and corporate boards: A stakeholder approach to decision-making. *Journal of Applied Accounting Research*, 24(5), 1027-1047. <https://doi.org/10.1108/JAAR-10-2022-0279>

Yu, M. (2023). CEO duality and firm performance: A systematic review and research agenda. *European Management Review*, 20(2), 346-358. <https://doi.org/10.1111/emre.12522>

Zhu, N., Nagriwum, T. M., & Saeed, U. F. (2025). Advancing ESG Performance in MENA Economies: Do Governance Structures and Eco-Technology Matter? *Corporate Social Responsibility and Environmental Management*. <https://doi.org/10.1002/csr.70111>