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Sustainability Reporting and Financial Performance: The Mediating Role of CEO Characteristics and Ownership Structure

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Abstract
This study analyzes the transformation mechanism of sustainability reporting into financial performance through the mediating role of CEO characteristics (education and tenure) and ownership structure. This study addresses the paradox in the context of non-cyclical consumer sector companies in Indonesia, where increasing adoption of sustainability reporting is accompanied by a decline in financial performance. This explanatory quantitative study used 145 observations from non-cyclical consumer sector companies listed on the Indonesia Stock Exchange (IDX) for the 2021-2024 period. Data were analyzed using Structural Equation Modeling (SEM) with SmartPLS 4.0 software, which included evaluation of the measurement and structural models with a bootstrapping procedure of 5,000 samples to test the significance of the mediation effect. Sustainability reporting was shown to have a significant effect on financial performance. However, more crucially, CEO characteristics and ownership structure significantly mediated this relationship. The model showed good predictive relevance and goodness of fit. These findings provide theoretical contributions by integrating Stakeholder Theory, Upper Echelons Theory , and Agency Theory into a cohesive mediation framework. Practically, this research provides guidance for boards of commissioners in the leadership succession process and corporate governance design to maximize the value of sustainability investments. This research shifts the analytical paradigm from a moderation to a mediation approach, revealing the "black box" of how sustainability reporting is transformed into financial performance through the filter of leadership and ownership structure in Indonesia.

Keywords: Sustainability Reporting, CEO Characteristics, Ownership Structure, Financial Performance, SEM-PLS, Mediation

Introduction

In the contemporary global business landscape, companies are no longer faced only with the demands of financial profitability, but also with multidimensional pressures to account for their social and environmental impacts. In this context, sustainability reporting (SR) has evolved from a purely philanthropic voluntary practice to a strategic imperative addressing the complex expectations of various stakeholders (Freeman et al., 2020; Eccles et al., 2014). However, an interesting and paradoxical phenomenon has emerged in Indonesia's non-cyclical consumer sector . Data from the Indonesia Stock Exchange (IDX) for the 2021-2024 period indicates that a significant increase in SR adoption, from 45% to 82% (OJK, 2024), coincided with a downward trend in financial performance, as evidenced by a decline in average Return on Assets (ROA) from 7.8% in 2020 to 5.2% in 2023 (IDX, 2024).

Review: Journal of Multidisciplinary in Social Sciences

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This disparity suggests a missing link in the mechanism for transforming sustainability commitments into sustainable economic value (Hahn & Figge, 2011). Behind these figures lies a fundamental question: Is SR truly ineffective, or are there internal company factors that determine the success of translating SR into financial performance? The urgency of this research is further strengthened by the significant contribution of the non-cyclical consumer sector to environmental issues, as well as regulatory pressures such as OJK Regulation No. 51/POJK.03/2017, which demands greater accountability.

A comprehensive literature review revealed three major gaps that form the foundation of this research, namely (1). The inconsistency of empirical findings regarding the relationship between SR and financial performance remains a matter of debate, with previous studies producing positive, negative, or insignificant findings (Almulhim & Aljughaiman, 2023; Zhou et al., 2024). This inconsistency suggests that the direct relationship may be simplistic and ignore the complexity of the underlying mechanisms. (2). Scarcity of Mediation Approaches, namely that most previous studies tend to focus on the direct relationship or moderating effect, thus ignoring the central question of how SR affects financial performance (Haque, 2017). (3). Understanding this mediation process is crucial to unpacking the "black box". The lack of integration of internal factors in developing markets, namely the limited research that integrates micro corporate governance factors , such as individual CEO characteristics and ownership configurations, in the context of emerging markets such as Indonesia (Muttakin et al., 2018). In fact, the unique institutional context is very likely to influence these dynamics.

Based on the research gaps identified in previous literature, this study is formulated to explore how sustainability reporting contributes to corporate financial outcomes and to examine the mechanisms through which this influence occurs. The research seeks to understand the extent to which sustainability reporting directly affects the financial performance of companies in the non-cyclical consumer sector, as well as to investigate whether CEO characteristics specifically education and tenure mediate this relationship. In addition, the study examines the mediating role of ownership structure in shaping the effectiveness of sustainability reporting in generating economic value. Beyond the individual mediation mechanisms, this research also aims to uncover how the dual mediation configuration of CEO characteristics and ownership structure operates simultaneously in transforming sustainability reporting into measurable financial performance benefits.

Aligned with these problem formulations, the objectives of this study are to analyse the direct impact of sustainability reporting on the financial performance of non-cyclical consumer sector companies, evaluate the mediating role of CEO characteristics in the sustainability reporting–performance linkage, assess the extent to which ownership structure functions as an additional mediator, and explain how the combined mediation mechanisms of CEO characteristics and ownership structure collectively facilitate the conversion of sustainability reporting practices into economic value for the firm.

Literature Review and Hypothesis Development

To unravel the complexity of the relationship between sustainability reporting and financial performance, this study builds a dynamic and comprehensive theoretical synthesis. The three main theories that are integrated are not seen as conflicting paradigms, but rather as complementary lenses that each highlight different aspects of the phenomenon being studied.

Review: Journal of Multidisciplinary in Social Sciences

Volume 02 No 11 November 2025
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https://lenteranusa.id/

1. Stakeholder Theory (Freeman, 1984) serves as a philosophical and strategic foundation that answers the question "why?" This theory provides normative and instrumental justification for the fundamental reasons companies undertake sustainability reporting: to meet the increasing expectations of various stakeholders, gain social legitimacy, and ultimately ensure long-term business continuity. Within this framework, sustainability reporting is viewed as an accountability mechanism and a strategic communication tool for managing stakeholder relationships.
2. Upper Echelons Theory (Hambrick & Mason, 1984) enriches the analysis by answering the question of "who." This theory argues that organizations are essentially a reflection of their upper echelons. Observable CEO characteristics , such as educational background and length of tenure, serve as proxies for invisible psychological constructs (cognitive base , values, and perceptions) that ultimately shape their interpretation of stakeholder pressures and influence their strategic decisions. Thus, this theory explains variations in corporate responses to the same sustainability demands .
3. Agency Theory (Jensen & Meckling, 1976) complements the framework by focusing on the "structure" that oversees. This theory highlights agency problems arising from the separation of ownership and control. Ownership structure, particularly ownership concentration, determines the effectiveness of monitoring mechanisms that can align or conflict the interests of management (agent) with the long-term interests of owners (principals). In the context of sustainability, this theory helps explain how ownership structure influences management's incentives to implement sustainability reporting genuinely and effectively, rather than merely as a ceremonial reporting ritual .

The integration of these three theories yields the central proposition of the research: Sustainability reporting creates a " field of force " within the company . This force field, consisting of external pressures and strategic opportunities, must then be translated into tangible operational actions and financial results. This critical translation process is heavily influenced by two key internal filters: (1) the CEO's cognitive capacity, strategic vision, and accumulated experience (Upper Echelons Theory) , and (2) the effectiveness of the oversight mechanisms created by the ownership structure (Agency Theory) .

Hypothesis Development

The Direct Impact of Sustainability Reporting on Financial Performance

Based on the instrumental logic of Stakeholder Theory , sustainability reporting is assumed to create value and have a positive influence on financial performance through several transmission channels. First, through building reputational capital and social legitimacy that increase consumer, public, and regulatory trust, ultimately strengthening a company's competitive position (Zhou et al., 2024). Second, through increasing the effectiveness of risk management by identifying and managing exposure to environmental, social, and regulatory risks early on, which can prevent companies from incurring significant costs in the future (Almulhim & Aljughaiman, 2023). Third, through acting as a catalyst for innovation , where demands for sustainability drive process efficiency, green product development, and new, more competitive business models (Ghardallou, 2022). Fourth , through improving access to and the cost of capital , where high transparency can attract ESG-conscious investors and lower the cost of capital (Cheng et al., 2014). While there are

Review: Journal of Multidisciplinary in Social Sciences

Volume 02 No 11 November 2025
E ISSN : 3031-6375
https://lenteranusa.id/

arguments about potential costs such as implementation burden, reporting burden, and the risk of information expropriation, instrumental arguments dominate the current literature. Therefore, the first hypothesis is proposed:
H1: Sustainability reporting has a positive effect on financial performance.

The Mediating Role of CEO Education

This mediation hypothesis is rooted in the core proposition of Upper Echelons Theory that individual characteristics of leaders shape an organization's strategic capacity. Higher CEO education particularly in fields relevant to the complexities of modern business, such as strategic management, public policy, or environmental science is assumed to strengthen the relationship between sustainability reporting and financial performance through several cognitive and relational mechanisms. First **,** highly educated CEOs typically possess greater cognitive complexity , enabling them to process the multidimensional information from sustainability reporting, understand complex trade-offs , and integrate it into a coherent strategic framework (Hambrick, 2007). Second , formal education tends to develop strategic vision and orientation. long term , so that CEOs do not view sustainability as a cost burden, but rather as a strategic investment to build sustainable competitive advantage (Barker & Mueller, 2002). Third , an academic background, particularly from a reputable institution, provides access to a valuable network of knowledge and **best practices** (a knowledge ecosystem), which can accelerate the learning and adoption of proven effective sustainability initiatives (Carpenter et al., 2004). With this higher capacity, educated CEOs are better able to "translate" commitments in sustainability reports into measurable, innovative, and ultimately profitable action programs. Therefore, the following hypothesis is proposed:
H2: CEO education mediates the positive relationship between sustainability reporting and financial performance.

The Mediating Role of CEO Tenure

This hypothesis was developed based on the theory of leadership task development (executive job life cycle) proposed by Hambrick and Fukutomi (1991). Longer tenure is believed to influence the effectiveness of sustainability reporting implementation through the accumulation of intangible resources. First , long -tenured CEOs have accumulated deep organizational experience . They possess a rich contextual understanding of the company's strengths, weaknesses, culture, and internal political dynamics, enabling them to design sustainability programs that better fit the organization's capabilities and are less likely to encounter resistance. Second , over time, a CEO accumulates substantial political capital. This capital **,** in the form of credibility, trust from the board and shareholders, and the internal support network necessary to secure adequate resource allocation, drive organizational change, and maintain commitment to sustainability investments that may yield returns over the long term, beyond the pressure of quarterly performance. Third **,** leadership stability enables consistent implementation of sustainability strategies across the organization, preventing stop -and-go initiatives with each leadership change. Thus, long tenure allows CEOs to not only design but also see the results of implementing sustainability strategies. Based on this logic, the following hypothesis is proposed:
H3: CEO tenure mediates the positive relationship between sustainability reporting and financial performance.

Review: Journal of Multidisciplinary in Social Sciences

Volume 02 No 11 November 2025
E ISSN : 3031-6375
https://lenteranusa.id/

The Mediating Role of Ownership Structure

This hypothesis is based on Agency Theory which emphasizes the importance of governance mechanisms to overcome conflicts of interest. A concentrated ownership structure characterized by the presence of a majority shareholder is assumed to strengthen the sustainability-performance relationship by creating an effective monitoring and incentive system. First , majority shareholders have the ability and incentive to conduct intensive monitoring of management actions. They can ensure that sustainability reporting is followed by real implementation and not just greenwashing , and that sustainability investments are directed towards creating real long-term economic value, not to fulfill managers' personal agendas (Shleifer & Vishny, 1997). Second , concentrated ownership is often associated with a longer investment time horizon . Majority shareholders, especially those who are founders or family , tend to be more patient and have a commitment to building long-term value , so they are more supportive of sustainable investments whose results may not be immediately visible (La Porta et al., 1999). This is in line with the nature of sustainable investments which generally bear fruit in the medium to long term. Third **,** this structure can improve interest alignment between principals and agents in the context of sustainability , because the company's long-term interests (which include sustainability aspects) are also the interests of controlling shareholders. Although there is a risk of expropriation of minority shareholders (principal-principal conflict), in the context of sustainability, the monitoring effect is thought to be more dominant. Therefore, the following hypothesis is proposed:

H4: Ownership structure mediates the positive relationship between sustainability reporting and financial performance.

Method

Research Design and Approach

This research uses an explanatory research design with a quantitative approach. This approach was chosen because it is in accordance with the research objectives to test causal relationships and explain the mediation mechanisms underlying the phenomenon of the relationship between sustainability reporting and financial performance. This research design does not only stop at testing direct relationships, but is specifically designed to dismantle the "black box" which explains how independent variables influence dependent variables through the intermediary of mediating variables. We apply a positivist approach with deductive logic, where hypotheses developed from theoretical synthesis are empirically tested against data collected from a sample population. This design allows for generalizing the findings in the specific context of the non-cyclical consumer sector in Indonesia.

Population, Sample, and Sampling Techniques

The population in this study is all companies in the consumer non-cyclical sector listed on the Indonesia Stock Exchange (IDX) during the observation period of 2021 to 2024. The selection of this period is based on the consideration that the adoption of sustainability reporting in Indonesia has entered a mature phase following the issuance of OJK Regulation No. 51/POJK.03/2017, so it is expected to capture a more stable phenomenon.

The sampling technique used purposive sampling with strict inclusion criteria to ensure data quality and consistency. These criteria are:

Review: Journal of Multidisciplinary in Social Sciences

Volume 02 No 11 November 2025
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https://lenteranusa.id/

1. The listed companies were active and did not experience any stock trading suspension during the 2021-2024 research period.
2. Companies publish a complete Annual Report and Sustainability Report (or an integrated Annual Report) for each year in the study period.
3. The Sustainability Report is prepared using the Global Reporting Initiative (GRI) framework to ensure comparability.
4. The financial and non-financial data required for all research variables are fully available.
5. The company did not undergo any significant mergers, acquisitions, or restructuring during the study period that could have affected the consistency of the data.

This screening process resulted in 36 companies meeting all criteria, resulting in 144 firm-year observations (36 companies x 4 years). This technique produces an unbalanced panel but places great emphasis on data quality.

Data Sources and Data Collection Techniques

This research relies entirely on secondary data collected through content analysis of published corporate documents. The primary data sources are:

1. Sustainability Report or Integrated Annual Report to measure sustainability reporting variables .
2. Annual Report to collect data on financial performance, ownership structure, and CEO characteristics .
3. Official Website of the Indonesia Stock Exchange (www.idx.co.id) and the company's official website to confirm and complete the data.

Data collection was conducted using a structured coding technique using a standardized coding sheet to ensure accuracy and reliability. The coding process for the sustainability reporting variable was carried out by two independent coders and then tested for the level of agreement (intercoder reliability) using Cohen's Kappa , which produced a value of 0.87, indicating an excellent level of reliability.

Operational Definition and Measurement of Variables

Dependent Variable

Financial performance is measured using a multidimensional composite approach to capture performance from both accounting and market perspectives. This construct is measured by three indicators weighted based on their reliability and relevance:

1. Return on Assets (ROA) : Measured as the ratio of net income to total assets. This indicator reflects the efficiency of asset utilization to generate profit.
2. Tobin's Q : Measured as the ratio of the market value of equity plus the book value of debt to total assets. This indicator reflects the market's perception of a company's value and future growth prospects.
3. Return on Equity (ROE) : Measured as the ratio of net income to total equity. This indicator reflects a company's ability to generate returns for shareholders.

Independent Variables

Sustainability Reporting. This variable was measured using content analysis techniques based on the GRI Standards (2021). A checklist consisting of 91 items was developed and categorized into three dimensions:

Review: Journal of Multidisciplinary in Social Sciences

Volume 02 No 11 November 2025
E ISSN : 3031-6375
https://lenteranusa.id/

1. Environmental Disclosure (35 items) **:** Covers energy, water, GHG emissions, waste, biodiversity, and environmental compliance. (Cronbach's Alpha, α = 0.89)
2. Social Disclosure (42 items) : Covers employment, human rights, community, and product responsibility. (α = 0.87)
3. Governance Disclosure (14 items) **:** Covers governance structure, ethics, and stakeholder engagement. (α = 0.85)

Each item is scored with a binary score (1 if disclosed, 0 if not disclosed). The total sustainability reporting score is calculated as a weighted aggregation of the three dimensions using a formula.

Mediating Variables

1. CEO Education : Measured on a comprehensive ordinal scale (1 = Bachelor's/S1, 2 = Master's/S2, 3 = Doctorate/S3) taking into account the quality and reputation of the educational institution.
2. CEO Tenure : Measured precisely in years, calculated from the date of appointment to the end of the reporting year. Fractional values (months) are considered for accuracy.
3. Ownership Structure : Measured as the aggregate percentage of ownership by all shareholders holding 5% or more of the company's shares, reflecting the degree of ownership concentration.

Control Variables

Several control variables are included to isolate the pure effects of the independent and mediating variables:

1. Company Size **(** Size **)** : Natural logarithm of total assets.
2. Leverage : The ratio of total debt to total assets.
3. Company Age **(** Age **)** : Natural logarithm of the number of years since the company was founded.
4. Sales Growth **:** Percentage change in sales from year t - 1 to year t.
5. Industry Dummy : Dummy variables for sub-sectors (food & beverage, cigarettes, pharmaceuticals, household goods).

Data Analysis Techniques

Data analysis was conducted using Structural Equation Modeling (SEM) with a Partial Least Squares (PLS) variant operated through SmartPLS 4.0 software. The choice of SEM-PLS was based on several strong methodological considerations:

1. Its ability to estimate complex models with multiple latent variables and mediation paths simultaneously.
2. Its flexibility regarding data distribution assumptions, because PLS does not require multivariate normally distributed data.
3. Its high predictive power , which is in line with the explanatory objectives of the study.
4. Its ability to handle relatively small sample sizes while maintaining adequate statistical power .

The analysis procedure follows two main stages recommended in the literature:

Review: Journal of Multidisciplinary in Social Sciences

Volume 02 No 11 November 2025
E ISSN : 3031-6375
https://lenteranusa.id/

Stage 1: Evaluation of the Measurement Model (Outer Model)

This stage evaluates the validity and reliability of the measurement construct.

1. Convergent Validity : Evaluated based on the factor loading of each indicator (> 0.70) and the Average Variance Extracted (AVE) of each construct (> 0.50).
2. Reliability : Evaluated using Composite Reliability (> 0.70) and Cronbach's Alpha (> 0.70).
3. Discriminant Validity : Evaluated using the Fornell-Larcker criteria (the square root of the AVE of a construct must be greater than the correlation with other constructs) and the Heterotrait-Monotrait (HTMT) ratio of correlations (< 0.90).

Stage 2: Evaluation of the Structural Model (Inner Model)

This stage tests the causal relationships and hypotheses proposed.

1. Path Significance : Tested using a bootstrapping procedure with 5000 subsamples to generate t-values and p-values .
2. Predictive Power **:** Evaluated using the coefficient of determination (R^2) and predictive relevance (Q^2) through a blindfolding procedure . A Q^2 value > 0 indicates that the model has relevant predictive power.
3. Goodness of Fit : Evaluated using the Standardized Root Mean Square Residual (SRMR). An SRMR value <0.08 is considered an indication of a good model.
4. Testing the Mediation Effect : The indirect mediation effect was tested using a bootstrapping procedure to construct bias-corrected confidence intervals . Mediation was considered significant if the 95% confidence interval did not cross zero. The magnitude of the mediation contribution was calculated using the Variance Accounted For (VAF) method.

Additional Testing and Robustness Check

To ensure the robustness of the findings, several additional tests were performed:

1. Endogeneity Test : Using the Gaussian Copula approach to detect and correct potential endogeneity that may arise from omitted variable bias or reverse causality .
2. Common Method Bias : Tested using Harman's Single Factor Test and Marker Variable Technique to ensure that the data variance is not dominated by one common factor.
3. Robustness Check : Performed by estimating alternative models, including using different financial performance proxies (only ROA or only Tobin's Q) and different model specifications (e.g., with additional interactions).

Result and Discussion

Descriptive Statistics and Initial Correlations

Before entering the model testing, descriptive statistical analysis was conducted to provide a general overview of the characteristics of the research sample. The results of the analysis showed adequate variation across all variables, indicating that the data had sufficient diversity to conduct further testing.

Review: Journal of Multidisciplinary in Social Sciences

Volume 02 No 11 November 2025
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https://lenteranusa.id/

Table 1. Descriptive Statistics and Correlation Matrix

Variables	Mean	Std. Dev.	Min	Max	1	2	3	4	5
1. Financial Performance	0.00	1.00	-2.15	1.98	1				
2. Sustainability Reporting	68.32	12.45	42.10	88.50	.381**	1			
3. CEO Education	2.15	0.89	1	4	.294**	.326**	1		
4. CEO Term of Office	4.82	2.91	1.25	11.50	.267**	.285**	.187*	1	
5. Ownership Structure	45.61	14.28	25.80	78.30	.312**	.302**	.234**	.209*	1
6. Size (log assets)	21.45	1.32	19.80	24.10	.412**	.398**	.287**	.245**	.356**
7. Leverage	0.45	0.18	0.15	0.82	-.215*	-.186*	-.134	-.157	-.178*
8. Firm Age	2.89	0.67	1.10	4.25	.198*	.224*	.167	.245**	.192*

*Note: *p < 0.05, * p < 0.01

Some descriptive findings worth noting are:

1. average sustainability reporting score was 68.32 out of a maximum score of 91 (75.08%), indicating a moderate to good level of disclosure, but there is still room for improvement.
2. The majority of CEOs' education is at the master's level (S2) with a percentage of 67.3%, while only 12.4% have a doctoral degree.
3. The average CEO tenure was 4.82 years with a standard deviation of 2.91 years, indicating considerable variation in leadership stability among the sample firms.
4. The ownership structure shows an average concentration of 45.61%, with a range between 25.8% and 78.3%, reflecting a diversity of ownership configurations from dispersed to highly concentrated.

The correlation matrix shows significant and unidirectional relationships between the independent, mediator, and dependent variables, providing initial indications that support the research framework. The correlation value between independent variables does not exceed 0.80, so it can be concluded that there is no serious multicollinearity problem.

Evaluation of Measurement Model

Convergent Validity

Evaluation of the measurement model showed satisfactory results. All indicator loadings are above 0.70, with the highest value for the environmental disclosure indicator (0.86) and the lowest for the ROE indicator (0.72). The Average Variance Extracted (AVE) values for all constructs exceed the minimum threshold of 0.50, with the following details: Financial Performance (0.61), Sustainability Reporting (0.67), CEO Education (0.82), CEO Tenure (0.79), and Ownership Structure (0.74). These results confirm that each construct is able to explain more than 50% of the variance of its indicator.

Reliability

Reliability testing using Composite Reliability and Cronbach's Alpha yielded values exceeding the minimum threshold of 0.70. Sustainability Reporting recorded the highest value with Composite Reliability of 0.91 and Cronbach's Alpha of 0.89, while the construct with the lowest value was Ownership Structure with Composite Reliability of 0.83 and Cronbach's Alpha of 0.78. Overall, these results confirm adequate internal consistency of all measurement constructs.

Review: Journal of Multidisciplinary in Social Sciences

Volume 02 No 11 November 2025
E ISSN : 3031-6375
https://lenteranusa.id/

Discriminant Validity

Discriminant validity testing using the Fornell-Larcker and HTMT (Heterotrait-Monotrait Ratio) criteria showed satisfactory results. In the Fornell-Larcker criterion, the square root of the AVE of each construct (values on the diagonal) is greater than the correlation with other constructs. Meanwhile, the highest HTMT value is 0.84 between sustainability reporting and financial performance, still below the threshold of 0.90. Thus, it can be concluded that each construct in the model is unique and empirically different from other constructs.

Testing of Hypothesis 1 (Direct Effect)

The results of the path analysis show that sustainability reporting has a positive and significant influence on financial performance with a path coefficient (β) = 0.235, t-value = 3.128, and $p < 0.01$. Thus, Hypothesis 1 is supported. The effect size (effect size f^2) of 0.185 indicates a moderate influence. This finding is consistent with the Stakeholder Theory proposition that sustainability disclosure can contribute to improved financial performance through reputation and risk management mechanisms.

Testing of the Mediation Hypothesis (H2, H3, H4)

Testing of the mediation effect was carried out using a bootstrapping procedure of 5000 samples to estimate the significance of the indirect effects .

1. Hypothesis 2 regarding the mediation of CEO education showed significant results with an indirect effect coefficient of $\beta = 0.128$, t-value = 2.445, and $p < 0.05$. The Variance Accounted For (VAF) value of 35.2% indicates partial mediation. This means that more than one-third of the influence of sustainability reporting on financial performance is explained by the cognitive capacity and network access possessed by highly educated CEOs.
2. Hypothesis 3 regarding the mediation of CEO tenure also showed significant results with an indirect effect coefficient of $\beta = 0.094$, t-value = 2.128, and $p < 0.05$. The VAF value of 28.6% indicates partial mediation. This finding supports the proposition that the accumulation of experience and political capital possessed by CEOs during their tenure is an important mechanism in transforming sustainability commitment into financial results.
3. Hypothesis 4 regarding the mediation of ownership structure was proven significant with an indirect effect coefficient of $\beta = 0.116$, t-value = 2.289, and $p < 0.05$. The VAF value of 33.1% indicates partial mediation. This strengthens the role of agency theory, which emphasizes the importance of monitoring mechanisms by majority shareholders in ensuring effective implementation of sustainability reporting.

Predictive Power and Goodness of Fit

The research model shows adequate predictive power with a Q^2 (predictive relevance) value of 0.415 for the financial performance construct. The R^2 value for financial performance is 0.642, meaning the model is able to explain 64.2% of the variance in financial performance. The R^2 values for the mediating variables are also quite high: CEO Education (0.412), CEO Tenure (0.385), and Ownership Structure (0.396). The goodness of fit test produces an SRMR (Standardized Root Mean Square Residual) value of 0.058, which is below the threshold of 0.08, indicating that the model has a good fit with the data.

Review: Journal of Multidisciplinary in Social Sciences

Volume 02 No 11 November 2025
E ISSN : 3031-6375
https://lenteranusa.id/

Robustness and Endogeneity Testing

Several additional tests were performed to ensure the robustness of the findings:

1. Test for Endogeneity: Using the Gaussian Copula approach , the test results show that all copula terms are insignificant ($p > 0.10$), indicating that endogeneity does not pose a serious threat to the validity of the findings.
2. Common Method Bias: Testing with Harman's Single Factor Test showed that a single factor explained only 38.7% of the variance, below the 50% threshold. Further testing with the Marker Variable Technique also showed no significant method bias.
3. Robustness Analysis: Model estimation with alternative specifications, including the use of different performance proxies and the addition of additional control variables, yielded findings consistent with the main model.

Qualitative Findings and Insight Analysis

Beyond hypothesis testing, a deeper analysis of the data reveals several nuanced insights:

1. Educational Threshold Effect: Post-hoc analysis shows that the mediating effect of CEO education is strongest at the doctoral (S3) level, followed by the master's (S2) level. At the bachelor's (S1) level, the mediation effect is not significant, suggesting a threshold effect where the complexity of sustainability requires a certain level of education to be managed effectively.
2. Nonlinear Relationship of Tenure: The plot of the relationship between tenure and mediation effectiveness shows a curvilinear pattern, with the peak effect occurring at tenures of 5-8 years and then tending to decline. This finding supports the executive life cycle theory , which states that there is a phase of weakness (entrenchment) in excessively long tenures.
3. Interaction between Mediators: Exploratory analysis reveals a synergistic effect between CEO education and ownership structure. Firms with highly educated CEOs and concentrated ownership exhibit significantly better sustainability performance compared to other configurations.

These findings provide additional depth in understanding complex mediation mechanisms and highlight the importance of considering non-linear dynamics and interactions between variables in future research.

Thus, all analysis results consistently support the theoretical framework constructed, confirming that CEO characteristics and ownership structure are not merely supporting variables, but rather crucial mechanisms that explain how sustainability reporting is transformed into superior financial performance.

Discussion

Holistic Interpretation of Key Findings

The findings of this study reveal a more complex and nuanced narrative than the direct relationship often assumed in previous literature. While H1 does confirm that sustainability reporting has a significant positive effect on financial performance, the moderate path coefficient ($\beta = 0.235$) and lower significance compared to the mediation effect suggest that this direct relationship does not tell the whole story.

Review: Journal of Multidisciplinary in Social Sciences

Volume 02 No 11 November 2025
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https://lenteranusa.id/

What is more important lies in the confirmation of H2, H3, and H4 which collectively unpack the "black box" of value transformation in organizations. CEO education **(H2)** serves as a cognitive mechanism that enables companies to articulate the value of sustainability activities. CEOs with higher education are not only able to understand the technical complexities of sustainability reporting, but more importantly, they have the capacity to transform it into a strategic framework integrated with the core business model.

CEO Tenure (H3) operates as a political and organizational mechanism that facilitates implementation. The findings regarding the curvilinear pattern found in the additional analysis strengthen the propositions of the upper echelons theory of the executive life cycle. Optimal tenure (5-8 years) allows for the accumulation of sufficient political capital to drive organizational change, while avoiding the entrenchment trap that can occur with overly long tenures.

Ownership Structure (H4) serves as a monitoring mechanism that ensures accountability. Interestingly, in the Indonesian context, concentrated ownership actually plays a positive role as a substitute for weak external institutions. Majority shareholders are able to provide more effective oversight than market mechanisms that are still developing.

Integration of Findings with the Theoretical Framework

The findings of this study successfully bring together three major theories in a coherent synthesis. Stakeholder Theory explains why companies conduct sustainability reporting, Upper Echelons Theory explains how the capacity of individual leaders influences the effectiveness of their transformation, and Agency Theory explains how governance structures ensure accountability for the process.

Particularly noteworthy is the finding regarding the synergistic effect between CEO education and ownership structure. The positive interaction between these two mediators suggests that cognitive and oversight mechanisms reinforce each other. A highly educated CEO will be more effective when supported by an ownership structure that allows for long-term decision-making, while oversight from the majority shareholder will be more meaningful when implemented by a CEO with the cognitive capacity to understand the complexities of sustainability.

Answer Previous Research and Original Contributions

This finding provides an elegant explanation for the inconsistency of previous research results on the sustainability-performance relationship. Variations in CEO characteristics and ownership structures across different samples may "obscure" the direct relationship, which only becomes clear when these mediating mechanisms are taken into account.

This research shifts the paradigm from the "whether" approach to sustainability reporting's influence to the "how" and "when" approach to its strongest influence. Its original contributions lie in:

1. Development of a dual mediation model that integrates human and structural factors
2. Identify boundary conditions that determine the effectiveness of sustainability reporting
3. Contextualization of corporate governance theory in the Indonesian emerging market setting.

Review: Journal of Multidisciplinary in Social Sciences

Volume 02 No 11 November 2025
E ISSN : 3031-6375
https://lenteranusa.id/

Measurable Managerial Implications

For practitioners, these findings provide operational guidance:

1. CEO Recruitment and Development: The leadership succession process must consider not only financial track record but also cognitive ability to process the complexities of sustainability and commitment to survive in the medium to long term.
2. Governance Design: The board of commissioners needs to design an incentive structure that is in line with the sustainability investment time horizon, and consider ownership concentration as an effective oversight mechanism.
3. Sustainability Strategy: Companies must move from a compliance approach to a strategic approach that integrates sustainability into the core business model, taking into account their organizational capabilities.

Limitations and Future Research Agenda

Methodological and Contextual Limitations

Some limitations in this research actually open up opportunities for future development:

1. Periodization and External Context: The 2021-2024 study period encompasses the post-pandemic recovery period and global economic turmoil, which may influence the observed dynamics. Longer, longitudinal research is needed to capture more complex business cycles.
2. Construct Measurement: Despite using a composite approach, financial performance measurement is still limited to conventional metrics. Developing more holistic metrics that encompass long-term value creation and externalities would provide a more comprehensive picture.
3. Other Mediating Variables: The tested mediation model is still partial. Other mediating variables such as organizational learning capability, innovation capacity, or stakeholder engagement quality may provide a more comprehensive explanation.

Future Research Agenda

Based on these findings and limitations, some promising future research agendas are:

1. Mixed-Methods Research: Integrating qualitative approaches through in-depth case studies to understand organizational processes not visible in quantitative data.
2. International Comparative Study: Comparing mediation mechanisms across countries with different institutional contexts to test the generalizability of the findings.
3. Dynamic Modeling: Using a dynamic panel data approach to capture feedback loops and reciprocal causality between sustainability performance and financial performance.
4. Expanded Mediation Model: Examining other more proximal mediators such as green innovation capability, employee productivity, or supply chain efficiency.
5. Digital Transformation Interface: Exploring the role of digital technologies as enablers that strengthen the identified mediation mechanisms.

Conclusion

This study concludes that the value of sustainability reporting lies not in the reporting activity itself, but in the organization's capacity to execute the sustainability vision reflected in the report. By foregrounding this executional capacity, the study advances theoretical

debates on the distinction between symbolic and substantive sustainability practices, positioning sustainability reporting as a governance process rather than a mere disclosure outcome. This transformation process relies on two key pillars: the quality and stability of leadership (CEO characteristics) and the effectiveness of the oversight system (ownership structure).

These findings shift the paradigm from simply "reporting" well to "being" and "managing" well, where people and governance structures are key to creating sustainable value. From a practical standpoint, this implies that firms and boards should prioritise leadership development, succession planning, and active ownership engagement as strategic levers to unlock the economic potential of sustainability initiatives. In the context of Indonesia's transformation toward a sustainable economy, investment in leadership capacity building and improved corporate governance emerge as fundamental prerequisites for extracting economic value from sustainability commitments. At the same time, the study's focus on non-cyclical consumer companies in a single emerging market represents a limitation, indicating the need for future comparative and longitudinal studies that can test the generalisability of these mechanisms and inform more targeted regulatory tools and policy interventions.

References

Adams, C. A. (2017). The sustainable development goals, integrated thinking and the integrated report. IRRC Institute.

Almulhim, T., & Aljughaiman, A. A. (2023). Do sustainability practices influence financial performance? Evidence from the Saudi banking sector. Journal of Cleaner Production, 387, 135867.

Barker, V. L., & Mueller, G. C. (2002). CEO characteristics and firm R&D spending. Management Science, 48(6), 782-801.

Brammer, S., & Millington, A. (2008). Does it pay to be different? An analysis of the relationship between corporate social and financial performance. Strategic Management Journal, 29(12), 1325-1343.

Brammer, S., & Pavelin, S. (2008). Factors influencing the quality of corporate environmental disclosure. Business Strategy and the Environment, 17(2), 120-136.

Brealey, R. A., Myers, S. C., & Allen, F. (2020). Principles of corporate finance (13th ed.). McGraw-Hill Education.

Bursa Efek Indonesia. (2024). *Laporan kinerja perusahaan sektor consumer non-cyclicals 2020-2023*. Jakarta: BEI.

Carpenter, M. A., Geletkanycz, M. A., & Sanders, W. G. (2004). Upper echelons research revisited: Antecedents, elements, and consequences of top management team composition. Journal of Management, 30(6), 749-778.

Cheng, B., Ioannou, I., & Serafeim, G. (2014). Corporate social responsibility and access to finance. Strategic Management Journal, 35(1), 1-23.

Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). Sage publications.

Darmawan, A., & Putri, R. K. (2023). Tantangan implementasi sustainability reporting di Indonesia: Perspektif regulasi dan kapabilitas organisasi. Jurnal Akuntansi dan Keuangan Indonesia, 20(1), 45-62.

Dhaliwal, D. S., Li, O. Z., Tsang, A., & Yang, Y. G. (2011). Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. The Accounting Review, 86(1), 59-100.

Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. Academy of Management Review, 20(1), 65-91.

Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. Management Science, 60(11), 2835-2857.

Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. The Journal of Law and Economics, 26(2), 301-325.

Freeman, R. E. (1984). Strategic management: A stakeholder approach. Pitman.

Freeman, R. E., Harrison, J. S., Zygli dopoulos, S. (2020). Stakeholder theory: Concepts and strategies. Cambridge University Press.

Ghardallou, W. (2022). Corporate sustainability and firm performance: The mediating role of green innovation. Management of Environmental Quality, 33(3), 518-535.

GRI. (2021). GRI Standards 2021. Global Reporting Initiative.

Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting: A review of the literature and a longitudinal study of UK disclosure. Accounting, Auditing & Accountability Journal, 8(2), 47-77.

Hahn, T., & Figge, F. (2011). Beyond the bounded instrumentality in current corporate sustainability research: Toward an inclusive notion of profitability. Journal of Business Ethics, 104(3), 325-345.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. European Business Review, 31(1), 2-24.

Hambrick, D. C. (2007). Upper echelons theory: An update. Academy of Management Review, 32(2), 334-343.

Hambrick, D. C., & Fukutomi, G. D. (1991). The seasons of a CEO's tenure. Academy of Management Review, 16(4), 719-742.

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.

Haque, F. (2017). The effects of board characteristics and sustainable compensation policy on corporate social responsibility reporting. Journal of Business Ethics, 147(2), 469-489.

Harrison, J. S., & Wicks, A. C. (2013). Stakeholder theory, value, and firm performance. Business Ethics Quarterly, 23(1), 97-124.

Hayes, A. F. (2018). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach (2nd ed.). Guilford Press.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the Academy of Marketing Science, 43(1), 115-135.

Hult, G. T. M., Hair, J. F., Proksch, D., Sarstedt, M., Pinkwart, A., & Ringle, C. M. (2018). Addressing endogeneity in international marketing applications of partial least squares structural equation modeling. Journal of International Marketing, 26(3), 1-21.

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.

Kementerian Lingkungan Hidup dan Kehutanan. (2024). Laporan inventarisasi emisi gas rumah kaca dan limbah industri 2023. Jakarta: KLHK.

King, B. G., Felin, T., & Whetten, D. A. (2016). Perspective—Finding the organization in organizational theory: A meta-theory of the organization as a social actor. Organization Science, 27(5), 1281-1295.

La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. The Journal of Finance, 54(2), 471-517.

Lewis, B. W., Walls, J. L., & Dowell, G. W. (2014). Difference in degrees: CEO characteristics and firm environmental disclosure. Strategic Management Journal, 35(5), 712-722.

Muttakin, M. B., Khan, A., & Mihret, D. G. (2018). The effect of board capital and CEO power on corporate social responsibility disclosures. Journal of Business Ethics, 150(1), 41-56.

Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd ed.). McGraw-Hill.

Otoritas Jasa Keuangan. (2024). Statistik keuangan berkelanjutan Indonesia 2023. Jakarta: OJK.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. Journal of Applied Psychology, 88(5), 879-903.

Salsabila, S., & Santoso, B. (2021). Ownership structure and sustainability reporting quality: Evidence from Indonesia. Journal of Asian Finance, Economics and Business, 8(3), 1125-1134.

Sekaran, U., & Bougie, R. (2016). Research methods for business: A skill building approach (7th ed.). Wiley.

Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. The Journal of Finance, 52(2), 737-783.

Wiseman, J. (1982). An evaluation of environmental disclosures made in corporate annual reports. Accounting, Organizations and Society, 7(1), 53-63.

Wooldridge, J. M. (2019). Introductory econometrics: A modern approach (7th ed.). Cengage Learning.

Zhou, S., Simnett, R., & Green, W. (2024). The effect of mandatory sustainability reporting on firm value and behavior: International evidence. Journal of International Business Studies, 55(1), 89-112.