

FIRM SIZE IN MODERATING ESG PERFORMANCE AND FIRM VALUE IN INDONESIA

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Abstract

This study investigates the effect of Environmental, Social, and Governance (ESG) performance on firm value and evaluates the moderating role of firm size in publicly listed companies on the Indonesia Stock Exchange (IDX) from 2017 to 2021. Underpinned by Stakeholder Theory as the grand theory integrated with Legitimacy Theory, this research addresses inconsistent empirical findings regarding the ESG firm value nexus in emerging capital markets. Using a purposive sampling method, a final panel dataset of 243 firm-year observations across 53 companies was analysed using Moderated Regression Analysis (MRA) after satisfying classical assumption tests. Firm value is proxy-measured by Tobin's Q, ESG performance by ESG Intelligence composite scores, and firm size by market capitalization. The empirical results demonstrate that ESG performance has a statistically significant positive effect on firm value, confirming that capital market investors in Indonesia value non-financial sustainability signals. Furthermore, firm size acts as a pure moderator that significantly strengthens the positive relationship between ESG performance and firm value. Larger enterprises possess superior resource buffers, organizational capacity, and public visibility to effectively convert ESG commitments into enhanced market valuation. Robustness analysis using alternative firm size proxies confirms model stability. These findings offer practical guidance for corporate managers, investors, and regulators (OJK and IDX) to optimize sustainability reporting standards (POJK No. 51/POJK.03/2017).

Keywords: ESG Performance, Firm Size, Firm Value, Stakeholder Theory, Tobin's Q.

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1. Introduction

Firm value represents a measure of a company's success and total worth, as reflected through its financial statements, market conditions, managerial experience, and underlying assets. Firm value is the fair value indicating investor

perceptions of the issuing entity (Marantika, 2012). firm's ability to generate profits also directly affects its firm value, making profit optimization essential for every business entity. A high firm value indicates that the company possesses solid performance and bright future prospects.

In recent years, investors have become increasingly aware of the importance of incorporating Environmental, Social, and Governance (ESG) criteria into their investment decision-making processes. This shift is driven by the recognition that the effective implementation of ESG criteria can enhance long term firm value. Entities with high ESG scores tend to demonstrate greater operational sustainability and superior risk management capabilities. International organizations, industry bodies, and governments are actively expanding their support for a sustainable global economy through strategic partnerships forged by the United Nations Sustainable Stock Exchanges (SSE) initiative with various global stock exchanges to advance the sustainability agenda (Aydognmus et al., 2022). Driven by stringent regulatory updates, standardization, and heightened global stakeholder demands regarding ESG performance, corporate leaders are challenged to rapidly transform their strategic frameworks. Adopting ESG principles has thus shifted from a discretionary exercise into an essential imperative for market survival and relevance. Nevertheless, ESG performance standardization and reporting practices in Indonesia still lag behind those in developed nations, highlighting that continuous efforts are required to enhance sustainability awareness and implementation across the country (Ihsani et al., 2023).

Firm value is highly crucial for corporations as it directly conditions how external stakeholders perceive the organization. Furthermore, a company's strategic investment and business decisions are also bounded and influenced by its prevailing market value. Numerous empirical studies have demonstrated that superior ESG performance correlates positively with both operating returns and equity pricing (Al-tuwaijri et al., 2004); (Fatemi et al., 2017); (Aboud & Diab, 2018); (Azhar, 2020). ESG dimensions, such as eco-friendly operational practices, streamline overhead expenses and boost resource yields, as exemplified by carbon footprint reduction initiatives and energy efficiency measures. Furthermore, other dimensions pertaining to employee welfare and community relations can similarly enhance corporate value. Companies maintaining higher workforce productivity and strong community integration tend to command superior reputational advantages, which positively impact overall business

performance. In addition, internal corporate governance is closely tied to organizational performance, where sound management practices such as transparency and accountability reinforce investor confidence and mitigate risk, which in turn elevates firm value (Li et al., 2017).

This research concentrates on corporate ESG activities and evaluates their empirical effect on firm value while introducing firm size as an explicit moderating variable. ESG serves as an objective accountability benchmark utilized by investors to evaluate a company's commitment to sustainability and social responsibility. Firms displaying high sustainability levels demonstrate clear financial outperformance relative to less compliant counterparts (Eccles et al., 2014). The implementation of ESG in Indonesia has evolved progressively over time. Empirical studies confirm a positive impact of ESG implementation on firm value and financial performance within the Indonesian market (Rahmaniati & Ekawati, 2024; Shafitranata et al., 2026). Conversely, an inverse relationship between ESG transparency and sustainable growth suggests that the information costs and risks associated with ESG adoption may temporarily exceed immediate financial returns (Kunaifi et al., 2026). In line with this, the execution of ESG initiatives in Indonesia has proven effective in driving long-term financial performance and mitigating risks, while simultaneously elevating corporate reputation and ensuring compliance with international standards (Rizal et al., 2026). Suhardjo et al. (2025) state that corporations in Indonesia report sustainability primarily for legitimacy purposes driven by regulatory and institutional pressures.

Through ESG mechanisms, companies are assisted in fulfilling their social responsibilities and building a positive corporate reputation, which in turn enhances firm performance, as stakeholder theory emphasizes the necessity of balancing the interests of all stakeholders, including society and the environment. This initiative is reinforced by the Financial Services Authority (OJK), which mandates listed companies to submit Sustainability Reports under Regulation POJK No. 51/POJK.03/2017. In line with this, the Indonesia Stock Exchange (IDX) has launched an integrated reporting platform through IDX ESG Reporting and partnered with international rating agencies to display the ESG scores of listed entities. As part of this strategic roadmap, the IDX partnered with Morningstar Sustainalytics, under which 199 companies in Indonesia have implemented ESG practices and received formal ESG ratings (IDX, 2026).

Furthermore, firm size was selected as a moderating variable based on the premise that large-scale corporations generally possess greater financial resources, managerial capacity, and public visibility compared to smaller enterprises, enabling them to allocate resources toward comprehensive ESG practices without sacrificing short-term profitability. Large enterprises also face heightened oversight pressure from institutional investors and regulators, providing them with stronger incentives to demonstrate ESG commitment to maintain public legitimacy and reputation, aligned with the findings of Suhardjo et al. (2025).

Large scale companies exert broader ESG impacts and possess greater growth opportunities. Additionally, investors, customers, suppliers, and employees utilize ESG ratings and scores to evaluate the operational sustainability of an enterprise. Companies that actively demonstrate eco-friendly and socially responsible operations attract greater investor interest, thereby enhancing firm value. Consequently, while ESG plays a vital role in determining firm value, its influence is likely moderated by firm size. Evidently, effective ESG integration supports long-term corporate sustainability, particularly when embedded into core business strategies.

Empirical evidence indicates that companies executing ESG principles effectively have a higher likelihood of achieving superior profitability, thereby elevating firm value (Friede et al., 2015; Whelan et al., 2021; Aydogmus et al., 2022; Fu & Li, 2023; Sari & Hariyani, 2024). Studies by Brooks & Oikonomou (2017); Li et al. (2017) demonstrate that the impact of ESG disclosure and performance is markedly stronger on firm value. Consistently, Buallay (2019) asserts that ESG disclosure lifts overall commercial health. However, when disaggregated, environmental disclosures exhibit a positive relationship with Return on Assets (ROA) and Tobin's Q (TQ), whereas corporate social responsibility disclosures display an inverse association with ROA, ROE, and TQ. Corporate governance disclosures exhibit a negative connection with ROA and ROE, but a positive link with TQ. In contrast, classic investigations by Orlitzky et al. (2003); Wagner & Schaltegger (2004) confirm that corporate social performance, particularly localized social investments, is significantly and positively associated with corporate financial performance. Meanwhile, Velte (2017); Aydogmus et al. (2022) affirm that composite ESG scores, as well as individual environmental, social, and governance components, display a robust

positive relationship with financial performance, ultimately enhancing firm value.

Conversely, competing empirical studies identify no significant correlation between individual or combined ESG factors and corporate profitability or firm value (Atan et al., 2018). Findings by Junius et al. (2020); Seker & Gungor (2022) reveal that ESG performance exerts no effect on firm performance or market value, suggesting that ESG scores have not been fully integrated into core corporate production models. Al-tuwaijri et al. (2004) highlight an inverse link between environmental performance and immediate economic returns, balanced by a positive connection between environmental performance and environmental disclosures. This study underscores the vital importance of environmental performance in safeguarding business continuity, as it yields long-term positive effects on profitability. Furthermore, the primary objective of this study is to examine the effect of ESG performance on firm value, with firm size acting as a moderating variable.

This research distinctively departs from prior literature in several key aspects. The majority of earlier empirical studies investigating the ESG firm value nexus have concentrated on developed capital markets (Velte, 2017; Aydogmus et al., 2022; Fu & Li, 2023), whereas empirical inquiries in emerging markets, particularly Indonesia, remain relatively scarce and yield inconsistent outcomes (Junius et al., 2020; Kunaifi et al., 2026; Rizal et al., 2026). This empirical gap indicates that the relationship between ESG performance and firm value is highly contextual and heavily contingent upon institutional settings, regulatory frameworks, and capital market maturity across jurisdictions. Most prior studies evaluated direct linkages between ESG metrics and firm valuation without incorporating moderating conditions into their analytical models. This study bridges this literature gap by introducing firm size as a moderating construct, thereby providing deeper insights into the specific organizational conditions under which ESG initiatives most effectively drive corporate value. Moreover, this research utilizes verified ESG score datasets, ensuring higher measurement standardization and data accuracy.

Analyzing corporate data over the 2017 - 2021 timeframe holds distinct empirical relevance for this research context. This period marks the initial implementation of mandatory sustainability reporting in Indonesia pursuant to OJK Regulation POJK No. 51/POJK.03/2017, reflecting a transformative transition phase for Indonesian enterprises from voluntary disclosures to

regulated, structured reporting frameworks. Furthermore, this timeline spans pre and intra COVID-19 pandemic years, allowing the study to capture ESG firm value dynamics under stable economic conditions as well as during macro economic shocks, thereby offering critical insights into the structural resilience of high ESG enterprises facing external crises. Utilizing data from this period offers a unique empirical contribution as it represents the formative stage of a formal ESG ecosystem in the Indonesian capital market, serving as a baseline reference for future sustainability implementation.

The contribution of this research lies in enriching empirical evidence regarding ESG implementation efficacy in emerging capital markets, which feature institutional and regulatory structures distinct from developed economies, thereby supplementing global ESG literature. By integrating firm size as a moderating factor, this study provides a robust analytical framework for future scholars to evaluate contextual conditions altering the strength of the ESG firm value linkage. Practical implications extend to market regulators, notably the OJK and the IDX, in formulating targeted sustainability disclosure policies while accounting for varying organizational capacities across firm scales. Finally, for investors and market participants, this study offers actionable insights into the relevance of firm scale when assessing the efficacy of corporate ESG strategies, guiding sustainable investment decision making within the Indonesian capital market.

Stakeholder Theory

To understand corporate business practices, stakeholder theory posits an underlying relationship among interested parties who mutually influence one another within an enterprise. According to Freeman & McVea (2001), stakeholder theory refers to any group or individual who has the ability to affect or is affected by the achievement of an organization's objectives. This applies across environmental, social, and good corporate governance dimensions, which can increase cash holdings, debt, and equity financing flexibility, as well as build strong stakeholder relationships, manage risks, and enhance profitability. ESG performance also influences corporate valuation and financial performance. Therefore, sound ESG practices yield long term benefits for the firm while playing a vital role in meeting stakeholder expectations and needs, thereby ensuring corporate longevity.

This study positions stakeholder theory as the grand theory underpinning the overall conceptual framework, as it directly explains the mechanism through which ESG performance influences firm value. ESG activities are viewed as a concrete manifestation of corporate efforts to satisfy specific stakeholder expectations including employees, creditors, investors, the public, and regulators such that when a company responsibly manages its environmental impacts, employee welfare, and governance, the market responds positively in the form of enhanced firm value. Because the interrelationships among all variables in this research model comprising ESG performance, firm size, and firm value can be articulated through the logic of firm stakeholder relations, stakeholder theory serves as the primary theory unifying the overall research arguments.

Legitimacy Theory

According to Dowling dan Pfeffer (1975), legitimacy can be regarded as a potential resource or asset for organizational survival. The concept of a social contract between an enterprise and society serves as the core foundation of this theory. Under legitimacy theory, entities or organizations, including corporations, must continuously ensure that their operations are conducted legally and in alignment with societal values, boundaries, and norms (Ghozali, 2020). The social contract is utilized as a framework to explain broader societal expectations regarding how organizations should conduct business responsively toward their environment. According to legitimacy theory, if management perceives that doing so will meet community standards, a firm will voluntarily report its activities (Deegan, 2000). In this study, legitimacy theory is positioned as a supporting theory explaining the motives behind ESG disclosures, specifically the corporate drive to maintain general social acceptance in the eyes of the public.

The Relationship between Stakeholder Theory and Legitimacy Theory

Both theories share common conceptual roots in the notion of a social contract between the firm and society, yet they highlight distinct facets of this relationship, rendering them complementary rather than mutually exclusive. Legitimacy theory emphasizes the broader societal dimension and social acceptance as a singular entity, whereas stakeholder theory disaggregates "society" into specific stakeholder groups with distinct interests and emphasizes how the firm manages relationships with each respective group. These theories operate in tandem to explain ESG disclosure behavior. Corporations disclose ESG

performance not only to fulfill the interests of specific stakeholder groups (stakeholder perspective) but also to safeguard their overall operational legitimacy in the eyes of the public and regulators (legitimacy perspective). Findings by Suhardjo et al. (2025), which indicate that sustainability reporting in Indonesia is predominantly driven by legitimacy goals and institutional pressures, reinforce the simultaneous relevance of both theories in this study's context, such that stakeholder theory as the grand theory and legitimacy theory as the supporting theory are employed complementarily to construct the theoretical foundation of this research.

Firm Value

Firm value serves as a vital metric for evaluating corporate health and performance. Firm value is defined as a market value ratio, specifically describing market conditions as captured by the price to earnings ratio (PER), price to book value (PBV), and Tobin's Q (Ningrum, 2021). According to Dentika et al. (2022), a company must maintain prudent financial administration and execute streamlined operational management to enhance its market valuation. Corporate value is reflected in equity share prices and is influenced by various factors, including financial performance, capital structure, firm size, and environmental, social, and governance (ESG) elements.

Environmental, Social and Governance (ESG)

Environmental, Social, and Governance (ESG) is a paradigm promoting sustainable development, investment, or business activities anchored upon three primary criteria: environmental stewardship, social responsibility, and corporate governance. ESG principles have been adopted by companies in Indonesia and across the globe to build robust stakeholder relationships, navigate operational risks, enhance profitability, and optimize corporate decision making. From a financial management perspective, executives must scrutinize all administrative actions and utilize accounting mechanisms to prevent the infringement of shareholder rights. Consequently, expanding a firm's ESG agenda is essential to secure business continuity (Arayssi et al., 2020). Indonesian enterprises actively engage in ESG initiatives, including greenhouse gas emission reductions, industrial waste management, energy conservation, eco-friendly material usage, and employee and community welfare enhancements. Furthermore, following their IPOs, listed companies in Indonesia have increasingly adopted comprehensive ESG reporting models covering good governance, social

responsibility, and environmental disclosures. According to Feng & Wu (2023), to effectively integrate ESG issues into decision-making processes, stakeholders must possess the capability to analyze and utilize corporate ESG disclosures.

Firm Size

Firm size reflects an enterprise's organizational capacity, characterized by the diversity and scale of its production capacity or the volume of services it can extend to its customer base (Sritharan, 2015). According to Dang et al. (2018), every proxy used to measure firm size presents specific advantages and trade offs, meaning no solitary metric can comprehensively capture all dimensions of "firm size". Generally, total assets reflect cumulative organizational resources, market capitalization encapsulates equity dynamics and growth potential, and total sales reflect immediate product market competitiveness without factoring in future developments. When primary metrics are unavailable or non-viable, researchers can alternatively utilize total workforce, cumulative net profit, or net asset balances.

The Influence of ESG Performance on Firm Value

ESG performance encompasses environmental, social, and governance elements, and this factor directly influences corporate operational performance, ultimately enhancing firm value. Theoretically, the mechanism through which ESG performance elevates firm value operates through two main channels. First, the cost and risk reduction channel, where sound environmental practices diminish corporate exposure to regulatory, litigation, and reputational risks, while transparent governance reduces agency costs and information asymmetry between management and investors, causing investors to perceive lower investment risk and assign higher market valuations. Second, the signaling and trust channel, where ESG disclosures serve as a credible signal to the market that management is operating the firm responsibly with a long-term orientation, thereby lowering the cost of capital and improving financing access, which is ultimately reflected in elevated market value ratios. Both mechanisms align with stakeholder theory, wherein well maintained stakeholder relations function as strategic assets that are difficult for competitors to replicate, contributing to sustainable competitive advantage.

Xaviera & Rahman (2023) note that some critics view ESG investments as costly because corporate ESG implementation depends heavily on the

availability of financial resources. However, firms that disclose information regarding their treatment of employees, communities, and the environment generate superior financial performance, which in turn enhances firm value. ESG performance is critical as a factor influencing business performance, demonstrating that firms adopting ESG principles achieve greater financial gains (Tao, 2023). Research by Srivastava & Anand (2023) reveals a positive correlation between ESG scores and firm value, supporting stakeholder theory. This finding is also consistent with recent empirical evidence in emerging markets, Kunaifi et al. (2026) found that ESG disclosures contribute to sustainable corporate growth in Indonesia, despite relational complexities influenced by working capital management, while Rizal et al. (2026) affirmed that consistent implementation of ESG standards improves long-term financial performance while mitigating corporate reputational risks in Indonesia. Based on these theoretical mechanisms and empirical evidence, the following hypothesis is formulated:

H1: ESG performance has a positive effect on firm value.

The Moderating Role of Firm Size on the Relationship between ESG Performance and Firm Value

ESG activities hold greater potential to enhance corporate value when supported by large-scale business operations. Theoretically, mechanisms explain why firm size amplifies the relationship between ESG performance and firm value. While smaller enterprises may face resource constraints in addressing complex ESG challenges, larger corporations possess the financial and managerial resources to adopt ESG practices more consistently and integrate them into core business strategies, making their impact on operational performance and firm value more tangible rather than merely symbolic. According to Zhong et al. (2022), large and highly profitable enterprises in China tend to invest surplus funds in ESG projects to enhance communication with internal and external stakeholders, build strong corporate reputations, further bolster their legitimacy and competitiveness, and attain higher firm valuations. Furthermore, larger companies engage stakeholders more extensively in their operational activities, generating higher demand for ESG disclosures (Adhi & Cahyonowati, 2023). This broader stakeholder base ensures that ESG signals transmitted by large firms are observed by a wider audience, including institutional investors and analysts, resulting in faster and more significant market responses compared to similar signals from smaller firms. The legitimacy mechanism stemming from high public visibility makes large firms more

vulnerable to regulatory and public scrutiny, thereby creating stronger incentives to convert ESG commitments into enhanced reputation and investor trust to safeguard operational legitimacy.

Nevertheless, due to the nature of sustainable commerce, certain industrial sectors may find ESG integration more straightforward, whereas others encounter steeper hurdles. Empirical evidence confirms that firm size influences corporate performance and that Good Corporate Governance (GCG) mechanisms can mediate the impact of firm size on organizational performance (Zahir & Soewarno, 2021). Utilizing targeted ESG data allows analytical forecasts to become more precise and realistic. Companies executing ESG practices effectively possess a comprehensive understanding of long-term strategic issues, enabling them to systematically manage future milestones (Jeanice & Kim, 2023). This is supported by Fernando et al. (2022), who demonstrated that firms implementing Integrated Reporting (IR) achieve superior firm value and improved organizational performance. Recent international empirical evidence further reinforces this argument, Korkmaz & Nur (2023) found that the effect of ESG sustainability on corporate performance varies significantly based on firm size and age within the banking sector, while; Fu & Li (2023) and Sulistyawati et al. (2026) demonstrated that organizational capacity which correlates with enterprise scale moderates the strength of the relationship between ESG and financial performance. Based on these three theoretical mechanisms and empirical evidence, the following hypothesis is formulated:

H2: Firm size moderates the positive effect of ESG performance on firm value.

2. Research Method

This study adopts a quantitative research design. The sample selection technique utilized *purposive sampling* to encompass all companies in Indonesia listed on the Indonesia Stock Exchange (IDX) from 2017 through 2021. The sample selection process was executed in sequential stages as presented in the following table:

Table 1. Research Sample Selection Process

Criteria	Number of Companies
IDX listed companies that published sustainability reports during the 2017 - 2021 period	144
Companies with incomplete or inconsistently available data for all research variables during the 2017 - 2021 period	(91)
Total companies meeting the sample selection criteria	53
Total observations (53 companies × 5-year observation period)	265
Eliminated outlier observations	(22)
Final number of observations used in the analysis	243

Source: Processed Data

Based on the selection process outlined above, out of an initial population of 144 companies that published sustainability reports during the 2017 - 2021 period, only 53 companies met the criteria of consistent data completeness across all research variables throughout the five-year observation window. The majority of companies eliminated at this stage were due to the lack of complete, continuous ESG data across the entire observation period. With 53 companies meeting the selection criteria over five years, this study generated panel data totaling 265 observations. Subsequently, outlier detection tests were conducted to identify extreme data points capable of distorting regression estimation results, leading to the elimination of 22 observations identified as outliers. Ultimately, the final number of observations utilized in the analysis of this study was 243 observations.

Furthermore, the dependent variable in this study is firm value, operationalized using Tobin's Q (Maji & Lohia, 2023; Rastogi et al., 2023; Srivastava & Anand, 2023; Wulandari et al., 2025). This proxy was selected because it comprehensively reflects the market's valuation of the firm. Tobin's Q is calculated using the formula $\text{Market Capitalization} + \text{Debt} \div \text{Total Assets} + \text{Debt}$. The independent variable, ESG performance, was retrieved from ESG Intelligence (Prayogo et al., 2023; Durlista & Wahyudi, 2023). a data source providing composite ESG scores for publicly listed companies in Indonesia based on the aggregation of performance indicators across three primary pillars: environmental, social, and governance. Each of these three pillars comprises several disclosure and performance indicators that are weighted and combined into a single composite ESG score for each company per observation period. Meanwhile, the moderating variable, firm size, is operationalized using market

capitalization (Aghnitama et al., 2021; Farooq et al., 2022). Market capitalization refers to the product of stock price multiplied by the number of outstanding shares. Market capitalization was selected as the proxy for firm size because it reflects the collective market valuation of the company's overall resources and growth opportunities, making it highly relevant in the context of research examining market based interactions between ESG and firm value.

The selection of Moderated Regression Analysis (MRA) was based on its alignment with the research objective, which is to examine changes in the strength of the relationship between ESG performance and firm value across varying levels of firm size, through direct interpretation of the interaction coefficient (ESG Performance x Firm Size). This approach also suits the characteristics of the research data, comprising panel data from 53 companies across five observation years (243 observations following outlier elimination), with a relatively limited timeframe making estimation via MRA most appropriate. The application of MRA based on multiple linear regression requires fulfilling classical assumption tests namely normality, multicollinearity, heteroskedasticity, and autocorrelation all of which were fully satisfied in this study, ensuring the model qualifies as Best Linear Unbiased Estimator (BLUE) and valid for hypothesis testing. MRA offers a straightforward and direct interpretation of results in identifying the nature of moderating effects, while being more efficient for data structures with limited degrees of freedom, thus making it the most suitable method for this study. The regression equation is specified as follows:

$$Y = \alpha + \beta X + \beta Z + \beta X*Z + \varepsilon$$

Description:

Y	= Firm Value
X	= ESG Performance
Z	= Firm Size
α	= Constant
β	= Coefficient
ε	= Error

3. Result and Discussion

The test results show that the data used have met the classical assumption tests. The following is a summary of the classical assumption test results.

Table 2. Summary of Classical Assumption Test Results

Test	Test Statistic	Value	Criteria	Conclusion
Normality	Kolmogorov-Smirnov (Monte Carlo)	Sig. = 0,088	Sig. > 0,05	Residuals are normally distributed
Multicollinearity	Tolerance / VIF	Tolerance X = 0,111 VIF X = 8,991	Tolerance > 0,10 VIF < 10	No multicollinearity occurs
		Tolerance Z = 0,964 VIF Z = 1,038		No multicollinearity occurs
Heteroscedasticity	Glejser Test	Sig. X = 0,707	Sig. > 0,05	No heteroscedasticity occurs
		Sig. Z = 0,546		No heteroscedasticity occurs
Autocorrelation	Durbin-Watson	DW = 1,402	Close to a 2	Free from autocorrelation

Source: Processed Data

The normality test using Kolmogorov-Smirnov (Monte Carlo) on 243 observations yielded a significance value of 0.088 (>0.05), which means the residuals are normally distributed. The multicollinearity test showed that the VIF value of the ESG performance variable (X) was 8.991 and the firm size variable (Z) was 1.038, both below the threshold of 10, indicating that the model is free from serious multicollinearity, although the VIF value for X is relatively higher as a natural consequence because X is also a component forming the interaction term $X*Z$. The heteroscedasticity test using the Glejser test showed a significance of 0.707 for X and 0.546 for Z (>0.05), indicating that the model is free from heteroscedasticity. The autocorrelation test using Durbin-Watson yielded a value of 1.402, close to the criterion for being free from autocorrelation. Thus, all classical assumptions are met and the moderated regression model is fit to be used for hypothesis testing. Meanwhile, the hypothesis testing results are displayed in the table below.

Table 3. Result of t-Test (Partial Test)

Variabel	Koefisien	t	Sig.	Description
(Constant)	0.241	2.840	0.005	
X	0.358	65.989	0.000	Significantly Positive
Z	0.042	5.003	0.000	Significantly Positive

Source: Processed Data

Table 3 shows that the ESG performance variable has a significantly positive effect on firm value. The next testing step is conducting a moderated regression test from each independent variable on the dependent variable by including the moderating variable as shown in the following table.

Table 4. Result of Moderated Regression Analysis (MRA)

Variabel	Koefisien	T	Sig.
(Constant)	0.513	3.128	0.002
X	-0.160	-1.377	0.170
Z	0.012	0.755	0.451
X*Z	0.057	4.548	0.000

Source: Processed Data

Based on the results of the moderated regression test in Table 4, the firm size variable (Z) does not show a significant direct effect on firm value (coefficient 0.012; sig. 0.451), while the interaction term (X*Z) shows a significant effect (coefficient 0.057; sig. 0.000). Referring to the classification of moderating variables (Ghozali, 2020), this pattern indicates that firm size acts as a pure moderator, which is a variable that purely functions to alter the strength of the relationship between the independent and dependent variables without having a standalone direct effect on the dependent variable. This status as a pure moderator reinforces the argument that firm size is not an independent determinant of firm value, but rather functions as a contextual condition determining how strongly ESG performance can be converted into an increase in firm value.

The Moderating Effect of Firm Size on the Relationship Between ESG Performance and Firm Value

Based on the moderated regression test results in Table 2, the coefficient value is 0.057 with a significance level of 0.000, meaning that the moderating variable of firm size strengthens the relationship between ESG performance and

firm value. The finding that firm size strengthens the relationship between ESG performance and firm value provides insight into the characteristics of companies that tend to achieve high ESG scores in the Indonesian capital market. Companies with high ESG scores generally operate on a large business scale, as reflected by substantial market capitalization and total assets, thereby possessing adequate financial resources and managerial capacity to build comprehensive environmental, social, and governance management systems without sacrificing short-term profitability, as well as having implemented more mature governance practices that enable them to manage long term strategic issues more systematically. Such firms tend to have broader stakeholder engagement including institutional investors, regulators, customers, and local communities which in turn drives greater pressure and incentives to disclose ESG activities transparently (Itan et al., 2025). Large scale companies possess the capability to implement ESG in ways that satisfy stakeholder demands, thereby enhancing firm value. Comprehensively executed ESG activities create positive perceptions among various stakeholders (Özer et al., 2024). This affords the company trust or credibility regarding its commitment to consistently fulfill environmental, social, and corporate governance responsibilities.

While large companies have the capability to achieve optimal ESG performance, they also face several issues that can impact the organization. Large firms must concentrate on managerial oversight that addresses environmental and social impacts as well as good management practices driven by various stakeholders. In addition, corporate management must ensure that robust policies and procedures, along with a corporate culture supporting ESG implementation, are in place so that optimal ESG performance can be achieved in a planned manner, ultimately driving an increase in firm value. Korkmaz & Nur (2023) found a statistically significant positive correlation between ESG scores and firm performance. Meanwhile, Abdi et al. (2022) showed that firm size plays a moderating role in the relationship between ESG performance and firm value, where the larger the firm size, the greater the positive impact of ESG performance on firm value. Furthermore, research D'Amato & Falivena (2020) found that larger companies possess greater resources to manage their social and environmental impacts and hold better reputations regarding social responsibility. This may explain why larger firms exhibit a stronger relationship between CSR and firm value.

Overall, the findings of this study emphasize that consistent ESG implementation has important implications for enhancing market trust in a firm (Sharif & Saci, 2026). When a company tangibly implements ESG, it creates a perception of credibility among stakeholders because the firm is viewed as capable of managing non-financial risks effectively, rather than merely fulfilling regulatory mandates (Gazzola et al., 2026). This trust, in turn, can lower the cost of capital, expand financing access, and strengthen long-term investor loyalty (D'Ecclesia et al., 2025), as reflected by the positive relationship between ESG performance and firm value found in this study. The moderating effect of firm size also indicates that market trust in ESG is not formed instantaneously; rather, it develops alongside the track record, operational scale, and reporting consistency established by the company over time. The findings demonstrate that larger companies display superior ESG performance due to greater resource availability and stakeholder visibility (Gogia et al., 2026). For regulators such as OJK and the IDX, these findings underscore the importance of continuously promoting ESG reporting standardization and offering incentives for small and medium-sized enterprises to build ESG capacity, ensuring that enhanced market trust in sustainability practices benefits not only large listed issuers but also distributes its advantages more evenly across the Indonesian capital market ecosystem.

The findings of this study contribute to the development of stakeholder theory concerning emerging capital markets, which exhibit institutional characteristics distinct from those of developed markets that have historically dominated the ESG literature. In developed capital markets, institutional investor pressure and ESG regulatory maturity are relatively high (Zeng & Jiang, 2024; Sun & Zhao, 2024), causing the relationship between ESG and firm value to form directly and consistently. Conversely, in the Indonesian context as an emerging market, ESG implementation remains in a transitional phase from voluntary practice to regulatory mandate (POJK No. 51/POJK.03/2017), resulting in market trust in ESG information not yet being evenly established across all firms. This condition explains why firm size serves as a crucial contextual factor in a market that is not yet fully mature, as ESG signals from smaller firms tend to be less credible in the eyes of investors compared to similar signals from larger companies with higher reputations and public oversight. This study extends stakeholder theory by demonstrating that the effectiveness of the ESG signaling mechanism is contingent upon the level of institutional maturity of the capital market.

4. Conclusion

The test results demonstrate that ESG performance exerts a significant effect on firm value. Furthermore, firm size moderates the relationship between ESG performance and firm value. This study offers practical implications for corporate management that ESG implementation is not merely a regulatory obligation, but a strategy for long-term firm value creation; thus, investments in environmental, social, and governance practices must be integrated into core business strategies rather than treated as peripheral activities. Companies newly adopting ESG principles can begin with governance aspects and basic disclosures that require relatively low costs while progressively building capacity toward more comprehensive environmental and social practices. For investors, ESG scores can serve as a supplementary indicator for evaluating risk management quality and firm value prospects, particularly among large-scale issuers where the impact of ESG on firm value proved to be stronger, with firm size taken into account as an additional context when evaluating the effectiveness of ESG strategies across issuers. For regulators, there is a need to continuously strengthen the standardization of sustainability reporting (beyond POJK No. 51/POJK.03/2017) to render ESG disclosures more comparable and reliable across issuers, alongside providing incentives or regulatory facilitation for small and medium sized listed firms to prevent the ESG capacity gap between corporations from widening.

This study contributes to the following four areas of literature: First, enriching empirical evidence on ESG performance within the context of emerging capital markets, which remains limited compared to studies in developed markets. The finding of a statistically significant positive relationship between ESG performance and firm value clarifies the ongoing literature debate characterized by mixed results, while reinforcing that the effectiveness of ESG is contextual to institutional characteristics and market maturity. Second, providing empirical support that addressing stakeholder interests through ESG practices generates added value for companies, while expanding the application of stakeholder theory to emerging market contexts that differ in regulation and institutional pressures from developed nations. Third, confirming ESG performance as a key non-financial determinant of firm value, complementing conventional determinants such as financial performance or capital structure that have dominated prior literature on firm valuation. Fourth, filling a research gap

in prior studies that predominantly examined the direct relationship between ESG and firm value without considering contextual factors. The finding that firm size positively moderates this relationship reinforces empirical evidence from Abdi et al. (2022) and D'Amato & Falivena (2020) within the underexplored Indonesian context, while paving the way for future research to investigate other moderating factors such as board representation, industrial sector, and geographical location.

This study has several limitations that should be taken into consideration when interpreting its findings, while simultaneously providing avenues for future research. First, the observation period utilized is relatively constrained, spanning only from 2017 to 2021, and thus may not fully capture the long-term dynamics of ESG implementation among Indonesian firms, including developments post period as the sustainability reporting ecosystem in the Indonesian capital market continues to mature. Future research is encouraged to employ panel data covering longer time spans to capture ESG implementation trends more comprehensively, including potential shifts in the relationship between ESG and firm value over time. Second, this study relies exclusively on ESG Intelligence as the sole source for ESG performance data, which presents potential methodological bias given that different ESG rating agencies utilize distinct evaluation methodologies, indicator weighting schemes, and data coverage. Consequently, empirical results may not be entirely consistent if tested using alternative data providers such as MSCI ESG Ratings, Bloomberg ESG Disclosure Scores, or Sustainalytics. Furthermore, this study utilizes only a composite ESG score, thereby falling short of capturing the specific effects of individual dimensions. It is recommended that future studies evaluate the Environmental, Social, and Governance dimensions separately, as prior literature suggests these three dimensions may exhibit differing directions and strengths of impact on firm value, and separate analysis would provide a more precise understanding of which ESG dimension plays the most critical role.

Third, this study aggregates all sample companies without segregating them by industrial sector, encompassing both financial and non-financial sectors. Operational characteristics, degree of environmental sensitivity, and ESG implementation patterns inevitably differ across sectors; hence, this aggregation may mask variations in the relationship between ESG and firm value that uniquely manifest within specific industries. Future research is recommended to stratify samples by industrial sector classification and expand the analytical

scope through cross-country comparisons, particularly among developing nations in the ASEAN region with comparable regulatory landscapes and capital market maturity levels, to test the consistency of these findings across diverse institutional contexts. Fourth, this study employs Tobin's Q as a single proxy to measure firm value, which may not fully represent all dimensions of corporate value, considering that alternative metrics such as the price to earnings ratio (PER) or price to book value (PBV) offer distinct perspectives on market valuation. Additionally, this study only considers firm size as a moderating variable, thereby leaving unexamined other contextual factors that could potentially moderate the ESG firm value nexus. Subsequent studies are advised to incorporate more diverse proxies for firm value and examine other moderating variables such as corporate governance or ownership structure, given that both factors theoretically influence the effectiveness of ESG oversight and implementation, thereby potentially strengthening or weakening the relationship between ESG performance and firm value in ways distinct from firm size.

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