Jurnal Akuntansi Berkelanjutan Indonesia
Vol. 9, No. 1, Jan 2026
ISSN 2615-7896

Received : 2 Sep 2025 Revised: 21 Dec 2025 Accepted: 13 Jan 2026 Published : 31 Jan 2026

Does ESG Performance Have an Influence on Enterprise Value? Evidence From Indonesia

Anggi Anugerah Daulay[1], Eri Wahyudi[2]
Directorate General of Tax, Ministry of Finance Republic of Indonesia[1]
Public Asset Management Department, Polytechnic of State Finance STAN[2]
Email: anggianugerah.daulay@pajak.go.id[1]; eriwahyudi@kemenkeu.go.id[2]

Abstract

This study investigates the impact of environmental, social, and governance (ESG) performance on enterprise value in publicly listed companies in Indonesia. Using 69 firm-year observations with complete ESG scores from the Bloomberg Terminal from 2021 to 2023, panel data regression is employed for analysis, which incorporates Tobin's Q as the dependent variable, ESG scores as independent variables, and leverage, firm size, and return on equity as control variables. The results reveal that none of the ESG pillars environmental, social, or governance significantly affect enterprise value suggesting that ESG initiatives do not generate measurable financial benefits in the short run. These findings are consistent with time horizon theory, which suggests that ESG initiatives generate immediate costs while their value creation benefits materialize in the long run. The study presents empirical evidence that in the short-term context, ESG performance is not yet viewed as a value enhancing signal for investors in the Indonesian capital market, highlighting the need for further research over extended observation periods to capture long term sustainability impacts.

Keywords: Sustainability; Environmental; Social; Corporate Governance; Tobin’s Q; Enterprise Value

Abstrak

Penelitian ini bertujuan untuk mengkaji pengaruh kinerja *environmental, social, and governance* (ESG) terhadap nilai perusahaan pada perusahaan publik di Indonesia. Dengan menggunakan 69 observasi perusahaan-tahun dengan skor ESG lengkap dari Bloomberg Terminal selama periode 2021–2023, analisis regresi data panel dilakukan dengan menggunakan Tobin’s Q sebagai variabel dependen, skor ESG sebagai variabel independen, serta *leverage*, ukuran perusahaan, dan *return on equity* (ROE) sebagai variabel kontrol. Hasil penelitian mengungkapkan bahwa tidak ada pilar ESG lingkungan, sosial, atau tata kelola yang secara signifikan memengaruhi nilai perusahaan, yang menunjukkan bahwa inisiatif ESG tidak menghasilkan manfaat finansial yang terukur dalam jangka pendek. Temuan ini konsisten dengan teori horizon waktu, yang menyatakan bahwa inisiatif ESG secara instan akan mengakibatkan tambahan biaya sementara manfaat penciptaan nilainya baru akan terwujud dalam jangka panjang. Studi ini menyajikan bukti empiris bahwa dalam konteks jangka pendek kinerja ESG belum dipandang sebagai sinyal penciptaan nilai bagi investor di pasar modal Indonesia, yang menekankan perlunya

*Corresponding author’s email: anggianugerah.daulay@pajak.go.id
http://openjournal.unpam.ac.id/index.php/JABI

penelitian lebih lanjut dalam periode observasi yang lebih panjang untuk menangkap dampak keberlanjutan dalam jangka panjang.

Kata Kunci: Keberlanjutan; *Environmental*; *Social*; *Corporate Governance*; Tobin's Q; Nilai Perusahaan

1. INTRODUCTION

Human activity is recognized as the primary driver of climate change, manifested through long-term shifts in the earth's climate due to rising atmospheric, oceanic, and land temperatures (United Nations, n.d.; United Nations Development Programme, 2023). This phenomenon, often referred to as global warming, results largely from greenhouse gas emissions particularly carbon dioxide (CO_2) produced by fossil fuel consumption (L. H. Huang & Li, 2015; Yilmaz & Can, 2020; Irma, 2024).

To address these challenges, businesses are increasingly expected to adopt sustainable practices (Li et al., 2023). The Environmental, Social, and Governance (ESG) framework provides a structured set of indicators for evaluating corporate sustainability (Stamelos, 2023). The environmental pillar assesses an entity's response to climate change and observes efforts to preserve the environment (Trahan & Jantz, 2023). The social pillar reflects responsibility toward society, while the corporate governance pillar emphasizes standards in conducting business activities (Rau & Yu, 2024).

Globally, ESG considerations are gaining prominence in investment decisions, with corporate governance emphasized most strongly in the Americas and ESG integration more advanced in equity markets than in fixed income (Orsagh et al., 2018). Nonetheless, ESG adoption continues to face challenges, including limited comprehension of ESG principles and the lack of standardized benchmarks for measurement (Orsagh et al., 2018). Meanwhile, the adoption of ESG practices in Europe has been primarily driven by heightened investor demand for sustainability-oriented investments (Silvestri & Kamerling, 2024). In parallel, ESG integration in Asia has gained momentum, with assets under management applying ESG principles projected to rise sharply from approximately USD 90 billion in 2021 to over USD 500 billion by 2025 (Chan et al., 2022). Despite this growth, firms in Asia encounter difficulties stemming from heterogeneous reporting standards and fragmented ESG data. This creates risks of information asymmetrical and inconsistency, which in turn complicates investor assessment of firms' sustainability strategies and their preparedness to address climate-related risks (Chan et al., 2022).

The integration of ESG principles into corporate strategies demonstrates a positive global trend. According to Baker & Barba (2023), 88 percent of public companies have initiated ESG pillars in their business activities. Additionally, more than 90 percent of companies listed on the S&P 500 index have published ESG reports (Pérez et al., 2022). The implementation of the ESG framework by public companies in Indonesia is governed by Financial Services Authority Regulation No. 51/POJK.03/2017 on the Implementation of Sustainable Finance for Financial

*Corresponding author's email: anggianugerah.daulay@pajak.go.id

Services Institutions, Issuers, and Public Companies. Complementing this regulatory initiative, the Indonesia Stock Exchange (IDX) has developed sustainability-focused indices to incentivize and benchmark corporate ESG performance. In 2009, the IDX, in collaboration with the KEHATI Foundation, has introduced the Sustainable and Responsible Investment (SRI)-KEHATI Index, comprising 25 companies recognized for their commitment to responsible investment and sustainability practices. More recently, in 2022, the IDX launched the IDX ESG Leaders Index, consisting of 30 companies that demonstrate strong adherence to ESG principles, thereby reinforcing market mechanisms to promote sustainable business conduct in Indonesia (Simangunsong et al., 2022).

The implementation of ESG frameworks by companies is driven by several factors. One of the key determinants involves the emergence of sincere intentions and altruism (Benabou & Tirole, 2010; Borghesi et al., 2014). This perspective aligns with the belief among corporate managers that socially responsible business activities can enhance enterprise value (Rau & Yu, 2024). Empirical evidence supports this linkage. A study by Hung et al. (2023) demonstrated a direct correlation, finding that companies with superior ESG performance tend to exhibit higher valuations. Furthermore, research conducted by the Mandiri Institute reveals that 90 percent of public companies adopt ESG practices primarily to augment firm value (Simangunsong et al., 2022).

Although the implementation of ESG by business entities is often motivated by the expectation of increasing enterprise value, previous research on the influence of ESG on enterprise value has shown inconclusive results. A significant body of work indicates a positive correlation. Cheng et al. (2024) find ESG performance in China positively influences firm value, with the environmental pillar as the main driver, while Aydoğmuş et al. (2022) show that aggregate ESG scores significantly enhance enterprise value. Similarly, Jin & Lei (2023) highlight that ESG fosters innovation and firm value in China, particularly in private firms, and Wang (2024) finds ESG disclosure strongly correlated with financial performance. Significant positive effects are also reported by Oza & Patekar (2024) in Indian service firms, but not in manufacturing. Conversely, an equally substantial set of studies reports an insignificant or even negative relationship. Atan et al. (2018) find no significant relationship between ESG scores and firm value among Malaysian firms, while Lindawati et al. (2023) conclude that only sustainability performance not ESG disclosure affects firm value in Indonesian banks. Falzon & Micallef (2022), Suharto et al. (2024), and Qodary & Tambun (2021) also report non-significant effects, while Budhiananto & Fatimah (2024) even find ESG negatively impacts enterprise value.

These different outcomes demonstrate that the relationship is highly contextual, contingent on various factors. In the literature, it has been identified that the time horizon plays a role in the impact of ESG adoption on firm value. Dorfleitner et al. (2014) emphasized that sustainability principles to strengthen firm fundamentals over the long term. Meanwhile, Rojo-Suárez & Alonso-Conde (2023) conclude that ESG implementation has no impact in short term but reduces corporate value creation in the long run through higher equity costs. Furthermore, industry and ownership structure also influence the relationship, with effects

*Corresponding author's email: anggianugerah.daulay@pajak.go.id

varying between service and manufacturing sectors and private versus state-owned enterprises (Oza & Patekar, 2024; Jin & Lei, 2023).

These divergent findings reflect the absence of consensus in the literature and underscore the need for further research, particularly in emerging markets such as Indonesia, to clarify the mechanisms through which ESG performance translates into enterprise value. Variations and contradictions across studies indicate the existence of both theoretical and practical knowledge gaps that have yet to be fully addressed. Moreover, research examining the influence of ESG implementationmeasured through ESG performance scores on the firm value of publicly listed companies in Indonesia has not been identifiable. According to Robinson et al. (2011), this absence of evidence highlights a population gap, given that Indonesian listed firms have not been sufficiently represented in prior research samples. Accordingly, this study aims to bridge these gaps by analyzing and clarifying the effect of ESG implementation on the enterprise value of publicly listed companies in Indonesia with ESG performance scores in the period of 2021 to 2023.

This study is expected to provide contribution for both scientific development and practical implications. From an academic perspective, this research aims to enrich the existing body of knowledge on corporate valuation. By providing empirical evidence from the Indonesian market, it will specifically clarify whether ESG implementation acts as a determinant of firm value. The findings are anticipated to offer a deeper understanding of the relationship between sustainable business performance and enterprise value within a unique economic context. For practical implications, this research will provide a valuable insight for investors, managers, and policymakers in understanding the tangible effects of ESG initiatives on enterprise value, thereby informing strategic decisions and investment practices.

2. THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

ESG is a framework that enables stakeholders including investors, consumers, suppliers, and employees to assess how organizations manage sustainability-related risks and opportunities (Peterdy, 2024). The environmental dimension covers factors such as greenhouse gas emissions, resource utilization, and resilience to climate change. The social dimension reflects how firms manage relationships with stakeholders, including labor practices and broader societal impact, while the governance dimension concerns leadership, accountability, and transparency in corporate management. By implementing ESG principles, companies not only comply with sustainability criteria but also demonstrate responsibility in environmental stewardship, social engagement, and sound governance. Thus, through the implementation of ESG, companies can ensure the creation of long-term value in a sustainable manner (Radyati, 2023). The stakeholder theory can be used to explain the rationale.

Stakeholder Theory was first published in a book written by Freeman (1984). In Stakeholder Theory, companies must provide benefits to stakeholders, namely owners, consumers, suppliers, and employees. Companies aim to provide

*Corresponding author’s email: anggianugerah.daulay@pajak.go.id
http://openjournal.unpam.ac.id/index.php/JABI

maximum profits for investors. Not only that, but companies must also pay attention to the community, the environment, and the government. This is because every party involved in a business plays a role in the sustainability of the company. Therefore, companies must align the expectations of stakeholders with their objectives (Freeman, 2010).

The expectations of stakeholders can be reflected in the company's performance, both financial and non-financial. In the financial aspect, stakeholders understand the company's performance through financial ratios such as liquidity, solvency, efficiency, and profitability. On the non-financial side, stakeholders pay attention to governance and social-environmental aspects related to the company's operations. In addition to caring about performance, stakeholders also pay attention to any information that emerges about the company (Fauziah et al., 2024).

In the context of ESG, Stakeholder Theory provides a strong conceptual basis for why companies engaging in sustainable and ethical business practices can outperform their peers. ESG performance is essentially a reflection of a firm's commitment to its stakeholders. For instance, environmental stewardship addresses community and regulatory concerns; social responsibility reflects care for employees and society; and good governance enhances transparency and investor trust (Benabou & Tirole, 2010; Eccles et al., 2011; Freeman, 1984; Lindawati et al., 2023). Firms that excel in ESG are seen as more credible, stable, and trustworthy, characteristics that reduce business risk and enhance firm reputation—two important intangible assets that are increasingly priced into market valuations (Eccles et al., 2011).

Empirical evidence supports this view. Sariyer & Taşkın (2022) found that companies can increase their value by improving environmental, social, and corporate governance aspects. Through ESG reporting, companies fulfill the rights of stakeholders, and stakeholders can understand the sustainability performance of the business. Lindawati et al. (2023) found that sustainability performance in Indonesian banks had a significant positive influence on firm value, consistent with stakeholder theory. They argued that strong ESG practices foster trust with customers and regulators, enhancing firm legitimacy and market perception. Similarly, Yu & Zhao (2015) showed that firms included in the Dow Jones Sustainability Index enjoy superior market valuations, especially in countries with robust stakeholder protections. Institutional investors have begun incorporating ESG metrics into their decision-making, further reinforcing the stakeholder value connection (Hoelscher et al., 2024; Lindawati et al., 2023). Under this framework, the positive relationship between ESG performance and enterprise value is explained by the firm's ability to reduce stakeholder conflict, manage reputational risk, and build long-term goodwill, all of which contribute to better financial outcomes and higher market valuation. These studies affirm that ESG engagement can be understood as a strategic response to stakeholder expectations, which, when executed well, leads to enhanced firm value. According to Dinh (2023), the time horizon plays a role in determining the impact of ESG on company performance. Giese et al. (2021) posit that the impact of environmental and social performance is more long-term in nature, unlike the governance pillar, which can be short-term. Additionally, Wedajo et al. (2024) suggest that the implementation of the ESG

*Corresponding author's email: anggianugerah.daulay@pajak.go.id

pillars incurs short-term expenses, but their impact on company market value is long-term. In a study by Rojo-Suárez & Alonso-Conde (2023), it is stated that in the short term, ESG policies do not affect the creation of enterprise value. Another study was conducted by Eccles et al. (2011) and concluded that over an eighteen-year period, companies that applied sustainability principles had superior financial performance compared to those that did not. In the Indonesian context, time horizon theory is particularly relevant. ESG disclosure only became mandatory in 2020 under POJK No. 51/2017, meaning that both firms and investors are still adjusting to the new landscape. As ESG reporting becomes more integrated into financial communication, and as sustainability becomes embedded in corporate strategy, investors are likely to increasingly reward consistent ESG performance, particularly when supported by long-term profitability (Lindawati et al., 2023).

The Stakeholder Theory posits that a company's motivation to implement ESG is not dissociated from the interests of both internal and external parties. According to Stakeholder Theory, firms are expected to account for the interests of all stakeholders in their operations (Freeman, 2010), and the adoption of ESG practices represents a part of this effort. Through ESG implementation, firms can enhance their reputation among stakeholders, which in turn may contribute to higher enterprise value (Sariyer & Taşkın, 2022). Using time horizon perspective such sustainability signals are interpreted differently depending on investors' investment horizons (Block, 1972). ESG initiatives are primarily aims to generate long-term value and more likely to influence long-term investors (Radyati, 2023). Many benefits such as reduced regulatory risks, enhanced innovation, greater employee retention, or customer loyalty do not manifest instantly but accumulate over time (Wedajo et al., 2024). Therefore, firms that adopt a long-term perspective are more likely to engage in ESG and ultimately be rewarded by the market. Similarly, investors who adopt long horizons are better positioned to recognize the intrinsic value of ESG performance and reflect it in firm valuation (Benabou & Tirole, 2010). These theoretical perspectives provide a foundation for understanding how ESG performance contributes to business sustainability and firm value.

This study examines the impact of the company's environmental, social, and governance (ESG) performances as independent variables on enterprise value as the dependent variable. To control for omitted-variable bias and enhance model validity, leverage, return on equity (ROE), and firm size are included as control variables, consistent with the Capital Structure Theory (Pratt & Niculita, 2008; Graham & Leary, 2011), the Dividend Irrelevance Theory (Miller & Modigliani, 1961), and the concept of Enterprise Value (Damodaran, 2012) as the value of all company assets, both operational and non-operational. The choice of these control variables is also consistent with prior empirical work, such as Atan et al. (2018). The theoretical framework guiding this research is presented in Figure 1.

Building upon a rigorous review of theoretical and empirical literature, this study formulates its research hypotheses to address the central research question: Does ESG performance affect enterprise value in publicly listed companies in Indonesia during the post-regulatory era (2021–2023)?

*Corresponding author's email: anggianugerah.daulay@pajak.go.id

Despite growing consensus on the importance of ESG in investment decisions, empirical findings on the relationship between ESG performance and firm value remain mixed particularly in emerging markets. The purpose of this study is to examine whether ESG performance, as measured by Bloomberg ESG scores, significantly influences enterprise value (proxied by Tobin's Q) in Indonesian publicly listed companies between 2021 and 2023. Stakeholder Theory holds that firms managing environmental, social, and governance responsibilities build stakeholder trust and legitimacy, which translate into financial benefits (Eccles et al., 2011; Freeman, 1984). Time horizon perspective posits that ESG initiatives' value unfolds over time, especially under consistent implementation (Benabou & Tirole, 2010; Wedajo et al., 2024).

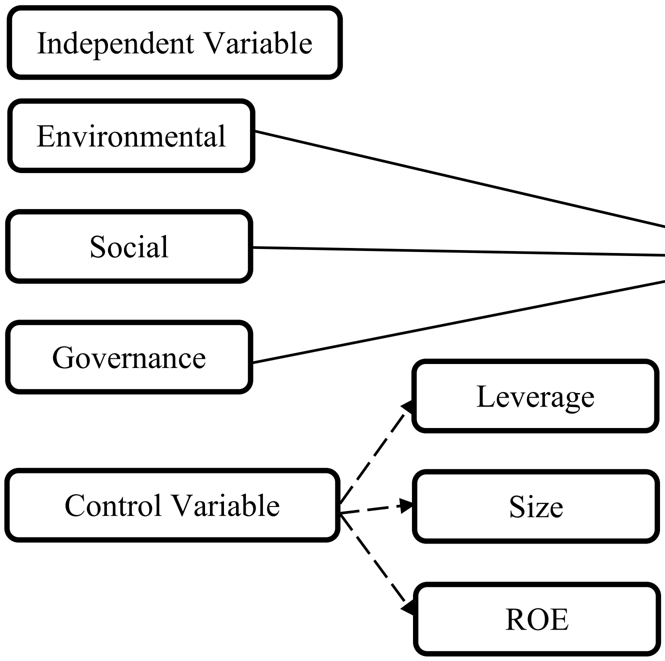

Figure 1. Theoretical Framework

Previous research by Aydoğmuş et al. (2022), Cheng et al. (2024), Jin & Lei (2023), Oza & Patekar (2024), Wang (2024), found that ESG has promoted value creations. However, non-significant findings were reported by Atan et al. (2018), Falzon & Micallef (2022), Qodary & Tambun (2021), and Suharto et al. (2024). On the other hand, Budhiananto & Fatimah (2024) even observed a negative impact of ESG on enterprise value. Taken together, these findings underscore an unresolved empirical gap, particularly in the Indonesian context where mandatory ESG reporting was only institutionalized starting in 2020 through OJK Regulation No. 51/POJK.03/2017.

*Corresponding author's email: anggianugerah.daulay@pajak.go.id
http://openjournal.unpam.ac.id/index.php/JABI

The hypotheses formulated in this study are as follows.

H1: Environmental performance significantly and positively affects enterprise value.
According to Eccles et al. (2011), firms that proactively manage environmental impact reduce the risk of regulatory sanctions and supply chain disruptions. In the Indonesian context, this is critical given the enforcement of OJK Regulation No. 51/2017. In line with Stakeholder Theory, strong environmental performance can enhance a firm's reputation among customers, investors, and regulators who are increasingly concerned about sustainability. Thus, we hypothesize a positive relationship between environmental (E) scores and firm value.

H2: Social performance significantly and positively affects enterprise value.
Firms that engage in labor rights, community development, and product responsibility initiatives are theorized to gain reputation and customer loyalty. Studies such as Jin & Lei (2023) and Wang (2024) support this through observed ESG–innovation and ESG–financial performance links, respectively. According to Stakeholder Theory, attending to social responsibilities helps a firm build goodwill and trust, which can translate into tangible financial outcomes like sales growth and innovation capacity (Eccles et al., 2011; Freeman, 1984; Jin & Lei, 2023). Therefore, we expect that firms with higher social (S) scores from Bloomberg will, on average, have higher firm value.

H3: Governance performance significantly and positively affects enterprise value.
Good governance including board independence, audit transparency, and shareholder rights has long been associated with stronger investor confidence. Meta-analyses and emerging market studies (e.g. Aydoğmuş et al., 2022) show governance as the most consistently significant ESG pillar. This study examines whether in an emerging market like Indonesia, investors place a premium on governance performance. For these reasons, we expect a positive and significant impact of governance (G) scores on firm's value.

3. RESEARCH METHOD

This study utilizes secondary data, such as ESG scores obtained from the Bloomberg Terminal, financial and market data from the Indonesia Stock Exchange (IDX), and company financial reports as quoted in Bloomberg. The study period, 2021–2023, was selected to ensure that financial performance data were not distorted by the COVID-19 pandemic, consistent with Murmu & Nguyen (2024) who documented its negative effects on firm performance.

The company's ESG implementation as independent variables are measured using ESG scores obtained from the Bloomberg Terminal. Meanwhile, Tobin's Q is employed to measure the value of a company as a dependent variable. The Q ratio is the ratio between a company's market value and the book value of its assets (Tobin, 1969) which is measured using the formula in Table 1.

*Corresponding author's email: anggianugerah.daulay@pajak.go.id
http://openjournal.unpam.ac.id/index.php/JABI

To address the research questions and objectives, this study employs inferential statistics using panel data regression, which integrates time-series and cross-sectional dimensions to generate richer insights and mitigate multicollinearity (Ghozali, 2018). The model specification to test the effect of ESG implementation on enterprise value is as follows:

$$TBQ_{it} = \alpha + \beta_1 ENV_{it} + \beta_2 SOC_{it} + \beta_3 GOV_{it} + \beta_4 LEV_{it} + \beta_5 SIZE_{it} + \beta_6 ROE_{it} + \varepsilon_{it}$$

Where TBQ_{it} represents firm value, α is the constant, ENV_{it}, SOC_{it}, GOV_{it} consecutively denote the Environmental, Social, and Governance pillars of ESG implementation. The variables LEV_{it}, $SIZE_{it}$, and ROE_{it} serve as control variables, and ε_{it} is the error term.

Table 1. Variable Measurement

Variable	Measurement	Issue
Tobin's Q	(Market value of equity + Market value of debt)/Book value of asset	
Environmental Score	Bloomberg E score (0-10)	Climate exposure Greenhouse gas emissions management Water management Energy management Ecological impact Air quality Waste management
Social Score	Bloomberg S score (0-10)	Occupational health and safety management Labor and employment practices Operational risk management Community rights and relations Ethics and compliance
Governance Score	Bloomberg G score (0-10)	Board composition Executive compensation Shareholder rights
Leverage	Total debt/Total asset	
Firm Size	Ln(Total asset)	
Return on Equity	Net income/Equity	

Source: Retrieved from Nunn (2023) and Tobin (1969)

The appropriate estimation model is determined through a series of specification tests, including the Chow test (Common Effect vs. Fixed Effect), Hausman test (Fixed Effect vs. Random Effect), and Lagrange Multiplier (LM) test (Common Effect vs. Random Effect) (Suyadi et al., 2023). Selecting the appropriate estimation model can improve efficiency in estimating parameters in the regression model (Basuki & Prawoto, 2019; Ekananda, 2014; Kuncoro, 2003). Once the estimation model is selected, The Gauss-Markov assumption diagnostics are performed to ensure the model satisfies the Best Linear Unbiased Estimator (BLUE) criteria. These include normality testing of residuals, multicollinearity assessment among independent variables, heteroscedasticity testing to detect variance inequality, and autocorrelation testing to evaluate temporal dependency (Gujarati, 2004). Following the estimation of the regression model, several

*Corresponding author's email: anggianugerah.daulay@pajak.go.id

statistical tests are conducted to evaluate its explanatory power and significance. The goodness-of-fit test is used to assess the model's ability to explain variation in the dependent variable, measured by the adjusted R-squared coefficient. The F-test is utilized to evaluate the joint significance of all independent variables, and the t-test is employed to examine the individual effect of each independent variable on the dependent variable (Kasmir, 2022). Hypothesis testing is conducted at a 5% significance level ($\alpha = 0.05$).

4. RESULTS AND DISCUSSION

The research population comprises all publicly listed firms on the IDX during 2021–2023. Samples were drawn using purposive sampling (Kasmir, 2022) with criteria detailed in Table 2. Of the 903 listed firms (Bursa Efek Indonesia, 2023), 118 reported complete ESG scores on Bloomberg. However, companies that conducted IPOs after 2021 or experienced trading suspensions were excluded, leaving 94 potential subjects. Boxplots were used to perform data distribution analysis and identify outliers (Triola, 2015), resulting in a final sample of 23 firms. The three-year study horizon (2021 to 2023) resulted in 69 firm-year observations for further analysis.

Descriptive analysis shows that the average Tobin's Q ratio is 0.875, ranging from 0.342 to 1.326, with a median of 0.891, suggesting a distribution close to normal. The environmental (ENV) pillar score ranges from 0.27 to 3.44, with an average of 1.691. The median ENV score is also close to its average value. In addition, the social pillar (SOC) exhibits relatively weak performance, with an average score of 2.731 (median: 2.530) and a wide range from 0.13 to 7.47, reflecting that while most firms score low, some achieve notably higher social ratings above 5. Among the three ESG pillars, the governance (GOV) pillar has the highest average score. The average GOV score is 4.158, with a median of 4.190, ranging from 2.46 to 5.62. The descriptive statistics are shown in Table 3.

Table 2. Research Sample Selection

Sample Selection Criteria	Number of Companies
Public companies listed on the IDX until the end of 2023	903
Company has ESG performance scores for the period from 2021 to 2023	118
Public companies whose shares are actively traded on the IDX from 2021 to 2023	94
Outlier data	71
Number of companies that can be used in research	23
Number of years of observation	3
Total firm-year observation	69

Table 3. Descriptive Statistics

Variable	Obs	Mean	Median	Std. Dev.	Min	Max
TBQ	69	0.8758	0.8919	0.1905	0.3429	1.3264
ENV	69	1.6911	1.5700	0.8026	0.2700	3.4400
SOC	69	2.7313	2.5300	2.0483	0.1300	7.4700
GOV	69	4.1582	4.1900	0.7329	2.4600	5.6200
LEV	69	0.4894	0.4871	0.2039	0.0810	0.8916

*Corresponding author's email: anggianugerah.daulay@pajak.go.id

SIZE	69	40,852,028,801,426	35,268,302,000,000	30,865,545,651,785.1000	860,162,908,000	112,182,256,839,000
ROE	69	8.4054	7.5773	5.9168	0.0000	22.7255

Prior to conducting panel data regression, specification tests were performed to identify the most appropriate estimation model with the selection results summarized in Table 4. The Chow test, which compares CEM and FEM, yielded a probability value of 0.0000 (< α = 0.05), indicating FEM is preferred. The Hausman test, used to distinguish between REM and FEM, produced a probability value of 0.6028 (> α = 0.05), suggesting REM is more suitable. Finally, the Lagrange Multiplier (LM) test, which compares CEM and REM, resulted in a probability value of 0.0000 (< α = 0.05), confirming REM as the most appropriate estimation model. REM estimation employs the Generalized Least Squares (GLS) method, which offers advantages over Ordinary Least Squares (OLS) by addressing heteroscedasticity and autocorrelation, thereby ensuring parameter estimates satisfy the Best Linear Unbiased Estimator (BLUE) properties (Basuki & Prawoto, 2019; Ekananda, 2014; Gujarati, 2004).

Gauss-Markov assumption tests were conducted to confirm model efficiency (Basuki & Prawoto, 2019; Ekananda, 2014; Gujarati, 2004; Kuncoro, 2003). The normality test yielded skewness of 0.269, kurtosis of 2.612, and a Jarque–Bera probability of 0.530 (> α = 0.05), indicating normally distributed residuals. Multicollinearity tests showed correlation coefficients among independent variables below 0.50, confirming no multicollinearity issues. The Glejser test results were statistically insignificant, suggesting no heteroscedasticity.

Table 4. Panel Regression Model Selection

Test	Probability	Model		
		CEM	FEM	REM
Chow test	0.0000		v	
Hausman test	0.6028			v
Lagrange Multiplier test	0.0000			v

Table 5. Regression Results

Variable	Coefficient	Std. Error	Prob. (α = 5%)
ENV	-0.0543	0.0295	0.0705
SOC	-0.0009	0.0130	0.9402
GOV	0.0176	0.0360	0.6267
LEV	0.6079	0.1587	0.0003
SIZE	-0.0000	0.0000	0.2536
ROE	0.0091	0.0028	0.0022

The Durbin Watson statistic was 1.559, with critical values dL = 1.3953 and dU = 1.8385, placing the result in the inconclusive zone. Nevertheless, any potential autocorrelation is mitigated by the GLS estimation procedure, which is robust to such violations (Basuki & Prawoto, 2019; Ekananda, 2014).

The results of the panel data regression output are presented in Table 5. The adjusted R-squared value of 0.2608 indicates that ESG variables and the selected controls explain 26.08% of the variation in enterprise value, while the remaining

*Corresponding author's email: anggianugerah.daulay@pajak.go.id

73.92% is attributed to factors outside the model. The F-statistic yields a P-value of 0.000 (< α = 0.05), confirming that the independent variables jointly exert a significant influence on enterprise value. Thus, ESG performance together with the control variables significantly affect firm value. However, the F-test does not reveal the contribution of each ESG pillar, necessitating individual testing through t-statistics.

The regression results show that the environmental (ENV) pillar has a P-value of 0.0705 (> 0.05), indicating no significant effect on Tobin's Q, thus rejecting Hypothesis 1 (H1). Similarly, the social (SOC) pillar (P = 0.9402) and the governance (GOV) pillar (P = 0.6267) also exhibit no significant impact on enterprise value, leading to the rejection of H2 and H3. These results suggest that ESG implementation does not have any impact on the firm's enterprise value. Considering the three-year observation horizon (2021–2023), these findings reinforce the view that ESG pillar performance exerts limited influence on firm's value in the short term.

The outcome is consistent with time horizon theory, which posits that the benefits of investment decisions, including ESG initiatives, are contingent on the investment period (Block, 1972). ESG activities typically involve upfront costs whose value-creation effects emerge over the long term (Dinh, 2023). Empirical evidence supports this view. Wedajo et al. (2024) emphasize that the implementation of ESG pillars results in short-term expenditures, but their impact on a company's market value is long-term. Rojo-Suárez & Alonso-Conde (2023) report no short-term effects of ESG policies on firm value, while Eccles et al. (2011) find that firms adopting sustainability practices outperform peers financially over an eighteen-year horizon.

At the pillar level, this study aligns with prior research showing limited short-term effects and collectively points to short-term costs and investor priorities as key explanatory factors. Within the environmental dimension, our results align with studies by Huang et al. (2014) in Taiwan and Arlita (2019) in Indonesia. Both concluded that environmental performance had no significant influence on Tobin's Q, which they attributed to high implementation costs and weak investor responses, especially in Indonesia where environmental concerns are not as prominent. In the social dimension, Servaes & Tamayo (2013) reported that Corporate Social Responsibility (CSR) only enhances firm value under specific conditions, such as strong reputation and consumer awareness. Haryono & Iskandar (2015) further specified that social performance in Indonesia does not directly impact firm value but requires strong underlying financial performance to have an indirect, positive influence. Similarly, research on the governance pillar corroborates our findings. Study by Pham et al. (2011) and Chanry et al. (2023) concluded that governance indicators and GCG scores do not directly influence firm value, as investors tend to prioritize financial performance and other structural factors such as leverage and firm size (Chanry et al., 2023); Pham et al., 2011) .

However, the results of this study present a nuanced challenge to the conventional perspectives of Stakeholder Theory. From a stakeholder perspective which posits that firms must consider the interests of diverse stakeholders, including the society, ESG initiatives should logically enhance enterprise value.

*Corresponding author's email: anggianugerah.daulay@pajak.go.id

Nevertheless, in the short term, this study finds insufficient evidence to support such an effect. Our findings indicate an absence of a significant short-term valuation impact, suggesting that investors do not immediately price these non-financial signals into their valuations.

5. CONCLUSION

This study aims to predict and elucidate the effect of ESG pillar implementation on firm's enterprise value. Using 69 firm-year observations of public firm in Indonesia Stock Exchange with three-year study horizon (2021 to 2023), the study concluded that ESG pillar implementation does not have a significant effect on firm value in short term context. This outcome is supported by a substantial body of empirical literature that highlights the complexities and temporal lags associated with the ESG-value relationship. Prior studies indicate that ESG implementation imposes additional short-term costs without delivering immediate financial benefits (Arlita, 2019; Dorfleitner et al., 2014; Giese et al., 2021; Rojo-Suárez & Alonso-Conde, 2023; Wedajo et al., 2024). Moreover, ESG disclosure is not universally perceived as a positive signal, as investors often focus more on profitability and reputation than on sustainability practices (Chanry et al., 2023; Haryono & Iskandar, 2015; Pham et al., 2011; Servaes & Tamayo, 2013).

This study contributes empirical evidence that the financial returns on ESG are not immediate. The absence of a short-term effect should not be interpreted as a definitive lack of a relationship, but rather as an indication of a temporal lag. Future research should consequently adopt a longitudinal approach to investigate the long-term impact of sustained ESG implementation. A longer time horizon may reveal a significant and positive effect on corporate value creation, a hypothesis supported by numerous studies that have identified ESG's long-term benefits to firms' value creation (Eccles et al., 2011; Giese et al., 2021; Wedajo et al., 2024).

REFERENCES

Arlita, I. G. A. D. (2019). The Effect of Environmental Performance on Firm Value with Good Corporate Governance as a Moderator. *The International Journal of Business & Management*, *7*(8). https://doi.org/10.24940/theijbm/2019/v7/i8/BM1908-042

Atan, R., Alam, Md. M., Said, J., & Zamri, M. (2018). The impacts of environmental, social, and governance factors on firm performance. *Management of Environmental Quality: An International Journal*, *29*(2), 182–194. https://doi.org/10.1108/MEQ-03-2017-0033

Aydoğmuş, M., Gülay, G., & Ergun, K. (2022). Impact of ESG performance on firm value and profitability. *Borsa Istanbul Review*, *22*, S119–S127. https://doi.org/10.1016/j.bir.2022.11.006

Baker, B., & Barba, M. (2023, January 31). *ESG investing statistics 2023*. Https://Www.Bankrate.Com/Investing/Esg-Investing-Statistics/.

*Corresponding author's email: anggianugerah.daulay@pajak.go.id

Basuki, A. T., & Prawoto, N. (2019). *Analisis Regresi dalam Penelitian Ekonomi & Bisnis : (Dilengkapi Aplikasi SPSS & Eviews)*. Rajawali Pers.

Benabou, R., & Tirole, J. (2010). Individual and Corporate Social Responsibility. *Economica*, *77*(305), 1–19. https://doi.org/10.1111/j.1468-0335.2009.00843.x

Block, F. E. (1972). Time Horizon. *Financial Analysts Journal*, *28*(5), 30–62.

Borghesi, R., Houston, J. F., & Naranjo, A. (2014). Corporate socially responsible investments: CEO altruism, reputation, and shareholder interests. *Journal of Corporate Finance*, *26*, 164–181. https://doi.org/10.1016/j.jcorpfin.2014.03.008

Budhiananto, H. A., & Fatimah. (2024). The Effect of Environmental, Social, and Governance Disclosure on Stock Returns with Firm Value as an Intervening Variable: Study on Companies Listed in the SRI-KEHATI Index. *KnE Social Sciences*. https://doi.org/10.18502/kss.v9i25.16946

Bursa Efek Indonesia. (2023, December 29). *Melalui Berbagai Pencapaian Tahun 2023, Pasar Modal Indonesia Tunjukkan Optimisme Hadapi Tahun 2024*.

Chan, A., Chao, D., & Wu, T. (2022, April 8). *ESG Opportunities and Challenges in Asia*. Https://Www.Invesco.Com/Apac/En/Institutional/Insights/Esg/Esg-Opportunities-and-Challenges-in-Asia.Html.

Chanry, K., Maya, S., & Siahaan, U. M. (2023). Corporate Governance And Company Value: An Investigation Into The Role Of ACSG Score. *JABI (Jurnal Akuntansi Berkelanjutan Indonesia)*, *6*(3), 247–267. https://doi.org/10.32493/JABI.v6i3.y2023.p247-267

Cheng, R., Kim, H., & Ryu, D. (2024). ESG performance and firm value in the Chinese market. *Investment Analysts Journal*, *53*(1), 1–15. https://doi.org/10.1080/10293523.2023.2218124

Damodaran, A. (2012). *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset* (3rd ed.). John Wiley & Sons.

Dinh, M. T. H. (2023). ESG, time horizons, risks and stock returns. *Research in International Business and Finance*, *65*, 101981. https://doi.org/10.1016/j.ribaf.2023.101981

Dorfleitner, G., Utz, S., & Wimmer, M. (2014). Patience Pays Off - Financial Long-Term Benefits of Sustainable Management Decisions. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2533957

Eccles, R. G., Ioannou, I., & Serafeim, G. (2011). The Impact of a Corporate Culture of Sustainability on Corporate Behavior and Performance. *SSRN Electronic Journal*, 1–36. https://doi.org/10.2139/ssrn.1964011

Ekananda, M. (2014). *Analisis Ekonometrika Data Panel: bagi Penelitian Ekonomi, Manajemen dan Akuntansi*. Mitra Wacana Media.

*Corresponding author’s email: anggianugerah.daulay@pajak.go.id

Falzon, J., & Micallef, R. (2022). ESG Factors: How Are Stock Returns, Operating Performance, and Firm Value Impacted? *Review of Economics and Finance*, *20*, 144–153. https://doi.org/10.55365/1923.x2022.20.16

Fauziah, F., Novita, N., & Fambudi, I. N. (2024). The Role of Institutional Ownership in Moderating ESG Disclosure's Impact on Firm Value. *Jurnal REKSA: Rekayasa Keuangan, Syariah Dan Audit*, *11*(2), 108–121. https://doi.org/10.12928/jreksa.v11i2.10534

Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Pitman.

Freeman, R. E. (2010). The Stakeholder Approach. In *Strategic Management* (pp. 1–2). Cambridge University Press. https://doi.org/10.1017/CBO9781139192675.003

Ghozali, I. (2018). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 25* (9th ed.). Badan Penerbit Universitas Diponegoro.

Giese, G., Nagy, Z., & Lee, L.-E. (2021). Deconstructing ESG Ratings Performance: Risk and Return for E, S, and G by Time Horizon, Sector, and Weighting. *The Journal of Portfolio Management*, *47*(3), 94–111. https://doi.org/10.3905/jpm.2020.1.198

Graham, J. R., & Leary, M. T. (2011). A Review of Empirical Capital Structure Research and Directions for the Future. *SSRN Electronic Journal*, *3*. https://doi.org/10.2139/ssrn.1729388

Gujarati, D. N. (2004). *Basic Econometrics* (4th ed.). Mc-Graw Hill Companies.

Haryono, U., & Iskandar, R. (2015). Corporate Social Performance and Firm Value. *International Journal of Business and Management Invention*, *4*(11), 69–75.

Hoelscher, S. A., Sappington, C., & Stros, L. R. (2024). A Practical Approach to Incorporating ESG Risk Into Equity Valuation. *Journal of Applied Business and Economics*, *26*(1). https://doi.org/10.33423/jabe.v26i1.6811

Huang, L. H., & Li, M. M. (2015). The Effect and Strategy of Global Warming. *Advanced Materials Research*, *1092–1093*, 1625–1628. https://doi.org/10.4028/www.scientific.net/AMR.1092-1093.1625

Huang, Y.-C., Wong, Y.-J., & Yang, M.-L. (2014). Proactive environmental management and performance by a controlling family. *Management Research Review*, *37*(3), 210–240. https://doi.org/10.1108/MRR-09-2012-0196

Hung, H.-H., Chen, W.-L., Lin, Y.-S., Liu, C.-N., & Hsu, M.-F. (2023, July 18). Integration of ESG and Financial Descriptors for Investment Portfolio Selection. *Proceedings of the International Conference on Industrial Engineering and Operations Management*. https://doi.org/10.46254/EU6.20230331

Jin, X., & Lei, X. (2023). A Study on the Mechanism of ESG's Impact on Corporate Value under the Concept of Sustainable Development. *Sustainability*, *15*(11), 8442. https://doi.org/10.3390/su15118442

*Corresponding author's email: anggianugerah.daulay@pajak.go.id

Kasmir, K. (2022). *Pengantar Metodologi Penelitian untuk Ilmu Manajemen, Akuntansi, dan Bisnis*. Rajawali Pers.

Kuncoro, M. (2003). *Metode Riset untuk Bisnis dan Ekonomi*. Erlangga.

Li, W., Bhutto, M. Y., Waris, I., & Hu, T. (2023). The Nexus between Environmental Corporate Social Responsibility, Green Intellectual Capital and Green Innovation towards Business Sustainability: An Empirical Analysis of Chinese Automobile Manufacturing Firms. *International Journal of Environmental Research and Public Health*, *20*(3), 1851. https://doi.org/10.3390/ijerph20031851

Lindawati, A. S. L., Geraldine, T. G., Handoko, B. L., Widuri, R., & Mustapha, M. (2023). Analysis of Sustainability Performance, Green Accounting and ESG Disclosure on Firm Valuation. *International Journal of Contemporary Accounting*, *5*(2), 183–198. https://doi.org/10.25105/ijca.v5i2.17745

Miller, M. H., & Modigliani, F. (1961). Dividend Policy, Growth, and the Valuation of Shares. *The Journal of Business*, *34*(4), 411. https://doi.org/10.1086/294442

Murmu, F., & Nguyen, L. T. P. (2024). Effects of the Pandemic on the Financial Performance of Listed Readymade Garment Firms in Bangladesh. *Human Behavior, Development, and Society*, *25*(2), 27–38. https://doi.org/10.62370/hbds.v25i2.274443

Nunn, T. (2023, July 10). *Sourcing ESG data in Bloomberg*. Https://Blogs.Cranfield.Ac.Uk/Library/Esg-Bloomberg/.

Orsagh, M., Allen, J., Sloggett, J., Georgieva, A., Bartholdy, S., & Douma, K. (2018). *ESG Integration in the Americas: Markets, Practices, and Data*. CFA Institute.

Oza, P., & Patekar, A. (2024). Does environmental, social, and governance strategy lead to better firm performance: Analysis of NIFTY 500 companies. *Corporate Governance and Sustainability Review*, *8*(2), 24–36. https://doi.org/10.22495/cgsrv8i2p2

Pérez, L., Hunt, D. V., Samandari, H., Nuttall, R., & Biniek, K. (2022, August 10). *Does ESG really matter—and why?* Https://Www.Mckinsey.Com/Capabilities/Sustainability/Our-Insights/Does-Esg-Really-Matter-and-Why.

Peterdy, K. (2024). *ESG (Environmental, Social, & Governance)*. Https://Corporatefinanceinstitute.Com/Resources/Esg/Esg-Environmental-Social-Governance/.

Pham, P. K., Suchard, J.-A., & Zein, J. (2011). Corporate governance and alternative performance measures: evidence from Australian firms. *Australian Journal of Management*, *36*(3), 371–386. https://doi.org/10.1177/0312896211413035

*Corresponding author's email: anggianugerah.daulay@pajak.go.id

Pratt, S. P., & Niculita, A. V. (2008). *Valuing a Business: The Analysis and Appraisal of Closely Held Companies* (5th ed.). McGraw Hill. https://doi.org/10.1036/0071441808

Qodary, H. F., & Tambun, S. (2021). Pengaruh Environmental, Social, Governance (ESG) dan Retention Ratio terhadap Return Saham dengan Nilai Perusahaan sebagai Variabel Moderating. *Juremi: Jurnal Riset Ekonomi*, *1*(2), 159–172. https://doi.org/10.53625/juremi.v1i2.266

Radyati, M. R. N. (2023). *Panduan ESG (Environment, Social, dan Governance)* (1st ed.). KADIN Indonesia.

Rau, P. R., & Yu, T. (2024). A survey on ESG: investors, institutions and firms. *China Finance Review International*, *14*(1), 3–33. https://doi.org/10.1108/CFRI-12-2022-0260

Robinson, K. A., Saldanha, I. J., & Mckoy, N. A. (2011). Development of a framework to identify research gaps from systematic reviews. *Journal of Clinical Epidemiology*, *64*(12), 1325–1330. https://doi.org/10.1016/j.jclinepi.2011.06.009

Rojo-Suárez, J., & Alonso-Conde, A. B. (2023). Short-run and long-run effects of ESG policies on value creation and the cost of equity of firms. *Economic Analysis and Policy*, *77*, 599–616. https://doi.org/10.1016/j.eap.2022.12.017

Sariyer, G., & Taşkın, D. (2022). Clustering of firms based on environmental, social, and governance ratings: Evidence from BIST sustainability index. *Borsa Istanbul Review*, *22*, S180–S188. https://doi.org/10.1016/j.bir.2022.10.009

Servaes, H., & Tamayo, A. (2013). The Impact of Corporate Social Responsibility on Firm Value: The Role of Customer Awareness. *Management Science*, *59*(5), 1045–1061. https://doi.org/10.1287/mnsc.1120.1630

Silvestri, R., & Kamerling, J. (2024). *CFA Institute Survey Report on the ESG Regulatory Framework in the EU*.

Simangunsong, A., Wicaksono, T. Y., Hermanus, B., Paramaditha, A., & Carolina, E. (2022). *Industry for Tomorrow: Towards ESG Implementation in Indonesia*.

Stamelos, C. (2023). Corporate Sustainability and ESG Factors in Greece and Cyprus: Compliance, Laws, and Business Practices, Towards a Holistic Approach. *InterEULawEast : Journal for the International and European Law, Economics and Market Integrations*, *9*(2), 289–313. https://doi.org/10.22598/iele.2022.9.2.10

Suharto, A. B., Subiyantoro, E., Cahyaningsih, D. S., Zuhroh, D., & Sitinjak, N. D. (2024). Pengaruh Pengungkapan ESG dan Net Foreign Flow terhadap Nilai Perusahaan Sektor Manufaktur. *Jurnal Aplikasi Akuntansi*, *8*(2), 495–506. https://doi.org/10.29303/jaa.v8i2.389

*Corresponding author's email: anggianugerah.daulay@pajak.go.id

Suyadi, S., Hakim, L. N., & Febriyanto, F. (2023). Analisis Pengaruh Inflasi dan Kurs terhadap Fluktuasi Nilai Saham (Studi Kasus pada Perusahaan Telekomunikasi yang Terdaftar di Bursa Efek Indonesia Periode 2019-2021). *Jurnal Riset Akuntansi Dan Manajemen Malahayati*, *11*(4). https://doi.org/10.33024/jrm.v11i4.8572

Tobin, J. (1969). A General Equilibrium Approach To Monetary Theory. *Journal of Money, Credit and Banking*, *1*(1), 15. https://doi.org/10.2307/1991374

Trahan, R. T., & Jantz, B. (2023). What is ESG? Rethinking the "E" pillar. *Business Strategy and the Environment*, *32*(7), 4382–4391. https://doi.org/10.1002/bse.3371

Triola, M. F. (2015). *Essentials of Statistics* (5th ed.). Pearson.

United Nations. (n.d.). *What Is Climate Change?* Https://Www.Un.Org/En/Climatechange/What-Is-Climate-Change.

Wang, Y. (2024). A Study of LYFEN's ESG Disclosure and Its Impact on Corporate Performance. *Highlights in Business, Economics and Management*, *40*, 391–397. https://doi.org/10.54097/yt8dtq33

Wedajo, A. D., Salah, A. A., Bhat, Mohd. A., Iqbal, R., & Khan, S. T. (2024). Analyzing the dynamic relationship between ESG scores and firm value in Chinese listed companies: insights from generalized cross-lagged panel model. *Discover Sustainability*, *5*(1), 336. https://doi.org/10.1007/s43621-024-00546-2

Yilmaz, V., & Can, Y. (2020). Impact of knowledge, concern and awareness about global warming and global climatic change on environmental behavior. *Environment, Development and Sustainability*, *22*(7), 6245–6260. https://doi.org/10.1007/s10668-019-00475-5

Yu, M., & Zhao, R. (2015). Sustainability and Firm Valuation: An International Investigation. *International Journal of Accounting and Information Management*, *23*(3), 289–307. https://doi.org/10.1108/IJAIM-07-2014-0050

*Corresponding author's email: anggianugerah.daulay@pajak.go.id