

Environment, Social, and Governance (ESG) and Firm Value (Study on IDX ESG Leader Index Emitters)

Nurida Isnaeni^{*1}, Sigit Indrawijaya², Ary Dean Amri³, Fauziah Chairiyati⁴

^{1,2,3}Economics and Business, Jambi University,
36657 Jambi, Indonesia

⁴Economics and Business, Air Langga University,
60115 East Java, Indonesia

*Corresponding Author: fauziahch15@gmail.com

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ABSTRACT

Over the last decade, investments that consider environmental, social, and governance (ESG) factors have become a priority for companies focused on long-term sustainability. This awareness drives the integration of ESG policies into business operations to expand markets and increase 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 using three indicators: Environment, Social, and Corporate Governance. Firm value is measured using Tobin's Q 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 results show that the ESG pillar of IDX ESG Leaders has a significant negative impact on company value because of several factors, including high investment costs and the short-term implementation of ESG in environmentally friendly technology, social programs, and governance reforms. Investors from developing countries also tend to focus more on short-term financial results. Stakeholders can use the results of this study to pay more attention to the effectiveness of ESG implementation to enhance company 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 making long-term investments by implementing and integrating environmental, social, and governance policies. Henisz 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 considers several aspects, including environmental, social, and governance (ESG) factors (Stobierski, 2021). A sustainability report presents a range of information regarding a company's activities and impacts in the past, present, and future, covering environmental issues, social matters, and the past, present, and future financial implications arising from the company's environmental management decisions and actions (Berthelot, Cormier, & Magnan, 2003).

Some companies disclose sustainability reports to signal their intention to build a good reputation and legitimacy with stakeholders by integrating social and environmental issues into their business operations and stakeholder interactions (Wood, 2010). A 2017 KPMG CSR survey found that since 2008, the value of sustainable financial report disclosures has increased by 41.5%. In 2008, 53% of companies published sustainable financial reports, while in 2018 that figure rose to 75%. Other information from the 2018 GRI survey shows that in 2000, 48 organizations disclosed sustainability reports, which 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. This report aims to maintain economic stability and inclusiveness through synergy across economic, 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 across all development activities (OJK, 2021).

In the study by Wulf, Niemoller, and Rentzsch (2014), it is stated that financial reports currently cannot meet shareholders' needs; 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 capital market stakeholders, 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.).

Several previous researchers, including in Indonesia, have studied ESG and firm value. 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, studies have partially measured environmental, social, and governance factors on company value, including those that use only 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 ESG disclosure requirements.

This study uses a problem-solving approach based on descriptive analysis and regression with a fixed-effects model in Stata. This research aims to understand the extent to which ESG can influence company value. This approach is expected to deepen understanding of the dynamics between ESG and company value and provide empirical evidence to 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 a company's sustainability and ethical impact across three main dimensions: environmental, social, and governance. The environmental pillar (E) includes factors such as energy efficiency, carbon emissions, and resource management. The social pillar (S) includes corporate social responsibility, employee relations, and community contributions. Governance (G) includes transparency, board structure, and risk management practices (Friede, G., Busch, T., & Bassen, 2015). ESG implementation has become a primary focus in financial management research because it has been shown to affect companies' long-term performance. 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. Common indicators used to measure firm value include 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, the impact of each ESG pillar on company value varies by industry sector, geographic location, and market expectations. For example, Khan et al. (2016) found that focusing on material ESG factors has a greater impact on company value than immaterial factors (Khan, M., Serafeim, G., & Yoon, 2016).

3 METHODOLOGY

3.1 Sample

This research sample consists of companies listed on the ESG Leaders index, comprising 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 using a fixed-effects model.

3.2 Variables 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). We also used the ESG score and each of its pillars as independent variables, 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 l Description

Variable	Formula	Notation	Source
Variablel Dependenden			
Firm Value	Market cap+ total liabilities, divided by total assets	Tobins'q	Refinitive Eikon
Variablel Independenden			
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
Variablel 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 Econometric model

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

$$\text{Tobins'q}_{it} = \alpha_i + \beta_1 \text{ESG}_{it} + \phi X_{it} + \varepsilon_{it}$$

i and t each represent the index and year of the company; Tobin's 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, and COVID. We use several control variables because they can affect a company's value. We use a fixed effects model so 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 for ESG Leaders companies is 25.079, indicating the company's value. 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 do 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 as the ESG score increases, the company's value decreases.

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 improvements in Environmental, Social, and Governance performance reduce the company's value.

Tabel 4
Main Regression

	(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 suggests that investing in ESG practices often requires high costs, which are allocated to environmentally friendly technology, waste management, and the implementation of social responsibility programs. Thus, it can reduce the company's short-term profitability, lowering its 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 ESG investments may 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). It also faces reputational risk if it engages in "greenwashing" practices that claim to comply with environmental standards but do not actually implement them.

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 in and focuses on environmental initiatives such as eco-friendly technology, energy efficiency, and waste management, incurs high costs that directly burden the company's finances and increase 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 value environmental sustainability initiatives, so they do not pay a premium for companies with high environmental scores.

The social pillars, including corporate social responsibility (CSR), employee welfare improvements, and community contributions, can also negatively affect the company's value. This happens because CSR programs often do not yield direct, short-term benefits. Instead, investors may see it as an additional, nonessential 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 can increase compliance costs, add bureaucratic complexity, and slow 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, the results showed significant negative effects. This suggests that strong ESG performance can significantly weaken a company's value. This highlights the challenges of investing in and implementing ESG in environmentally friendly technologies, social programs, and governance reforms, which often reduce short-term profitability. Additionally, investors in emerging markets tend to focus more on short-term financial results because ESG investments are often seen as a financial burden. Additionally, the implementation and management can worsen this situation, with ESG initiatives carried out without effective oversight, 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, investors should be educated about the benefits of long-term investments. From the regulator's side, incentives such as tax relief or green funding can ease the cost burden.

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