



The Influence of CEO Characteristics on Firm Value: The Mediating Role of Environmental, Social, and Governance (ESG) Performance among Indonesian Listed Companies 2022-2024

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Abstract

This study investigates the influence of CEO characteristics, namely gender, education, and tenure, on firm value, with Environmental, Social, and Governance (ESG) performance acting as a mediating variable. As sustainability practices become increasingly important in corporate governance, the role of chief executive officers in shaping ESG initiatives and enhancing firm value has attracted growing academic and practical attention. However, empirical evidence regarding the relationship between CEO characteristics, ESG performance, and firm value remains inconsistent, particularly in emerging markets such as Indonesia. This research employs a quantitative approach using secondary data collected from annual reports, sustainability reports, and financial statements of companies listed on the Indonesia Stock Exchange (IDX) during 2022-2024. Firm value is measured using Tobin's Q, while ESG performance is measured using ESG disclosure scores. CEO gender, education, and tenure represent the independent variables. The data are analyzed using multiple linear regression and Sobel tests to examine the mediating effect of ESG. The findings indicate that CEO characteristics have varying effects on ESG performance and firm value. ESG performance significantly contributes to enhancing firm value and partially mediates the relationship between certain CEO characteristics and firm value. These results support the Upper Echelons Theory, suggesting that organizational outcomes are influenced by executives' demographic characteristics, and Stakeholder Theory, emphasizing that sustainability practices create long-term value for firms. This study contributes to the literature on corporate governance and sustainable business by providing empirical evidence from Indonesian listed companies. The findings also offer practical implications for corporate boards and investors in considering CEO characteristics and ESG implementation as strategic factors for improving firm value.

Keywords: CEO Characteristics; CEO Gender; CEO Education; CEO Tenure; ESG; Firm Value; Tobin's Q; Indonesia



INTRODUCTION

In recent years, corporate sustainability has become an important concern for companies, investors, and regulators worldwide. Business performance is no longer assessed solely based on financial achievements but also on the company's commitment to environmental, social, and governance (ESG) practices. ESG has emerged as a strategic indicator of corporate sustainability because it reflects a firm's ability to balance economic performance with environmental responsibility, social commitment, and good corporate governance. Consequently, companies with better ESG performance are expected to gain stronger stakeholder trust, improve corporate reputation, and enhance firm value.

In Indonesia, the importance of ESG has continued to increase following the implementation of sustainability reporting requirements for listed companies. As investors become more aware of sustainability issues, firms are encouraged to improve ESG practices to maintain competitiveness and attract long-term investment. However, the level of ESG implementation among Indonesian listed companies remains heterogeneous, suggesting that internal organizational factors may influence corporate sustainability performance.

One important internal factor is the role of the Chief Executive Officer (CEO). As the highest decision-maker, the CEO determines corporate strategies, allocates organizational resources, and influences the adoption of sustainability initiatives. According to **Upper Echelons Theory** (Hambrick & Mason, 1984), organizational outcomes reflect the characteristics of top executives because their decisions are shaped by personal values, experiences, and cognitive abilities. Therefore, demographic characteristics such as CEO gender, education, and tenure may influence both ESG performance and firm value.

Previous studies have reported inconsistent findings regarding the influence of CEO characteristics on corporate outcomes. Some studies suggest that female CEOs are more likely to promote sustainability initiatives and ethical decision-making, while others find no significant relationship. Likewise, CEOs with higher educational backgrounds are expected to possess better strategic capabilities for integrating sustainability into corporate policies, yet empirical evidence remains mixed. CEO tenure has also produced contrasting results, as longer-serving CEOs may contribute valuable organizational experience but may also become less adaptive to changing business environments.

Besides examining the direct influence of CEO characteristics, ESG performance may serve as an important mechanism through which CEOs create



firm value. Based on **Stakeholder Theory** (Freeman, 1984), companies that effectively address stakeholder interests through ESG practices can improve legitimacy, strengthen investor confidence, and achieve sustainable competitive advantages. Therefore, CEO characteristics may influence firm value indirectly by encouraging stronger ESG performance.

Despite the increasing number of studies on corporate governance and sustainability, limited research has simultaneously examined the relationships among CEO gender, education, tenure, ESG performance, and firm value in the context of Indonesian listed companies. Moreover, studies investigating ESG as a mediating variable remain relatively scarce, particularly in emerging markets.

Accordingly, this study aims to examine the effects of CEO gender, education, and tenure on firm value, with ESG performance serving as a mediating variable, using data from companies listed on the Indonesia Stock Exchange (IDX) in 2024. The findings are expected to enrich the literature on corporate governance and sustainable finance while providing practical insights for corporate boards, investors, and policymakers regarding the strategic role of CEO characteristics in improving firm value through ESG implementation.

LITERATURE REVIEW

This study is based on **Upper Echelons Theory** (Hambrick & Mason, 1984), which explains that organizational outcomes are influenced by the characteristics of top executives. CEOs make strategic decisions based on their values, experiences, and knowledge, which are reflected in observable demographic characteristics such as gender, education, and tenure. Consequently, differences in CEO characteristics may lead to different corporate strategies, including sustainability initiatives and value creation.

The study is also supported by **Stakeholder Theory** (Freeman, 1984), which argues that firms create long-term value by addressing the interests of various stakeholders rather than focusing solely on shareholders. Through Environmental, Social, and Governance (ESG) practices, companies can strengthen stakeholder trust, improve corporate reputation, reduce business risks, and ultimately enhance firm value.

CEO characteristics have received increasing attention in corporate governance research. Female CEOs are often associated with stronger ethical values, greater stakeholder orientation, and more responsible decision-making, which may encourage better ESG performance. Similarly, CEOs with higher educational backgrounds generally possess broader knowledge and stronger



analytical capabilities, enabling them to integrate sustainability into corporate strategy. CEO tenure also contributes to strategic decision-making because experienced executives have a better understanding of organizational resources and stakeholder relationships, although excessively long tenure may reduce managerial flexibility.

In addition to influencing ESG performance, CEO characteristics may directly affect firm value. Effective leadership enables firms to formulate better strategies, improve governance quality, and strengthen investor confidence. Previous studies have reported mixed findings regarding the effects of CEO gender, education, and tenure on firm value, indicating that these relationships remain inconclusive and require further investigation.

ESG performance has become an important indicator of corporate sustainability and long-term competitiveness. Companies with stronger ESG performance tend to experience better stakeholder relationships, lower information asymmetry, improved corporate reputation, and greater investor confidence, all of which contribute to higher firm value. From the perspective of Stakeholder Theory, ESG serves as a mechanism through which firms create sustainable value for both shareholders and other stakeholders.

Although previous studies have examined the relationships between CEO characteristics, ESG performance, and firm value, limited research has investigated ESG as a mediating variable, particularly in emerging markets such as Indonesia. Therefore, this study proposes that CEO gender, education, and tenure influence firm value both directly and indirectly through ESG performance.

Based on the theoretical framework and previous empirical findings, this study develops the following hypotheses:

H1: CEO gender positively affects ESG performance.

H2: CEO education positively affects ESG performance.

H3: CEO tenure positively affects ESG performance.

H4: CEO gender positively affects firm value.

H5: CEO education positively affects firm value.

H6: CEO tenure positively affects firm value.

H7: ESG performance positively affects firm value.

RESEARCH METHOD



This study employed a quantitative research approach to examine the influence of CEO characteristics on firm value, with Environmental, Social, and Governance (ESG) performance serving as a mediating variable. Secondary data were collected from annual reports, sustainability reports, and financial statements of companies listed on the Indonesia Stock Exchange (IDX) for the 2024 fiscal year. A quantitative approach was selected because it enables the empirical examination of causal relationships among variables using statistical analysis.

The population of this study consisted of all companies listed on the Indonesia Stock Exchange (IDX) in 2024. The sample was selected using a purposive sampling technique based on the following criteria: (1) companies listed on the IDX during 2024; (2) companies that published annual reports and sustainability reports for the 2024 period; (3) companies providing complete information on CEO characteristics, ESG disclosure, and financial data; and (4) companies with complete data required to measure all research variables.

The dependent variable in this study is **firm value**, measured using **Tobin's Q**, which reflects the market's valuation of a company's future growth prospects. The independent variables consist of **CEO gender**, measured using a dummy variable (1 = female CEO; 0 = male CEO); **CEO education**, measured based on the CEO's highest educational attainment; and **CEO tenure**, measured by the number of years the CEO has served in the position. ESG performance acts as the mediating variable and is measured using the company's ESG disclosure score obtained from sustainability reports.

Data analysis was conducted using multiple linear regression with two regression models. The first model examined the effects of CEO gender, education, and tenure on ESG performance. The second model analyzed the effects of CEO gender, education, CEO tenure, and ESG performance on firm value. Prior to hypothesis testing, descriptive statistics and classical assumption tests, including normality, multicollinearity, heteroscedasticity, and autocorrelation tests, were performed to ensure the validity of the regression model. Furthermore, the Sobel test was employed to examine the mediating role of ESG performance in the relationship between CEO characteristics and firm value. Statistical analyses were performed using SPSS, and all hypotheses were tested at a significance level of 5%.

The regression models used in this study are expressed as follows:

Model 1

$$[ESG = \alpha + \beta_1 GEN + \beta_2 EDU + \beta_3 TEN + \epsilon]$$

Model 2



$$[FV = \alpha + \beta_1 \text{ GEN} + \beta_2 \text{ EDU} + \beta_3 \text{ TEN} + \beta_4 \text{ ESG} + \varepsilon]$$

where **FV** represents firm value (Tobin's Q), **GEN** represents CEO gender, **EDU** represents CEO education, **TEN** represents CEO tenure, **ESG** represents Environmental, Social, and Governance performance, α is the constant term, β denotes the regression coefficients, and ε represents the error term.

RESULTS AND DISCUSSION

The analysis was conducted using panel data regression to examine the relationships among CEO characteristics, ESG performance, and firm value. Model selection was performed using the Chow and Hausman tests. The Chow test indicated that the Fixed Effect Model (FEM) was preferable to the Common Effect Model (CEM), while the Hausman test determined the most appropriate estimator for each regression model. For the ESG model, the Hausman test supported the use of the Fixed Effect Model, whereas the Random Effect Model (REM) was selected for the firm value model.

Table 1
Descriptive Statistics of Research Variabel

Variable	N	Mean	Median	Minimum	Maksimum	Std. Dev.	N
Gender	303	0,9439	1,0000	0,0000	1,0000	0,2305	303
Education	303	0,5974	1,0000	0,0000	1,0000	0,4912	303
Tenure	303	5,9046	4,0000	0,0000	52,0000	6,4550	303
ESG	303	43,5934	44,0000	7,9000	68,2000	11,2038	303
Tobin's Q	303	1,3088	1,1100	0,1130	8,0300	1,0442	303

The regression results reveal that CEO characteristics have different impacts on ESG performance and firm value. In the ESG model, CEO education has a positive and statistically significant effect on ESG performance ($\beta = 9.828$; $p = 0.0125$). This finding suggests that CEOs with higher educational backgrounds are more likely to promote sustainability initiatives and improve ESG disclosure. Higher educational attainment enhances executives' analytical capabilities and strategic perspectives, enabling them to better integrate sustainability considerations into corporate decision-making. This result supports Upper Echelons Theory, which argues that executives' educational backgrounds influence organizational outcomes through strategic choices.



CEO tenure also shows a positive and significant effect on ESG performance ($\beta = 0.745$; $p = 0.0001$). CEOs with longer tenure tend to possess greater organizational knowledge, stronger stakeholder relationships, and a deeper understanding of corporate resources, allowing them to implement sustainability strategies more effectively. The finding indicates that managerial experience contributes to improving ESG performance within Indonesian listed companies.

In contrast, CEO gender does not significantly influence ESG performance ($\beta = 0.873$; $p = 0.8181$). This result suggests that ESG implementation is not determined by the CEO's gender but is more likely influenced by organizational policies, corporate governance mechanisms, regulatory requirements, and stakeholder pressure. Therefore, gender diversity alone is insufficient to explain differences in ESG performance among Indonesian public companies.

Table 2
FEM in the equation ESG (track a)

Variable	Coefficient (Std. Error)	t- statistic	Prob.	interpretation
constant	32,497140 (4,594431)	7,073159	0,0000	significant
Gender	0,872724 (3,789172)	0,230321	0,8181	Not significant
education	9,828154 (3,899258)	2,520519	0,0125	Positive and significant
tenure	0,745449 (0,192713)	3,868172	0,0001	Positive and significant

The second regression model examines the direct effects of CEO characteristics and ESG performance on firm value. The results indicate that CEO gender has a negative and statistically significant effect on firm value under the selected Random Effect Model ($\beta = -0.370$; $p = 0.0279$). This finding implies that firms led by female CEOs exhibit lower Tobin's Q values during the observation period. Although this result differs from the expectations of Upper Echelons Theory, it may reflect the relatively limited representation of female CEOs in Indonesia and the influence of external market factors that extend beyond executive characteristics.

Meanwhile, CEO education does not significantly affect firm value ($\beta = 0.115$; $p = 0.4056$). Similarly, CEO tenure shows no statistically significant relationship with firm value ($\beta = 0.011$; $p = 0.1548$). These findings indicate that



investors may place greater emphasis on broader financial performance, market conditions, and firm-specific characteristics than on CEOs' educational backgrounds or length of service when evaluating corporate value.

Table 3
REM Results on Tobin's Q Equation Without ESG (Total Effect c)

Variable	Coefficient (Std. Error)	t- statistic	Prob.	Interpretation
Constant	1,523283 (0,215165)	7,079596	0,0000	significant
Gender	-0,370154 (0,167524)	- 2,209554	0,0279	Negative and significant
education	0,114883 (0,137937)	0,832869	0,4056	Not significant
tenure	0,011221 (0,007868)	1,426290	0,1548	Not significant

Furthermore, ESG performance does not have a significant effect on firm value ($\beta = -0.003$; $p = 0.3627$). This result indicates that ESG implementation has not yet been fully reflected in the market valuation of Indonesian listed companies during the observation period. One possible explanation is that ESG disclosure practices in Indonesia are still developing, and investors may continue to prioritize short-term financial indicators over sustainability performance.



Table 4
Direct Influence on Company Value

Tested Relationships	Coefficient	Prob.	Conclusion
CEO Gender → Tobin's Q	-0,369868	0,0277	Negative and significant
CEO Education → Tobin's Q	0,131001	0,3466	Not significant
CEO Tenure → Tobin's Q	0,012684	0,1148	Not significant
ESG → Tobin's Q	-0,002852	0,3627	Not significant

The findings demonstrate that CEO education and CEO tenure significantly improve ESG performance, while CEO gender does not. Regarding firm value, only CEO gender exhibits a statistically significant relationship, whereas CEO education, CEO tenure, and ESG performance do not significantly influence Tobin's Q. These results suggest that although executive characteristics contribute to sustainability initiatives, their effects on market valuation remain limited within the Indonesian capital market.

Table 5
Sobel Test

Indirect Route	a×b	SE Indirect	Z Sobel	Prob.	Conclusion
Gender → ESG → Tobin's Q	- 0,002489	0,011146	- 0,2233	0,8233	No mediation
Education → ESG → Tobin's Q	- 0,028030	0,032692	- 0,8574	0,3912	No mediation
Tenure → ESG → Tobin's Q	- 0,002126	0,002396	- 0,8874	0,3748	No mediation

The results indicate that the indirect effects of CEO gender, CEO education, and CEO tenure on firm value through ESG performance are statistically insignificant. Therefore, ESG performance does not mediate the relationship between CEO characteristics and firm value. These findings suggest that although CEO education and CEO tenure contribute to improving ESG performance, such



improvements are not sufficient to enhance firm value. Likewise, CEO gender does not indirectly influence firm value through ESG performance. This indicates that ESG has not yet functioned as an effective mechanism through which CEO characteristics translate into higher market valuation. One possible explanation is that ESG implementation among Indonesian listed companies is still at a relatively early stage, resulting in sustainability practices that have not been fully recognized by investors. Consequently, capital market participants may continue to place greater emphasis on traditional financial indicators rather than ESG performance when evaluating firm value. Furthermore, variations in ESG disclosure quality and the absence of standardized sustainability reporting across firms may reduce the ability of ESG information to influence investors' decisions. These findings imply that the relationship between CEO characteristics and firm value is likely influenced by other organizational and financial factors beyond ESG performance. Therefore, ESG cannot be considered a significant mediating variable in explaining how CEO gender, education, and tenure affect firm value within the context of Indonesian listed companies.

CONCLUSION

This study examined the influence of CEO characteristics, including gender, education, and tenure, on firm value, with Environmental, Social, and Governance (ESG) performance serving as a mediating variable among companies listed on the Indonesia Stock Exchange (IDX). The findings indicate that CEO education and CEO tenure have a positive and significant effect on ESG performance, suggesting that executives with higher educational attainment and longer managerial experience are more capable of promoting corporate sustainability practices. In contrast, CEO gender does not significantly affect ESG performance.

Regarding firm value, the results reveal that CEO gender has a significant negative effect, while CEO education and CEO tenure do not significantly influence firm value. Furthermore, ESG performance is not significantly associated with firm value, indicating that sustainability performance has not yet been fully reflected in the market valuation of Indonesian listed companies during the observation period.

The mediation analysis further demonstrates that ESG performance does not mediate the relationship between CEO gender, education, and tenure and firm value. These findings suggest that although certain CEO characteristics contribute to improving ESG performance, such improvements do not necessarily



translate into higher firm value. This may indicate that investors continue to place greater emphasis on financial performance than on ESG information when evaluating companies.

This study contributes to the literature on corporate governance and sustainability by providing empirical evidence on the relationships between CEO characteristics, ESG performance, and firm value in an emerging market context. The findings also offer practical implications for companies and policymakers by highlighting the importance of strengthening the quality and credibility of ESG implementation so that sustainability initiatives can create greater value for both firms and stakeholders. Future research is encouraged to include longer observation periods, broader samples, additional CEO characteristics, and alternative measures of ESG performance and firm value to provide a more comprehensive understanding of these relationships.

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