



Please cite this article as:

Chairiyati, F., Isnaeni, N. ., Ary Dean Amri, & Fauziah Chairiyati. (2025). Environment, Social, and Governance (ESG) and firm value: Study on IDX ESG Leader Index emitters. *The Asian Journal of Professional & Business Studies*, 6(1), 135–143.
<https://doi.org/10.61688/ajpbs.v6i1.389>.

ENVIRONMENT, SOCIAL, AND GOVERNANCE (ESG) AND FIRM VALUE (STUDY ON IDX ESG LEADER INDEX EMITTERS)

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Received 3 Februari 2025, Accepted 1 June 2025, Available online 30 May 2025 |

ABSTRACT

In the last decade, investments that consider environmental, social, and governance (ESG) factors have become a priority for companies oriented towards long-term sustainability. This awareness drives the integration of ESG policies into business operations aimed at expanding markets and increasing profitability. This study aims to measure the impact of ESG on company value, focusing on issuers included in the IDX ESG Leaders listed on the Indonesia Stock Exchange (IDX) for the period 2020-2023 as the research sample. ESG is measured with three indicators, namely Environment, Social, and Corporate Governance. The Firm value is measured using Tobin's and employs control variables such as company size (LOGTA), the ratio of capital expenditure to assets (CAPEX/ASSETS), profitability (ROA), and leverage (LEVERAGE). Descriptive analysis and regression methods with a Fixed Effect Model approach, using Stata. The research results show that the ESG pillar of IDX ESG Leaders has a significant negative impact on company value due to several factors such as high investment costs and the implementation of ESG in environmentally friendly technology, social programs, and governance reforms in the short term. And the tendency of investors from developing countries to focus more on short-term financial results. The results of this study can be utilized by stakeholders to pay more attention to the effectiveness of ESG implementation in order to enhance the company's value.

| **Keywords:** ESG, Firm Value, IDX ESG Leader | |

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1 INTRODUCTION

In recent years, public awareness of investing based on Environment, Social, and Governance (ESG) has continued to increase. ESG has become the standard for companies in making long-term investments that can implement and integrate company policies related to the environment, social, and governance. Henis stated that the company's ESG can expand existing markets and reach new ones (Henisz, W., Koller, T., & Nuttall, 2019). Thus, it can increase profitability and run the company's business.

Sustainable investing mempertimbangkan beberapa aspek, diantaranya lingkungan, sosial, dan governance (Stobierski, 2021). The sustainability report presents a series of information related to the company's activities concerning the past, present, future, environmental issues, social matters, as well as past, present, and future financial implications arising from the company's environmental management decisions and actions (Berthelot, S., Cormier, D., & Magnan, 2003)

Some companies disclose sustainability reports to signal their intention to gain a good reputation and legitimacy from stakeholders by integrating a focus on social and environmental issues into their business operations and interactions with stakeholders (Wood, 2010). A survey conducted by KPMG CSR in 2017 found that since 2008, there has been a 41.5% increase in the value of sustainable financial report disclosures. The percentage of sustainable financial reports in 2008 was 53%, while in 2018 it reached 75%. Other information from the GRI survey results in 2018 shows that in 2000 there were 48 organizations disclosing sustainability reports, which then increased to 12,075 by the end of 2017. (Standards, n.d.).

One of the pieces of evidence that the Indonesian Government has supported the implementation of sustainability reporting is the enactment of Financial Services Authority Regulation No. 51/POJK.03/2017 concerning the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies. With the implementation of this report, it is hoped that it can maintain the stability and inclusiveness of the economy through synergy from various aspects, starting from the economy, social, and environmental sectors.

The Indonesian Minister of Finance stated that they will enhance support and connectivity to promote ESG performance in infrastructure development to revive the economy (Winarto, H., & Oktaria, 2022). Sustainable Finance Roadmap Phase II of the Financial Services Authority (OJK) is a response from Bank Indonesia to the development of sustainability aspects (ESG). The plan is expected to create a comprehensive sustainable finance ecosystem in all aspects of development activities (OJK, 2021).

In the study by Wulf, Niemoller, and Rentzsch (2014), it is stated that currently, financial reports are unable to meet the needs of shareholders, thus additional reports such as intellectual reports and sustainability reports are needed. The Indonesia Stock Exchange has made several efforts to enhance ESG implementation, including raising ESG awareness among stakeholders in the capital market, providing electronic reports, launching environmentally friendly programs in the capital market, and issuing the IDX ESG Leader Index. The IDX ESG Leader Index has several criteria, including stocks with good ESG ratings, strong financial performance and liquidity, and timely responses to significant controversies (Rosiana, n.d.)

Research on ESG and firm value has been conducted by several previous researchers, including in Indonesia. Previous research has discussed the impact of ESG on firm value, but each of them used diverse samples, including companies in Asian countries (Melinda, A., & Wardhani, 2020), Korean company (Yoon, B., Lee, J. H., & Byun, 2018), Egyptian company (Aboud, A., & Diab, 2018), Brazilian company (Lima Crisóstomo, V., de Souza Freire, F. and Cortes de Vasconcellos, 2011), Indonesia company (Kartika et al., 2023) and other companies (Fatemi, A., Glaum, M., & Kaiser, 2018; Plumlee, M., Brown, D., Hayes, R. M. & Marshall, 2015). Additionally, there are also studies that partially measure environmental, social, and governance factors on company value, including those that only use CSR variables (Lima Crisóstomo, V., de Souza Freire, F. and Cortes de Vasconcellos, 2011; Purnomo, 2011). And next, the environmental information variable (Deswanto, R. B., & Siregar, 2018; Haninun, H., Lindrianasari, L., & Denziana, 2018; Malarvizhi, P., & Matta, 2016; Purnomo, 2011; Setiadi, I., Rahmawati, Suhardjanto, D., 2017).

This research offers novelty, especially from the research sample. From the author's analysis, research on ESG and its relationship with company value, especially in Indonesia, is still relatively scarce. Thus, this research attempts to fill that gap by taking case studies of companies in Indonesia. This study uses IDX ESG Leaders companies that have an ESG Score and are listed on the Indonesia Stock Exchange (IDX). This constitutes the second novelty of this research. Next,

from the regulator's perspective, Elmassri et al. state that the government should use research as an analytical tool to implement mandatory disclosure regulations (Aboud, A., & Diab, 2018). This research can contribute by providing insights into the regulatory disclosure requirements for ESG.

In this study, the problem-solving approach used is descriptive analysis and regression with the Fixed Effect Model approach, using Stata. This research aims to understand the extent to which ESG can influence company value. This approach is expected to provide a deeper understanding of the dynamics of ESG and company value, as well as to provide empirical evidence that can support the formulation of sustainable financial policies in Indonesia.

2 LITERATURE REVIEW

2.1 Environmental, Social, And Governance (ESG)

Environmental, Social, and Governance (ESG) is a concept that assesses the sustainability and ethical impact of a company in three main dimensions: environmental, social, and governance. Environmental pillar (E) includes factors such as energy efficiency, carbon emissions, and resource management. The social pillar (S) involves corporate social responsibility, employee relations, and contributions to the community. Whereas governance (G) includes transparency, board structure, and risk management practices (Friede, G., Busch, T., & Bassen, 2015). The implementation of ESG has become a primary focus in financial management research because it has been proven to affect the long-term performance of companies. Research shows that companies with high ESG scores tend to be more financially stable and have better market value (Eccles, R. G., Ioannou, I., & Serafeim, 2014).

2.2 Firm Value

Firm Value or company value refers to the overall economic value of a company that reflects investors' perceptions of the company's ability to generate profits in the future. Indicators that are often used to measure firm value are Tobin's Q, Return on Assets (ROA), and stock price (Wang, Z., & Sarkis, 2017). The relationship between ESG and Firm Value Some studies show a positive relationship between ESG scores and company value. Environmental factors are often associated with higher operational efficiency and lower environmental risks. Social factors, such as employee satisfaction and community engagement, can enhance a company's reputation. Good governance ensures business sustainability through transparency and accountable decision-making (Giese, G., Lee, L. E., Melas, D., Nagy, Z., & Nishikawa, 2019). However, there is variation in the impact of each ESG pillar on company value, depending on the industry sector, geographical location, and market expectations. For example, research by Khan et al. (2016) found that focusing on material ESG factors has a greater impact on company value compared to immaterial factors (Khan, M., Serafeim, G., & Yoon, 2016)

3 METHODOLOGY

3.1 Sample

The sample of this research consists of companies listed on the ESG Leaders index, which comprises 30 companies from 2020-2022. Data were collected through Refinitiv Eikon for ESG variables and firm value, and the methods used were descriptive analysis and regression with a Fixed Effect Model approach.

3.2 Variable and Measurement

In this study, ESG is used as the dependent variable and company value as the independent variable, using the Tobin's q proxy by summing the market cap and total liabilities, divided by total assets, which has been used in several previous studies. (Butt et al., 2023; Nirino et al., 2021; Yulianti, 2023). Then we used the ESG score and each of its pillars as independent variables in our research, which we obtained from the Refinitiv Eikon database. Next, we used several control variables, namely size, leverage, CAPTA, and Covid. All the variables we used are summarized in Table 1 below. The sample of this research consists of companies listed on the ESG Leaders index, which comprises 30 companies from

2020-2022. Data were collected through Refinitiv Eikon for ESG variables and firm value, and the methods used were descriptive analysis and regression with a Fixed Effect Model approach.

Tabel 1 Variable I Description

Variable	Formula	Notation	Source
Variabel Dependen			
Firm Value	Market cap+ total liabilities, divided by total assets	Tobins'q	Refinitive Eikon
Variabel Independen			
ESG activities	ESG	ESG	Refinitive Eikon
Environmental pillar	E Score	ENV	Refinitive Eikon
Social Pillar	S Score	SOC	Refinitive Eikon
Governance Pillar	G Score	GOV	Refinitive Eikon
Variabel Kontrol			
Size	Ln. total Asset	size	Refinitive Eikon
Leverage	debt/ total Asset	lev	Refinitive Eikon
CAPTA	Total capital/total Asset	CAPTA	Refinitive Eikon
covid	Dummy, if covid=2020,2021,2022	Covid	

3.3 Ekonometric model

To explain the influence of ESG on company value, the researchers used the following econometric model.

$$\text{Tobins'q}_{it} = \alpha_i + \beta_1 \text{ESG}_{it} + \varphi X_{it} + \varepsilon_{it} \quad (1)$$

i and t each represent the index and year of the company, Tobins'q is a proxy for measuring the value of the company (Butt et al., 2023; Nirino et al., 2021; Yulianti, 2023) and X is the control variable that includes size, leverage, CAPTA, covid. We use several control variables because they can affect the value of the company. We use a fixed effects model in this regression model so that the fixed effects of the observation units can be controlled and do not change over time. This model also makes the obtained estimates more consistent and allows us to identify causal relationships between the observed variables.

4 FINDINGS AND DISCUSSION

4.1 Descriptive Analysis

Table 2 explains the statistical analysis of ESG Leaders companies, including ESG variables, company value, and country-level macro variables as control variables.

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
tobins q	268	25.079	1.561	21.13	28.81
ESG	169	.494	.207	.102	.874
ENV	169	.386	.287	0	.892
SOC	169	.544	.226	.072	.939
GOV	169	.504	.223	.107	.904
size	283	21.816	1.774	17.642	25.674
lev	247	.147	.164	0	.796
CAPTA	233	.799	.118	.248	.985
covid	300	.3	.459	0	1

The average Tobin's Q value of ESG Leaders companies is 25.079, indicating the value of the company. Next, ESG shows an average value of 0.494, indicating that the ESG level of ESG Leaders companies in Indonesia during the 2020-2022 period is still relatively high.

Tabel 3: Pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) tobins_q	1.000								
(2) ESG	0.336	1.000							
(3) ENV	0.268	0.861	1.000						
(4) SOC	0.340	0.939	0.800	1.000					
(5) GOV	0.222	0.832	0.569	0.653	1.000				
(6) size	0.163	0.578	0.574	0.571	0.489	1.000			
(7) lev	-0.025	-0.406	-0.381	-0.381	-0.318	-0.116	1.000		
(8) CAPTA	-0.280	-0.643	-0.716	-0.585	-0.405	-0.028	0.288	1.000	
(9) covid	-0.038	0.131	0.166	0.086	0.105	0.049	-0.047	0.065	1.000

Table 3 shows the correlation analysis to see whether the data is free from multicollinearity issues. Some studies use a pairwise correlation matrix to test the data. In this analysis, the standard rule is that if the coefficient between independent variables exceeds 0.8, the data has multicollinearity issues (Gujarati, Damodar N, 2012; Porter, M. E., & Kramer, 2011). Table 3 shows that the pairwise correlation coefficients between all variables do not exceed the standard rule. This means that the data in this study does not experience multicollinearity.

4.2 Empirical Results

Table 4 presents the results of the ESG regression on the value of ESG Leaders companies. Model (1) shows the impact of the combined ESG score on company value. The results show that ESG leaders experience a negative impact from ESG performance. This means that when the ESG score increases, the company's value will decrease.

In models (2), (3), and (4), the results also show that ESG has a significant negative impact on the company's value. This means that an improvement in Environmental, Social, and Governance performance will reduce the company's value.

Tabel 4: Main Regresion

	(1) tobins_q	(2) tobins_q	(3) tobins_q	(4) tobins_q
ESG	-1.975*** (-4.71)			
size	-0.690*** (-3.19)	-0.695*** (-3.26)	-0.843*** (-4.37)	-0.955*** (-4.76)
lev	0.912 (1.59)	1.091 (1.71)	0.677 (1.37)	1.263** (2.42)
CAPTA	-2.585* (-2.08)	-2.740** (-2.19)	-1.993 (-1.42)	-2.437*** (-2.91)
covid	-0.0934 (-1.34)	-0.0961 (-1.34)	-0.135* (-1.94)	-0.131 (-1.51)
ENV		-1.255*** (-3.79)		
SOC			-1.615*** (-4.14)	
GOV				-0.759** (-2.33)
_cons	42.96*** (8.24)	42.70*** (8.28)	45.80*** (9.37)	48.06*** (11.11)
N	118	118	118	118
N_g	18	18	18	18
r2_w	0.521	0.495	0.505	0.460

t statistics in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Explanation: Model (1) shows the ESG regression results on company value, Models (2), (3), and (4) respectively show the regression results for the pillars, namely Environmental, Social, and Governance.

4.3 Findings and Discussions

In Table 4, examining the impact of ESG on company value (1). Both show that ESG has a significant negative impact on Tobin's q. This means that ESG Leaders companies will experience a decline in company value when implementing increasingly stringent ESG practices. This result concludes that investment in ESG practices often requires significant costs, which are allocated to the use of environmentally friendly technology, waste management, and the implementation of social responsibility programs. Thus, it will reduce the company's profitability in the short term, lowering the company's value in the eyes of investors. (Cremasco, C., & Boni, 2022; Prabawati, P. I., & Rahmawati, 2022; Shaikh, 2022).

Furthermore, investor awareness in developing countries tends to focus on short-term financial results, so significant investments in ESG can be seen as a financial burden rather than a strategic advantage (Cremasco & Boni, 2022). Then, ESG-oriented companies allocate resources to meet ESG standards, which can reduce the company's focus on core activities, such as product innovation or market expansion, which are actually the main drivers of increasing the company's market value (Shaikh, 2022). And the reputational risk if the company engages in "greenwashing" practices that claim to comply with environmental standards but are not actually implemented.

Thus, although ESG practices aim for long-term sustainability, market realities show that high costs, lack of market appreciation, and reputational risks can negatively impact the company's value. Next, the researchers examined the indicators of each pillar of Environmental, Social, and Governance in models (2), (3), and (4). Showing that models (2), (3), and (4) have a significant negative impact on company value. Here is the analysis breakdown.

Pillar Environment (Environment), a company that invests and focuses on environmental initiatives, such as eco-friendly technology, energy efficiency, and waste management, requires significant costs that directly burden the company's finances, adding to the company's operational expenses. However, in the short term, this is not always accompanied by an increase in revenue, leading to a decrease in profitability, which will impact the company's value (Shaikh, 2022). Moreover, investors in developing countries often do not appreciate environmental sustainability initiatives, which leads them not to give a premium to companies with high environmental scores.

The social pillars consisting of corporate social responsibility (CSR), employee welfare improvement, or contributions to the community can also have a negative impact on the company's value. This happens because CSR programs often do not yield direct benefits that can be measured in the short term. On the contrary, investors might see it as an additional non-essential expense, especially if the company operates in a more competitive market. Moreover, the lack of proper management of social programs can render them ineffective and even generate skepticism among stakeholders (Cremasco, C., & Boni, 2022)

Good corporate governance requires structural reforms, enhanced oversight mechanisms, and greater transparency, which lead to increased compliance costs, more complex bureaucracy, and slower decision-making. Thus, it can reduce the company's flexibility and slow down its response to market dynamics, leading to a decrease in the company's value. (Shaikh, 2022).

5 CONCLUSION

This research examines the impact of ESG on company value. Using panel data from ESG Leaders companies from 2020-2022, which showed significant negative results. This means that when a company has good ESG performance, it will significantly weaken the company's value. This shows the challenges faced by the costs of investment and implementation of ESG in environmentally friendly technologies, social programs, and governance reforms, which often reduce the company's profitability in the short term. Additionally, there is a tendency among investors in emerging markets to focus more on short-term financial results because ESG investments are often considered a financial burden. Additionally, the implementation and management that are neither strategic nor effective can worsen this condition, where ESG initiatives are carried out without effective management, resulting in minimal impact or even harming the company's value. Thus, the researchers suggest that companies should design an ESG implementation strategy integrated with their main business objectives to ensure efficient cost management and measurable impact. In addition, educating investors about the benefits of long-term investments. From the regulator's side, incentives such as tax relief or green funding can be provided to ease the cost burden. |

6 ACKNOWLEDGEMENT

The authors would like to express their sincere gratitude Jambi University for providing the resources and support necessary to complete this study. We would also like to thank all participants who contributed their time and insights to this research. Special appreciation is extended to colleagues and peers who offered valuable feedback during the development of this manuscript.

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