



# The impact of the implementation of economic, social, and good corporate governance (ESG) on the performance of esg-listed companies on the Indonesia stock exchange

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## ABSTRACT

The implementation of Economic, Social, and Good Corporate Governance (ESG) is expected to enhance company performance by reducing the risks faced by investors. This study will examine how the implementation of ESG influences company performance, measured using Return on Assets (ROA), with the hypothesis that ESG has a positive impact on company performance. The data used are from secondary sources, with a sample of 84 companies and a total of 298 observations through unbalanced panel data with a fixed-effect model regression. The research results indicate a negative impact of ESG on company performance due to a lack of awareness and education about sustainability practices. To increase awareness of ESG implementation, adequate regulations and law enforcement are needed to enhance the appeal of green projects.

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## INTRODUCTION

Climate change has become an issue that many countries are addressing, and there have been numerous public policies shifting towards green economies while mitigating as many adverse economic impacts as possible. Therefore, climate change presents an opportunity to rebuild the global economy (Breckenfelder et al., 2019). Public policies to transition to a green economy are also being implemented by Indonesia with the aim of promoting sustainable activities across all layers, including the capital market sector. This sector is encouraged to implement Economic, Social, and Good Corporate Governance (ESG) programs, with businesses having the mindset that growth can still be achieved despite aligning their business activities. This alignment is intended to preserve the environment, promote responsible resource usage, and support the social well-being of the surrounding community through empowerment (Bursa Efek Indonesia, 2021).

ESG has become one form of implementing green investments that consider non-financial aspects such as ecological, scientific, ethical, and even reputational factors. Although financial

considerations remain fundamentally crucial, other aspects play a role in supporting better financial outcomes resulting from an enhanced corporate reputation (Boling, 2010). The contention arises due to companies implementing ESG having smaller transactions, limited resources, encountering regulatory limitations, and technological constraints. As a result, ESG companies are perceived to yield smaller benefits (Voica et al., 2015). Although there are concerns among companies about the potentially adverse financial implications and reduced investor returns when implementing ESG, the shift in investor values makes ESG one of the means to add value to a company. This, in turn, can increase stock prices by maintaining consistent profits. ESG is expected to be a focal point for companies aiming to enhance value and return on investment, thereby amplifying the positive impact on both shareholders and other stakeholders (Mercereau et al., 2022). As stakeholders, investors have an interest in ensuring that companies create value, aligning capitalism with ethics, and identifying appropriate management practices (Fares et al., 2021). ESG is used as a parameter to measure company performance. Through sustainable practices towards the environment, it can generate long-term value for shareholders, enabling the company to invest, grow, and innovate (*Business Roundtable Redefines the Purpose of a Corporation to Promote 'An Economy That Serves All Americans,'* n.d.). Management is expected to maximize shareholder profits and create long-term value for the company (Henisz et al., 2019). ESG can drive companies to maintain stable relationships with stakeholders. ESG performance will improve, providing benefits such as reducing operational costs and financial risks, enhancing efficiency and competitiveness, and boosting the company's reputation and consumer trust (Friede et al., 2015). The implementation of ESG in companies allows for an improved identification of the risks and opportunities faced by the company, thereby supporting the risk management process (Taliento et al., 2019).

Previously, (Makhdalena et al., 2023) conducted a study to examine the influence of ESG on all companies in ASEAN. In contrast, this research focuses on exploring the impact of ESG on firm performance, specifically among ESG-listed companies on the Indonesia Stock Exchange. The consideration is that not all companies have an ESG Score report, so the study is conducted on companies that have been confirmed to have ESG Score reports. In this research, the author aims to examine how ESG can influence performance of ESG-listed companies on the Indonesia Stock Exchange. This research contributes to understanding the role of ESG influences on the performance of ESG companies listed on the Indonesia Stock Exchange.

## RESEARCH METHOD

This study is both descriptive and quantitative. The secondary data used in the research are sourced from the S&P Capital IQ, Refinitiv, Yahoo Finance, and IDX ESG database platforms to obtain ROA, debt to equity ratio, firm age, asset turnover, and firm age from companies that have ESG reports on the Indonesia Stock Exchange (BEI) from 2018 to 2022. The research employs purposive sampling technique with a population of 912 companies and a sample of 84 companies. The total observations used amount to 298 data points, utilizing Stata as the statistical analysis program through the unbalanced panel data regression model. The research model can be seen in Figure 1

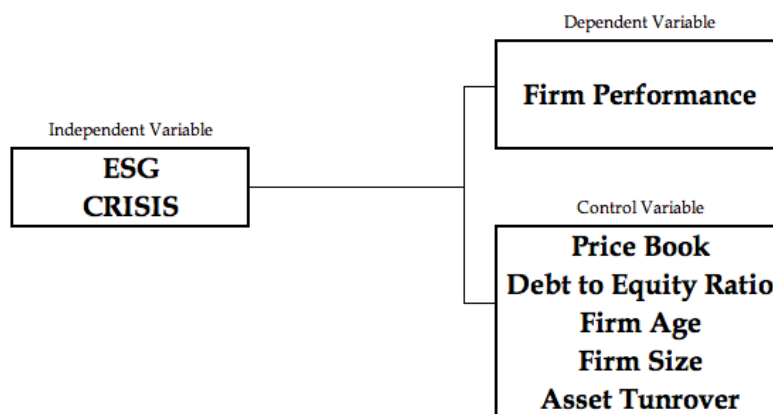


Figure 1: Illustration of the Research Model

Table 1. Data Variable Type

Variabel Type	Indikator	Measurement	References
Independen t	ESG	ESG Score	(Sofian et al., 2020), (Buallay, 2019)
	Crisis	DumYEAR = 1 for crisis years (2020-2022); DumYEAR = 0 1 for non-crisis years (2018-2019).	(Brad et al., 2012), (Dang et al., 2018)
Dependent	Firm Performance (KIN)	$ROA = \frac{\text{Net Income}}{\text{Total Asset}}$	(Sofian et al., 2020), (Anwaar, 2016)
Control	Price Book	$PB = \frac{\text{market price per share}}{\text{book value per share}}$	(Şamiloğlu et al., 2017), (Afriani Utama & Utama, 2019)
	DER	$DER = \frac{\text{Total Debt}}{\text{Total Equity}}$	(Suroso et al., 2020), (Yuli Soesetio et al., 2023)
	Firm Age	$LNAGE = \ln(\text{firm establish})$	(Hidayat & Utama, 2015), (Coad et al., 2012), (Khan et al., 2021)
	Firm Size	$LNTA = \ln(\text{Total Asset})$	(C. Anscas et al., 2019), (Bangun et al., 2017)
	Asset Turnover	$AT = \frac{\text{Net Sales}}{\text{Total Asset}}$	(Yuli Soesetio et al., 2023), (Nurlaela et al., 2019)

Table 1 shows the variables details such as the supported indicators of the variables and the types and categories of each variable. The empirical model equation used for panel data regression is as follows:

$$KIN_{i,t} = \alpha_i + \beta_1 ESG_{i,t} + \beta_2 ESG_{i,t} \times DUMMY + \beta_3 PB_{i,t} + \beta_4 DER_{i,t} + \beta_5 LNAGE_{i,t} + \beta_6 LNTA_{i,t} + \beta_7 AT_{i,t} + \varepsilon_{i,t}$$

KIN : Firm Performance

ESG : ESG Score (ESG total, index environmental, social, dan governance)

PB : Price Book

DER : Debt to equity ratio

LNAGE: Firm Age

LNTA : Firm Size  
 AT : Asset Turnover  
 DUMMY : Crisis

## RESULTS AND DISCUSSIONS

### Descriptive statistics

The table below describes the statistics descriptive of each variable

**Table 1.** Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
ESG	298	49.799	19.621	10.181	88.051
ENV	292	39.331	23.9	.117	87.383
SOC	298	54.503	22.22	5.474	95.746
GOV	298	50.813	22.701	2.977	94.013
ROA	298	.06	.08	-.139	.459
AT	298	.596	.577	.034	3.336
LNTA	298	22.322	1.541	19.195	28.332
LNAGE	298	3.73	.493	1.946	4.828
DER	298	.761	1.034	0	5.69
PB	298	2.604	2.788	-.784	19.169

The descriptive statistics presented in Table 2 show that the mean ESG score is 49.799 with a maximum of 88.05. The averages for each aspect of ESG are as follows: environment 39.33%, social 54.50%, and governance 50.81%. Other information obtained from the sample data includes the average company performance measured by ROA at 0.06, asset turnover at 0.596, total assets at 22.322, company age at 3.73, debt to equity ratio at 0.761, and price to book value at 2.604.

### Matrix correlations

**Table 3.** Matrix of correlations

Variables	ESG	ENV	SOC	GOV	ROA	AT	LNTA	LNAGE	DER	PB
ESG	1.000									
ENV	0.796	1.000								
SOC	0.905	0.664	1.000							
GOV	0.825	0.505	0.603	1.000						
ROA	0.126	0.219	0.062	0.097	1.000					
AT	-0.036	0.139	-0.092	-0.034	0.500	1.000				
LNTA	0.289	0.159	0.252	0.229	-0.168	-0.388	1.000			
LNAGE	0.353	0.318	0.382	0.189	0.106	0.089	0.233	1.000		
DER	-0.060	-0.141	0.032	-0.061	-0.245	-0.239	0.048	-0.079	1.000	
PB	0.010	0.067	-0.020	0.012	0.466	0.419	-0.249	0.019	0.090	1.000

Table 3 shows the correlation between variables, indicating that ESG has a positive relationship with ROA, where ROA represents company performance. Meanwhile, asset turnover and debt to equity ratio have a negative relationship with ESG. Similar to ROA, a positive relationship is observed between ESG and total assets, company age, and price-to-book ratio. When examining each aspect of ESG, each aspect shows a positive relationship with company performance.

### Results of Model Selection Test and Classical Assumption Test

In this research, unbalanced panel data was used with a fixed-effect model regression. The fixed-effect regression model was determined after conducting the Chow Test, LM Test, and Hausman Test. The results of the classical assumption tests are as follows: First, the heteroskedasticity test conducted showed no heteroskedasticity issues. Second, the autocorrelation

test indicated no autocorrelation. Third, the cross-section dependence test showed a correlation between residuals, indicating cross-section dependence.

### Regression Result

**Table 4.** Regression Result

ROA (dependent)	ESG	ENV	SOC	GOV
ESG	-.0002 (.0003)			
ENV		-.0001 (.0001)		
SOC			-.0003 (.0005)	
GOV				-.0001 (.0001)
AT	.2015*** (.0165)	.2093*** (.0124)	.2003*** (.0148)	.2025*** (.0166)
LNTA	.0008 (.0015)	.0022 (.002)	.0011 (.0018)	.0006 (.0013)
LNAGE	.0611 (.0552)	.0521 (.0364)	.0652 (.0597)	.0581 (.0346)
DER	.0038 (.0049)	.0045 (.0047)	.0036 (.0046)	.004 (.005)
PB	.0041*** (.0004)	.0043*** (.0006)	.004*** (.0004)	.0042*** (.0006)
_cons	-.3111 (.2265)	-.3193 (.1721)	-.3244 (.2372)	-.2994 (.163)
Observations	298	292	298	298
Pseudo R <sup>2</sup>	0.3988	0.4020	0.4004	0.3989
Prob > F	0.0002	0.0002	0.0002	0.0007

*Standard errors are in parentheses*

\*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .1$

The table indicates that the coefficient for ESG as a whole is -.0002, for environment is -.0001, for social is -.0003, and for governance is -.0001. The coefficients for ESG and its components are close to zero. Negative coefficients suggest a negative relationship between the independent variable and the dependent variable. The R-squared value is around 40%, indicating that the regression model successfully explains approximately 40% of the variation in the dependent variable. This means that almost 40% of the variation in the outcome can be explained by the independent variables in the model. A higher R-squared value suggests a better fit of the model to the data. In this context, a value of 40% indicates a relatively good level of fit.

Based on the test results, it is found that there is no significant relationship between ESG and company performance. This result is supported by a result from (Garcia & Orsato, 2020), where the research showed a positive and statistically significant relationship between the influence of ESG and company performance in companies from developed countries, while this correlation did not occur in companies from developing countries. As Indonesia is still categorized as a developing country, the statistically significant but negative relationship between ESG and company performance in this study aligns with these findings. This negative relationship may be due to a lack of awareness and education about sustainability practices in developing countries. People might still believe that sustainable development does not add value to companies and does not affect decisions to purchase goods or services.

Weak governance and regulatory frameworks in developing countries can lead to inadequate enforcement of sustainability policies and regulations for ESG programs. This results in legal uncertainty regarding existing ESG practices. Through robust law enforcement, there will be indirect encouragement for both companies and the public to recognize the importance of ESG and

the creation of a pipeline of green projects. For investors, the existence of a pipeline for green projects can be an attractive proposition (Asian Development Bank, 2022).

### Robustness test

Table 5. Robustness Test

ROE (Robust)	ESG	ENV	SOC	GOV
ESG	.0002 (.0002)			
ENV		.0003 (.0002)		
SOC			.0001 (.0003)	
GOV				-.0001 (.0001)
AT	.0396** (.0098)	.0417** (.012)	.0399** (.0099)	.04** (.0099)
LNTA	-.0017 (.0014)	-.0023 (.0012)	-.0019 (.0011)	-.0019 (.0014)
LNAGE	.0501 (.0478)	.0309 (.0601)	.0567 (.0516)	.0751* (.0308)
DER	.0046 (.0052)	.0048 (.0049)	.0047 (.0053)	.0047 (.0052)
PB	.0019* (.0008)	.002* (.0007)	.0019** (.0006)	.0017 (.0009)
_cons	-.1692 (.1441)	-.0902 (.1953)	-.1897 (.1588)	-.2448* (.0958)
Observations	.0396**	.0417**	.0399**	.04**
Pseudo R <sup>2</sup>	0.0034	0.0005	0.0019	0.0228
Prob > F	0.0225	0.0250	0.0224	0.0040

Standard errors are in parentheses

\*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .1$

The robustness test was conducted using ROE, measured by net income divided by average total equity. The robustness test indicates that ESG does not have a significant influence on ROE, where ROE is also one of the ratios used to measure a company's profitability. Overall, ESG, environmental elements, and social elements have a positive but insignificant influence, while governance elements have a negative influence. This aligns with research by (Koroleva et al., 2020; Tanjung, 2008), indicating that ROE has a negative impact on ESG-based companies. This may be because ESG companies may not always experience direct financial benefits from the implementation of ESG values. It suggests that being an ESG company does not guarantee a positive financial impact on ROE.

The different results between ROA and ROE can be attributed to different profit distribution assumptions. ROE considers the return given to equity shareholders, while ROA considers the return given to all capital providers (creditors and shareholders). Therefore, changes in profit distribution policies can affect both results differently. However, both ROA and ROE can be used to assess the company's profitability.

## CONCLUSION

This study found a negative relationship between the implementation of ESG and company performance. This is reasonable for companies in developing countries, including Indonesia. The lack of awareness and education about sustainability practices in developing countries leads people to believe that sustainable development will not add value to companies and will not influence decisions to purchase goods or services. To increase awareness of the importance of ESG practices, adequate regulations and law enforcement are needed to support the creation of a

pipeline of green projects that attract investors to green projects. This research has implications for companies and the government to provide more education and awareness to the public about the importance of ESG practices for long-term sustainability. In addition, this research contributes to expanding the literature on the influence of ESG on firm performance, particularly among companies listed on the Indonesia Stock Exchange.

The limitations of this study are attributed to the small sample size, consisting of only 84 companies with ESG reports on the Indonesia Stock Exchange (IDX). Therefore, there is a possibility of bias in the study, and careful interpretation is needed. For future research, it is recommended to: (i) utilize data over a more extended period, (ii) employ different performance metrics beyond profitability to encompass market performance measurements, and (iii) conduct industry-specific studies, considering the variation in ESG Score measurement across industries for increased relevance within each sector.

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