

The Impact of Environmental Social Governance (ESG) on Firm Performance with the Moderating Role of CEO Turnover

Hertya Dwi Ameliawati¹, Nur Dhani Hendranastiti¹

¹Universitas Indonesia, Jakarta, Indonesia

Corresponding author e-mail: hertya.dwi@ui.ac.id

Article History: Received on 27 July 2024, Revised on 5 August 2024,
Published on 28 September 2024

Abstract: This research aims to investigate the influence of Environmental, Social, and Governance (ESG) on firm performance, measured by Return on Equity (ROE). Additionally, the study explores the moderating role of CEO turnover in the relationship between ESG and firm performance in publicly listed companies on the Indonesia Stock Exchange, with a sample of 33 companies from 2016 to 2022. The GMM estimator method is employed to address endogeneity issues, ensuring consistent and unbiased estimation results. Findings indicate that overall ESG performance significantly affects firm performance, emphasizing the importance of implementing ESG principles in Indonesian businesses to enhance ROE. Other results reveal the pure moderating role of CEO turnover, weakening the relationship between ESG and firm performance. Therefore, proper planning and guidelines for CEO succession are crucial for improving firm performance and sustainability. The research results carry important implications for Indonesian companies to consider ESG implementation in their business strategies. Furthermore, CEO succession planning management is key to maximizing the positive impact of ESG on firm performance. This study contributes to a deeper understanding of how ESG factors influence firm performance in the Indonesian business context, highlighting the significance of executive leadership in managing these impacts.

Keywords: CEO Turnover, ESG, GMM, ROE

A. Introduction

Implementation of Environmental, Social, and Governance (ESG) has become an investment trend in companies on a global scale since the meeting of 193 countries at the UN Headquarters on September 25, 2015, which supports the agenda of Sustainable Development Goals (SDGs). The establishment of SDGs aims to realize the aspirations of sustainable development and protect the resources available in the future, making environmental issues such as air pollution, climate change, and other environmental issues crucial for many parties, including investors (Hoi Hin & Liu, 2023).

The importance of achieving sustainable development goals encourages companies as entities in society to consider environmental, social, and corporate governance aspects in their business operations. Previous research has investigated ESG issues and companies, including ESG attributes (Hoi Hin & Liu, 2023), the impact of CSR on company performance (Gillan et al., 2021) and the impact of ESG on corporate risk (Brooks & Oikonomou, 2018). These studies provide insights into how companies and investors integrate environmental, social, and governance issues into their business models.

The ESG concept is not just social responsibility but also strategic, involving relationships with clients, regulators, and stakeholders. Strong commitment from top-level management in companies is key to achieving effective ESG implementation. Long-term goal formulation, learning processes, organizational changes, training, and incentive systems are key elements in achieving better ESG integration (Tuteja, 2024).

Firm performance plays a crucial role for stakeholders. Companies that focus solely on profit as their main goal may overlook the human relationships between employees, the environment, and society, leading to suboptimal company performance (Colak et al., 2024). Criticisms in research, expressed (Krüger, 2015) highlight that the relationship between ESG and financial performance does not always indicate causality. Factors such as company valuation can affect ESG scores, and understanding this relationship transmission is necessary (Amanda & Saputro, 2023).

CEO turnover becomes a complex factor in the relationship between ESG and firm performance (Y. Kim et al., 2021). Research shows diverse results, with some stating a positive influence of CEO turnover on organizational performance, while the event is disruptive and can cause instability if not managed well (Hamzah et al., 2023).

Recent studies indicate that ESG is a crucial factor for stock returns (performance) and corporate risk (K. Kim & Kim, 2023) where company performance and risk can influence managerial turnover (M. Kim & Kim, 2014). Thus, CEOs need to pay attention to ESG investments. Companies implementing ESG practices tend to achieve better stock returns. Sustainable environmental, social, and corporate governance factors are identified as elements that can mitigate risks and create long-term value. This indicates that the understanding and implementation of ESG strategies can form a strong foundation for achieving company performance and sustainable risk management. According to (Giese et al., 2019), higher profitability supports that companies with high ESG ratings are more profitable and receive higher dividend payments compared to companies in the lower quintile (Cheng et al., 2017) focused on ESG and CSR practice issues in terms of company attributes, performance, and value, finding that ESG/CSR has a negative impact on equity and the cost of capital. Leverage, indicating business risk, can affect future financial performance (Atan et al., 2018).

In Indonesia, ESG implementation is still relatively low, based on a survey by Mandiri Institute published on November 3, 2022, covering 190 public companies in Indonesia. The results showed that only 52% of companies measure carbon emissions in their business activities, and only 15% of companies have set carbon emission reduction targets, which is one aspect of ESG performance evaluation. Looking at the ESG performance assessment results in the Refinitiv database until December 31, 2022, only 83 companies out of 778 listed companies had performance assessment scores, accounting for only 10.67%. The low ESG performance is likely because companies still lack a strong belief that ESG will add value or create a competitive advantage and improve company performance since ESG investments are seen as costly, especially in environmental aspects.

Despite numerous studies related to ESG and firm performance, gaps in existing literature still need to be identified in more detail. This research attempts to clarify this gap by highlighting the complexity of the relationship between ESG, firm performance, and CEO turnover, which has not been fully explored in previous studies by trying to identify the influence of each ESG pillar on company performance. Referring to the agency theory proposed by (Cooper, 2017), agency problems arise because managers (agents) tend to have more information than shareholders (principals), so ESG practices can serve as an agency mechanism to reduce information asymmetry and encourage management to manage risks and gain long-term benefits that can, in turn, enhance company performance. Additionally, referring to the stakeholder theory developed by (Elmghamez & Olarewaju, 2022), companies are responsible not only to shareholders but also to various stakeholders such as employees (Liou et al., 2023), customers (Zhu & Huang, 2023), and the community (Niu et al., 2022). Implementing ESG practices can create long-term value by considering the needs and expectations of various parties, contributing to company performance. The novelty offered in this research is focusing on the moderation role of CEO turnover in the relationship between ESG and firm performance. To the authors' knowledge, in Indonesia, there has been no in-depth study investigating how CEO turnover can moderate the impact of ESG practices on firm performance, where the implementation of ESG practices can be strengthened or weakened by the dynamics of corporate leadership. Referring to the CEO succession theory and Upper Echelon Theory, theories emphasize the key role of the CEO in shaping the company's strategic direction and how CEO turnover can affect how the company addresses ESG issues. At a theoretical level, this research attempts to fill knowledge gaps by exploring these theoretical concepts further, providing new insights into the role of CEO leadership in decision-making supporting company ESG practices that will impact performance improvement. The Indonesian context is chosen because there are currently many initiatives and guidelines to encourage the implementation of sustainability strategies, and Indonesia is currently committed to achieving the Sustainable Development Goals (SDGs) by 2030 and achieving Net Zero Emission by 2060.

The novelty of this study lies in the in-depth effort to examine the relationship between Environmental, Social, and Governance (ESG) and corporate performance, and how the implementation of sustainability strategies can contribute to the long-term success of a business. This study focuses on the practical application of ESG for decision-making at the board and stakeholder levels, which has not been widely explored in the literature. The main contribution of this study is that the implementation of ESG not only has a positive impact on current corporate performance but can also support future business desires. This study will also provide an understanding that ESG integration is an important factor in the success of companies in the modern era, which increasingly demands attention to interests. This study strengthens the argument that ESG is not just a trend, but an important strategy in achieving strong and competitive business destruction. Built on the above research, hypotheses proposed in this study are: H₁: ESG scores have a significant positive impact on the firm performance (ROE). H₂: ENV scores have a significant positive impact on the firm performance (ROE). H₃: SOC scores have a significant positive impact on the firm performance (ROE). H₄: GOV scores have a significant positive impact on the firm performance (ROE). H₅: CEO Turnover significantly moderates the relationship between ESG and firm performance (ROE)

B. Methods

This research examines the relationship between ESG and firm performance in Indonesia, specifically focusing on companies listed on the Indonesia Stock Exchange with an observation period from 2016 to 2022. Sample selection was done using purposive sampling, where selected companies have complete ESG scores during the study period. Data for this research is sourced from secondary data obtained through Thomson Reuters (Refinitiv).

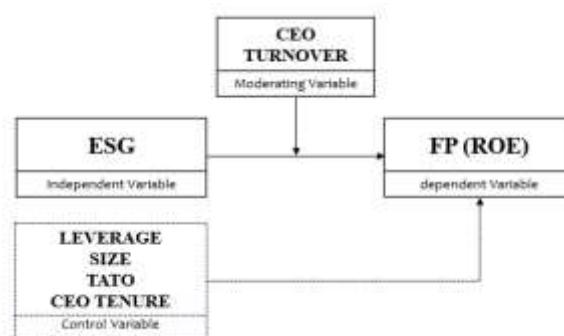


Figure 1. Conceptual Framework

The research model, testing the influence of ESG on firm performance, as well as the moderating role of the CEO in the relationship between ESG and firm performance, refers to the econometric research model used (Yuen et al., 2022). The testing of ESG and its components on Firm Performance, as well as the testing of ESG and each of

its pillars, is done separately to avoid multicollinearity issues. The equations to address the questions in this research are as follows:

$$ROE_{i,t} = ROE_{i,t-1} + \beta_1 ESG_{i,t} + \beta_2 LEV_{i,t} + \beta_3 LEV_{i,t-1} + \beta_4 SIZE_{i,t} + \beta_5 SIZE_{i,t-1} + \beta_6 TATO_{i,t} + \beta_7 CTENURE_{i,t} + \varepsilon_{i,t} \text{ (eq.1)}$$

$$ROE_{i,t} = ROE_{i,t-1} + \beta_1 ENV_{i,t} + \beta_2 LEV_{i,t} + \beta_3 LEV_{i,t-1} + \beta_4 SIZE_{i,t} + \beta_5 SIZE_{i,t-1} + \beta_6 TATO_{i,t} + \beta_7 CTENURE_{i,t} + \varepsilon_{i,t} \text{ (eq.2)}$$

$$ROE_{i,t} = ROE_{i,t-1} + \beta_1 SOC_{i,t} + \beta_2 LEV_{i,t} + \beta_3 LEV_{i,t-1} + \beta_4 SIZE_{i,t} + \beta_5 SIZE_{i,t-1} + \beta_6 TATO_{i,t} + \beta_7 CTENURE_{i,t} + \varepsilon_{i,t} \text{ (eq.3)}$$

$$ROE_{i,t} = ROE_{i,t-1} + \beta_1 GOV_{i,t} + \beta_2 LEV_{i,t} + \beta_3 LEV_{i,t-1} + \beta_4 SIZE_{i,t} + \beta_5 SIZE_{i,t-1} + \beta_6 TATO_{i,t} + \beta_7 CTENURE_{i,t} + \varepsilon_{i,t} \text{ (eq.4)}$$

To analyze the moderating role of CEO turnover on the relationship between ESG and company performance, referring to the research econometric model used (Karim, 2020):

$$ROE_{i,t} = ROE_{i,t-1} + \beta_1 ESG_{i,t} + \beta_2 CEOTURN_{i,t} + \beta_3 LEV_{i,t} + \beta_4 LEV_{i,t-1} + \beta_5 SIZE_{i,t} + \beta_6 SIZE_{i,t-1} + \beta_7 TATO_{i,t} + \beta_8 CTENURE_{i,t} + \varepsilon_{i,t} \text{ (eq.5)}$$

$$ROE_{i,t} = ROE_{i,t-1} + \beta_1 ESG_{i,t} + \beta_2 CEOTURN_{i,t} + \beta_3 ESG_{i,t} * CEOTURN_{i,t} + \beta_4 LEV_{i,t} + \beta_5 LEV_{i,t-1} + \beta_6 SIZE_{i,t} + \beta_7 SIZE_{i,t-1} + \beta_8 TATO_{i,t} + \beta_9 CTENURE_{i,t} + \varepsilon_{i,t} \text{ (eq.6)}$$

Where:

ROE _{i,t}	:	ROE variables from firm i in year t
ROE _{i,t-1}	:	ROE variables from company i at time t-1
ESG _{i,t}	:	ESG variables from firm i in year t
ENV _{i,t}	:	ENV variables from firm i in year t
SOC _{i,t}	:	SOC variables from firm i in year t
GOV _{i,t}	:	GOV variables from firm i in year t
LEV _{i,t}	:	Leverage variables from firm i in year t
LEV _{i,t-1}	:	Leverage variables from firm i in year t-1
SIZE _{i,t}	:	Size variables from firm i in year t
SIZE _{i,t-1}	:	Size variables from firm i in year t-1
TATO _{i,t}	:	Total Assets Turnover variables from firm i in year t
CEOTURN _{i,t}	:	CEO Turnover variables from firm i in year t
ESG _{i,t} *CEOTURN _{i,t}	:	Interaction variable between ESG and CEO Turnover from firm i in year t
ε _{i,t}	:	Residual from firm i in year t

The method employed in this research utilizes dynamic panel regression with a two-step Generalized Method of Moment (GMM) estimator because GMM is effective in addressing endogeneity issues, where independent variables are correlated with the model's errors, allowing researchers to overcome endogeneity and obtain consistent parameter estimates. Furthermore, GMM provides flexibility in model specification by adjusting for heteroskedasticity, autocorrelation, and uncertainty without restricting to a specific functional form.

The GMM estimator applies techniques to current dynamic data (t) estimated about previous period data (t-1), incorporating lags from dependent variables to independent variables. The general equation for dynamic panel data can be formulated as follows:

$$y = \alpha_i + \gamma Y_{i,t-1} + X'_{i,t} \beta + u_{it}$$

Where: $i = 1, \dots, N$ (individuals) and $t = 1, \dots, T$ (time) in this equation x'_{it} = observation of individual i at period t for independent variables where there are strictly exogenous variables, considering the presence of predetermined or endogenous variables, β as the coefficient parameter of independent variables, α_i indicates unobserved individual-specific time-variant effects, and u_{it} has zero mean, constant variance, uncorrelated across time and individuals. Because $Y_{i,t-1}$ is correlated with α_i and because $Y_{i,t-1}$ is a function of α_i , GLS and OLS estimators become biased and inconsistent. Fixed Effect Model estimation is also biased and inconsistent because, in the transformation model, when using variable deviations from the mean, independent variables become endogenous. (\bar{y}_i is correlated with error α_i). As an alternative transformation to eliminate individual effects, the 'first difference' method can be used with the following equation:

$$\Delta y_{it} = \gamma \Delta y_{it-1} + \Delta x'_{it} \beta + \Delta \alpha_{it}$$

In this scenario, estimates with fixed effect and GLS are less accurate because the model faces endogeneity issues (Δy_{it-1} is correlated with $\Delta \alpha_{it}$) (Schepker et al., 2017) addressed this problem by using lagged levels of the endogenous variable three or more periods prior, resulting in a greater number of instruments available than unknown parameters (Harjoto et al., 2021) developed a method that utilizes all possible instruments, employing the Generalized Method of Moment (E-Vahdati et al., 2023) on dynamic panel data by estimating using conditional moments from lagged levels of the dependent variable ($y_{it-1}, y_{it-2}, \dots, y_{it-n}$) known as difference GMM estimators. The GMM - Arellano Bond estimation employs the first difference equation; this transformation eliminates the individual error term and allows lagged endogenous variables in the second and previous periods to serve as proper instruments, provided there is no serial correlation in the random error. This serial correlation can be tested with a serial correlation test on residuals in the form of first difference.

C. Results and Discussion

1. Descriptive Statistics

The descriptive statistics in Table 1 reveal that the average Return on Equity (ROE) for companies in Indonesia is 22.52%, indicating that the average return on capital for Indonesian companies implementing ESG standards is relatively low, with a maximum value of 28.97% and a minimum value of -1.29%. The average ESG score is 50.08, suggesting that, on average, Indonesian companies perform at a grade B- level. This indicates a relatively good and above-average performance in terms of transparency in reporting ESG data to the public. The highest ESG score is 87.92, while the lowest is 8.16. Regarding how companies incorporate environmental aspects into their business, the average score for Indonesian companies is 39.69, with a maximum value of 87.57 and a minimum value of zero. The average Environmental (ENV) score is the lowest among the pillars, possibly due to the significant costs associated with

improving environmental performance. For instance, decarbonization programs require substantial investment and pose various challenges for companies. Factors contributing to high costs include significant initial investments in transitioning to renewable energy sources, developing new technologies, upgrading and replacing existing equipment, changes in the supply chain, employee training, financial risks, and uncertainties related to regulatory changes.

Table 1. Descriptive Statistics

Variable	Obs	Mean	Std. dev.	Min	Max
ROE	231	0,225	0,354	-0,013	2,897
ESG	231	50,077	19,461	8,162	87,917
ENV	231	39,692	25,603	0,000	87,567
SOC	231	55,370	22,508	5,444	95,746
GOV	231	51,164	22,223	2,977	94,013
CTURN	231	0,152	0,359	0,000	1,000
LEV	231	0,248	0,212	0,000	1,712
SIZE	231	31,401	0,892	29,204	33,655
TATO	231	0,746	0,547	0,005	2,392
CTENURE	231	6,680	5,836	1,000	30,000

Source: processed data (2023)

On the other hand, companies may face economic pressure to reduce operational costs, and allocating significant resources to technology (innovation) or environmentally friendly infrastructure changes may be considered a financial burden that cannot be prioritized. Additionally, uncertainties related to the long-term financial impacts of ESG practices may make management hesitant to invest substantially. Challenges in measuring environmental performance, insufficient competitive pressure, and a focus on shareholder interests (owners) can also limit companies' interest in adopting ESG practices that require significant investment in environmental aspects.

Furthermore, the social performance score shows an average value of 55.37, with the highest score at 95.75 and the lowest at 5.44. The social pillar's score is the highest on average among the ESG pillars, indicating how companies have paid attention to relationships and the company's reputation with its stakeholders and how they nurture these relationships. The governance pillar's score averages 51.16, with the highest value at 51.16 and the lowest at 2.98. These values illustrate how companies manage and govern their business effectively.

As for the moderation variable, it has an average value of 0.75, with a maximum value of 1 and a minimum of 0, indicating an average likelihood of turnover of 75%. The average control variable Leverage (LEV) is 24.77%, with a minimum value of 0 and a maximum of 171.20%. The leverage ratio indicates the level of debt usage compared to total assets or, in other words, how much of the company's funding comes from

debt. The average company size variable (SIZE) is 31.40, with a minimum of 29.20 and a maximum of 33.66. Company size provides information on the extent to which a company is involved in business activities and its impact on the market.

The average Total Asset Turnover (TATO) is 74.60%, with a minimum value of 0.5% and a maximum of 239.19%. TATO provides an overview of how efficiently a company can generate income from each unit of its assets. It can be used to evaluate the company's asset productivity and identify potential improvements or efficiencies that can be applied in asset management to enhance financial performance. The average CEO tenure (CTENURE) is 6.68 years, with a minimum of 1 year and a maximum of 30 years.

GMM Estimation Results

Table 2. GMM Two-Step Estimation Results

Variable	Coefficient (Std Error)			
	Eq.1	Eq.2	Eq.3	Eq.4
1 st diff var dependent ($Y_{i,t-1}$)	0.0743274** (0.0329488)	0.0738585** (0.0338775)	0.0662317** (0.0316824)	0.0713878** (0.0288982)
ESG	0.0085636*** (0.0021402)			
ENV		0.0085489*** (0.0025131)		
SOC			0.0012567 (0.0018897)	
GOV				0.0034979* (0.0021091)
Tato	1.501219*** (0.1592823)	1.468188*** (0.1529477)	1.48112*** (0.1614825)	01.488115*** (0.1603895)
Lev	0.0687283* (0.0378041)	0.0523338 (0.0326784)	0.0568083 (0.036641)	0.0784757** (0.0351314)
Lev $i,t-1$	-0.0727769 ** (0.0323742)	-0.0528239* (0.0314415)	-0.0531236 (0.0345414)	-0.0563539 (0.0344238)
Size	0.1938153 (0.2040748)	0.1756498 (0.246411)	0.3851309** (0.1812163)	0.2414672 (0.2174198)
Size $i,t-1$	-0.4687917** (0.2074186)	-0.5851345** (0.2444315)	-0.3241255 (0.19765)	-0.316676 (0.2037647)
CTenure	0.1160331** (0.0519445)	0.103169** (0.0486025)	0.1067989* (0.0569812)	0.1347575** (0.0602015)
Arellano- Bond:				
AR (1)	0.0059	0.0058	0.0055	0.0045
AR (1)	0.9086	0.9559	0.8179	0.9360
Sargan test:				
Prob.chi- square	0.3990	0.4106	0.3977	0.3705

Note: ROE is Net Profit Divided by Total Equity. ESG is ESG Score (refinitiv). ENV is environmental score (refinitiv). SOC is social score (refinitiv). GOV is governance score (refinitiv). CEOTURN is number of CEO Turnovers During the Observation Period. LEV is Ratio of debt to total assets. SIZE is natural Logarithm of Total Assets. TATO is Total Revenue divided by Total Assets. CTENURE is Length of CEO tenure. *, **, *** denotes significance level at 0.10, 0.05 and 0.01 respectively.

The Arellano-Bond test results in Table 2 confirm that the dynamic panel data model used did not experience misconceptions or autocorrelation issues. This is evident from the second order or AR (2) values of all models, which show values above α (>0.05). This indicates a failure to reject the null hypothesis (H_0), demonstrating that all the models used have been free from serial correlation problems. It can be stated that there is no model misspecification. In line with the Arellano-Bond test, the Sargan test also displays probability values above the significance level in all cases. This implies no indication of correlation between residuals and over-identifying restrictions from instrumental variables, as seen in Table 2, where the chi-square values for all models are above α (>0.05), failing to reject H_0 . This indicates the validity of instrumental variables, suggesting no model misspecification due to heteroskedasticity concerns, and thus, there is no need to worry about the model's validity. From both tests, it can be concluded that all the models used are valid and consistent, signifying that the application of the GMM model was appropriate.

The lagged value of period 1 from the dependent variable ROE has a statistically significant positive impact on ROE at the 5% significance level in all models. This implies that the lag from the dependent variable indicates that the model relies not only on the present time but also on the previous period. These results indicate that the use of dynamic panel data models is appropriate because it can capture the temporal dynamics of variables throughout time, given that the variables have variations and changes over time. The positive coefficients of the lagged dependent variable in all models can be interpreted as an increase in the ROE in the previous period, leading to an increase in the current ROE.

The independent variable of ESG performance statistically shows a significant positive influence at the 1% level, indicating that an improvement in ESG performance will enhance ROE. These findings align with the studies by Brooks & Oikonomou (2018) and Triyani et al. (2020), suggesting that the implementation of ESG in business practices positively affects company performance. A one-point increase in ESG performance will result in a 0.008% increase in ROE. Thus, it can be concluded that H_0 is rejected, and the research results support the first hypothesis in this study: ESG has a positive effect on ROE. These results indicate that sustainable business practices can meet the expectations and needs of various stakeholders, such as employees, customers, communities, and investors. Companies that focus on environmental, social, and good governance factors can enhance their reputation, gain trust, and meet

the desired sustainability standards of these stakeholders, thereby creating long-term value and improving corporate sustainability performance.

The independent variable of environmental performance (ENV) statistically shows a significant positive influence at the 1% level, indicating that an improvement in environmental performance will enhance financial performance (ROE). Therefore, H_0 is rejected, and the research results support the first hypothesis proposed in this study, which is that ESG has a positive effect on ROE. The positive influence of ENV on company performance (ROE) supports the findings of (Weng & Chen, 2017) that companies focusing on environmental responsibility will impact an increase in firm performance. This positive impact is possible because environmental issues have gained global attention, and companies conscious of environmental responsibility are seen as able to meet consumer and stakeholder expectations, enhance their reputation, and, in turn, support business growth and ROE. Moreover, environmental aspects such as energy efficiency and waste management can reduce operational costs, improve efficiency, and directly affect company profitability.

The relationship between social performance and financial performance does not significantly affect the significance level (H_0 is not rejected). Thus, these findings do not support the third hypothesis framework proposed in this study. The insignificant influence between social performance and company performance may be because social pillars often involve philanthropic actions or corporate social responsibility support that does not directly contribute to the company's operational sustainability or profit. Therefore, some companies may feel that social initiatives do not have a significant impact on their financial performance if the market or customers do not appreciate or benefit from companies vocal in social aspects. Companies may shift focus to other areas considered more strategic for their growth and business sustainability. Additionally, the insignificant influence may occur because the benefits of social practices may take time to reflect on financial performance. Social practice influences tend to be long-term and do not directly affect ROE instantly. Corporate stakeholder priorities may involve various stakeholders with different priorities. If other stakeholders emphasize factors such as product innovation, operational efficiency, or marketing policies, social aspects may not significantly affect company performance.

In the Indonesian context, this insignificant influence is possible because, first, social aspects often emerge as a top priority for companies in Indonesia. For example, within the ESG framework, social issues such as corporate social responsibility (CSR) and community engagement generally become the main focus. Therefore, companies usually respond and adjust their operations to social demands from the start. The influence of social aspects may already be reflected in daily business practices, and its impact may not be explicitly reflected in financial performance. Second, regulations in Indonesia, particularly in Law Number 40 of 2007 concerning Limited Liability Companies, require companies to be socially responsible. This includes the obligation

to participate in CSR and have a positive impact on society. Companies are required to comply with this regulation, and it can be assumed that social responsibility efforts toward society have become an integral part of company operations. Consequently, it might be challenging to measure the specific impact of social aspects on financial performance separately. Integrating social aspects into business practices and adhering to regulations may cause social impact to become more implicit and challenging to identify separately in financial performance analysis.

The independent variable of governance performance (GOV) statistically shows a significant positive influence at the 10% level, indicating that an improvement in governance performance will enhance financial performance (ROE). Therefore, H0 is rejected, and this result supports the fourth hypothesis framework proposed in this study. The application of Good Corporate Governance (GCG) principles is expected to create an environment that supports long-term growth and sustainability, aligning with GCG goals to improve stakeholder performance and trust.

Table 3. GMM Two-Step Estimation Results

Variable	Coefficient (Std Error)	
	Eq.5	Eq. 6
1 st diff var dependent ($Y_{i,t-1}$)	0.0841279** (0.0346878)	0.0823726** (0.0393186)
ESG	0.0086801*** (0.0023877)	0.0075069** (0.0032556)
CEOTURN	-0.0614877 (0.0831922)	2.101041*** (0.7552772)
CEOTURN*ESG		-0.0367319*** (0.0129546)
Tato	01.510442*** (0.1887856)	1.179861*** (0.2378557)
Lev	0.0777702** (0.0384612)	0.0697036** (0.0349377)
Lev _{<i>i,t-1</i>}	-0.0619707* (0.0323464)	-0.072322** (0.0341017)
Size	0.2229532 (0.245826)	0.1369199 (0.2349275)
Size _{<i>i,t-1</i>}	-0.5194904 (0.2091118) **	-0.4637257* (0.2765355)
CTenure	0.1189213** (0.0532501)	0.3392509*** (0.116138)
Arellano-Bond:		
AR (1)	0.0055	0.0010
AR (2)	0.9389	0.4485
Sargan test:		
Prob.chi-square	0.3717	0.6100

To analyze the moderating role of CEO turnover in the relationship between ESG and company performance, two regression analyses were conducted with the estimation results in Table 3 eq.5, the moderation variable (CEOTURN) shows an insignificant

impact on the dependent variable (ROE). However, in the second equation, the results show that when considering the interaction between the independent variable (ESG) and the moderation variable (CEOTURN), there is a significant effect on both the moderation variable and the interaction variable on the dependent variable (ROE). This indicates that CEO turnover plays a moderating role in the relationship between the independent variable and the dependent variable. By comparing the results in Eq.5 and Eq.6, CEO Turnover is referred to as a pure moderator or, in other words, a moderation variable that moderates the relationship between the independent variable and the dependent variable, where the pure moderation variable interacts with the independent variable without becoming an independent variable.

To examine the moderating role of CEO turnover in weakening or strengthening the relationship between ESG and ROE, refer to the estimation results of Eq.6 (Table 3). The moderation variable (CEO Turnover) significantly affects the 1% significance level, and the interaction variable (CEOTURN*ESG) also significantly influences the 1% significance level, rejecting H_0 . The negative coefficient (-0.0367) of the interaction variable indicates that CEO turnover weakens the relationship between ESG performance and ROE. This implies that CEO turnover has detrimental effects on the connection between ESG performance and company performance. CEO turnover may even diminish the positive impact of sustainable practices encompassed in ESG principles on firm performance. This suggests that executive leadership changes or CEO turnover could be a factor influencing the dynamics and complexity of the relationship between ESG and company performance. Therefore, companies must plan and plan and establish appropriate CEO succession regulations or guidelines to achieve improved performance and business sustainability.

Agency theory emphasizes that CEOs act as agents responsible for optimizing value for shareholders, and the decisions and policies they make can influence company performance. Additionally, CEOs are responsible for all stakeholders, including employees, customers, and the community. Effective CEO leadership committed to ESG values can motivate companies to adopt sustainable practices, create long-term value, and mitigate risks related to social and environmental responsibilities. Hence, the transmission of the relationship between CEOs, company performance, and ESG practices reflects the strategic role of CEOs in shaping corporate culture, making sustainable decisions, and integrating ESG values into business strategies.

Thus, from the results of this study, CEO turnover weakens the relationship between ESG and company performance. Referring to the Upper Echelon theory proposed by (Triyani et al., 2020), that organizations and organizational strategies mirror and reflect the values and cognitive foundations of the top executives' behavior. CEO turnover can bring changes in values, perspectives, and executive experiences, influencing a company's priorities and focus on ESG practices. Therefore, the transmission of the relationship between CEOs, company performance, and ESG

practices reflects the complex dynamics of leadership and decision-making within a company that will impact its performance.

D. Conclusion

This study concludes that Environmental, Social, and Governance (ESG) performance in Indonesia, especially on the environmental and governance pillars, has a positive and significant impact on company performance as measured by Return on Equity (ROE), while the social pillar shows a positive but insignificant relationship. CEO turnover acts as a moderator, where CEO succession can weaken the influence of ESG depending on the policies taken. Therefore, proper CEO succession planning is essential to maintain ESG continuity and performance. Although Indonesia already has a number of regulations related to ESG, the lack of integration in the legal framework can hinder wider and consistent ESG adoption, so integrated regulations are needed to encourage more comprehensive ESG implementation.

E. Acknowledgement

We would like to express our gratitude to the University of Indonesia for providing support so that the research entitled "The Impact of Environmental Social Governance (ESG) on Firm Performance with the Moderating Role of CEO Turnover" can be carried out.

References

- Amanda, B., & Saputro, G. E. (2023). The Effect of Asset Efficiency and Growth on Financial Performance in the Defense Industry Sector. *JMKSP (Jurnal Manajemen, Kepemimpinan, Dan Supervisi Pendidikan)*, 8(1), <https://doi.org/10.31851/jmksp.v8i1.11074>
- Atan, R., Alam, M. M., Said, J., & Zamri, M. (2018). The impacts of environmental, social, and governance factors on firm performance: Panel study of Malaysian companies. *Management of Environmental Quality: An International Journal*, 29(2), 182-194. <https://doi.org/10.1108/MEQ-03-2017-0033>
- Brooks, C., & Oikonomou, I. (2018). The effects of environmental, social and governance disclosures and performance on firm value: A review of the literature in accounting and finance. *British Accounting Review*, 50(1), 1-15. <https://doi.org/10.1016/j.bar.2017.11.005>
- Cheng, J., Cummins, J. D., & Lin, T. (2017). Organizational Form, Ownership Structure, and CEO Turnover: Evidence from the Property-Casualty Insurance Industry. *Journal of Risk and Insurance*, 84(1), 95-126. <https://doi.org/10.1111/jori.12083>
- Colak, G., Korkeamäki, T. P., & Meyer, N. O. (2024). ESG and CEO turnover around the world. *Journal of Corporate Finance*, 84(C). <https://ideas.repec.org/a/eee/corfin/v84y2024ics0929119923001724.html>

- Cooper, E. (2017). Corporate social responsibility, gender, and CEO turnover. *Managerial Finance*, 43(5), 528–544. <https://doi.org/10.1108/MF-02-2016-0049>
- Elmghaamez, I. K., & Olarewaju, J. I. (2022). Corporate social responsibility and financial performance of product and service-based firms listed on London Stock Exchange. *Corporate Social Responsibility and Environmental Management*, 29(5), 1370–1383. <https://doi.org/10.1002/csr.2275>
- E-Vahdati, S., Wan-Hussin, W. N., & Mohd Ariffin, M. S. (2023). The Value Relevance of ESG Practices in Japan and Malaysia: Moderating Roles of CSR Award, and Former CEO as a Board Chair. *Sustainability (Switzerland)*, 15(3). <https://doi.org/10.3390/su15032728>
- Giese, G., Lee, L.-E., Melas, D., Nagy, Z., & Nishikawa, L. (2019). Foundations of ESG Investing: How ESG Affects Equity Valuation, Risk, and Performance. *The Journal of Portfolio Management*. <http://www.msci.com/prod>
- Gillan, S. L., Koch, A., & Starks, L. T. (2021). Firms and social responsibility: A review of ESG and CSR research in corporate finance. *Journal of Corporate Finance*, 66. <https://doi.org/10.1016/j.jcorpfin.2021.101889>
- Hamzah, A. H. P., Nurhasanah, N., & Soesanta, P. E. (2023). Population Growth and Environmental Damage Issues (A Review of Environmental Damage on Land Conversion Perspective in North Jakarta). *JMKSP (Jurnal Manajemen, Kepemimpinan, Dan Supervisi Pendidikan)*, 8(2), 614–623. <https://doi.org/10.31851/jmksp.v8i2.11281>
- Harjoto, M. A., Hoepner, A. G. F., & Li, Q. (2021). Corporate social irresponsibility and portfolio performance: A cross-national study. *Journal of International Financial Markets, Institutions and Money*, 70. <https://doi.org/10.1016/j.intfin.2020.101274>
- Hoi Hin, L., & Liu, M. (2023). The Impact of ESG Scores on Corporate Performance – A-Share Banks and Securities Firms. *SHS Web of Conferences*, 163, 02029. <https://doi.org/10.1051/shsconf/202316302029>
- Kim, K., & Kim, T.-N. (2023). CEO career concerns and ESG investments. *Finance Research Letters*, 55, 103819. <https://doi.org/10.1016/j.frl.2023.103819>
- Kim, M., & Kim, Y. (2014). Corporate social responsibility and shareholder value of restaurant firms. *International Journal of Hospitality Management*, 40, 120–129. <https://doi.org/10.1016/j.ijhm.2014.03.006>
- Kim, Y., Jeong, S., Yiu, D., & Moon, J. (2021). Frequent CEO Turnover and Firm Performance: The Resilience Effect of Workforce Diversity. *Journal of Business Ethics*, 173. <https://doi.org/10.1007/s10551-020-04534-0>
- Krüger, P. (2015). Corporate goodness and shareholder wealth. *Journal of Financial Economics*, 115(2), 304–329. <https://doi.org/10.1016/j.jfineco.2014.09.008>
- Liou, J. J. H., Liu, P. Y. L., & Huang, S.-W. (2023). Exploring the key barriers to ESG adoption in enterprises. *Systems and Soft Computing*, 5, 200066. <https://doi.org/10.1016/j.sasc.2023.200066>
- Niu, S., Park, B. I., & Jung, J. S. (2022). The Effects of Digital Leadership and ESG Management on Organizational Innovation and Sustainability. *Sustainability*, 14(23),. <https://doi.org/10.3390/su142315639>

- Schepker, D. J., Kim, Y., Patel, P. C., Thatcher, S. M. B., & Campion, M. C. (2017). CEO succession, strategic change, and post-succession performance: A meta-analysis. *The Leadership Quarterly*, 28(6), 701–720. <https://doi.org/10.1016/j.leaqua.2017.03.001>
- 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. <https://doi.org/10.22219/jrak.v10i2.11820>
- Tuteja, D. (2024). Sustainability Strategies In Contemporary Business Management: Integrating Environmental, Social, And Governance (Esg) Principles. *Educational Administration: Theory and Practice*, 30, 7562–7568. <https://doi.org/10.53555/kuey.v30i5.4211>
- Weng, P.-S., & Chen, W.-Y. (2017). Doing good or choosing well? Corporate reputation, CEO reputation, and corporate financial performance. *The North American Journal of Economics and Finance*, 39, 223–240. <https://doi.org/10.1016/j.najef.2016.10.008>
- Yuen, M. K., Ngo, T., Le, T. D. Q., & Ho, T. H. (2022). The environment, social and governance (ESG) activities and profitability under COVID-19: Evidence from the global banking sector. *Journal of Economics and Development*, 24(4), 345–364. <https://doi.org/10.1108/JED-08-2022-0136>
- Zhu, J., & Huang, F. (2023). Transformational Leadership, Organizational Innovation, and ESG Performance: Evidence from SMEs in China. *Sustainability*, 15(7), Article 7. <https://doi.org/10.3390/su15075756>