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Environmental-social-governance Firm performance, and firm value: Sustainability value-based performance as an intervening variable

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Abstract

As global markets increasingly prioritize sustainability, the role of Environmental, Social, and Governance (ESG) performance in influencing firm value has garnered significant attention. However, the pathway through which ESG efforts translate into financial outcomes remains underexplored, particularly in manufacturing sectors. This study examines the relationship between ESG performance, firm performance, sustainability value-based performance, and firm value, with sustainability value-based performance serving as a mediating variable. The primary objective of this research is to explore how ESG performance and firm performance influence firm value, with a focus on the role of sustainability value-based performance as a mediator in these relationships. A quantitative research design was employed, utilizing secondary data from annual reports, sustainability disclosures, and financial statements. By examining 100 manufacturing companies listed on the Indonesia Stock Exchange (BEI) from 2019 to 2023, this study seeks to provide a clearer understanding of the mechanisms that link ESG and financial performance to long-term firm value. Hypotheses were tested using Structural Equation Modeling – Partial Least Squares (SEM-PLS), facilitated by SmartPLS 3.0 software. The study found that both ESG performance and firm performance positively influence firm value, with sustainability value-based performance acting as a significant mediating variable. Strong ESG practices and financial performance create value through improved operational efficiency, stakeholder trust, and brand reputation. The study's scope is limited to manufacturing companies listed on the BEI, potentially limiting generalizability to other sectors or regions. Additionally, the reliance on secondary data and publicly disclosed information may introduce reporting biases. This study contributes to the literature by providing empirical evidence on the mediating role of sustainability value-based performance, offering practical insights for managers and policymakers on integrating ESG practices to enhance firm value.

Keywords: Environmental-social-governance (ESG), Firm performance, Firm value, Sustainability value-based performance, Intervening variable.

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1. Introduction

In an era marked by increasing environmental challenges, growing social awareness, and evolving corporate governance standards, the role of Environmental, Social, and Governance (ESG) factors in shaping firm outcomes has become a focal point of modern business discourse. "ESG initiatives have emerged as a response to stakeholder demands for sustainable and responsible business practices, integrating non-financial considerations into corporate strategies [1, 2]. Organizations are no longer evaluated solely based on their financial performance; rather, their commitment to sustainability, ethical governance, and social responsibility plays a critical role in determining their reputation, operational efficiency, and long-term survival. This paradigm shift emphasizes the importance of aligning financial objectives with broader sustainability goals to meet the expectations of investors, customers, and society at large [2-5].

The relationship between ESG practices and firm performance has been widely debated, with empirical studies producing mixed results [6-14]. Some research suggests that adopting ESG principles positively influences financial performance by fostering innovation, reducing operational risks, and improving stakeholder relationships. Companies that prioritize environmental initiatives, ethical governance, and social impact can achieve cost savings, enhanced productivity, and a competitive advantage. Conversely, critics argue that the costs associated with ESG implementation may outweigh the benefits, particularly for firms with limited resources. This complexity raises important questions about the extent to which ESG practices contribute to firm performance and whether their impact is direct, indirect, or mediated through other variables.

Firm value, as a reflection of investors' perceptions and expectations, is increasingly influenced by a company's ESG performance. Investors today are integrating ESG metrics into their decision-making processes, viewing sustainability as a driver of long-term value creation and risk mitigation. Firms with strong ESG practices are often rewarded with higher valuations, lower capital costs, and greater investor confidence [3, 7, 15-26]. However, the relationship between ESG performance and firm value remains multifaceted, with many mediating and moderating factors affecting this link. Understanding the dynamics of this relationship is essential for organizations seeking to enhance their market value while simultaneously addressing sustainability challenges.

The concept of sustainability value-based performance emerges as a critical intervening variable in the ESG-performance-value nexus. This perspective highlights how firms can leverage their ESG initiatives to create tangible and intangible value that enhances overall performance. Sustainability value-based performance emphasizes the integration of environmental and social considerations into the firm's strategic and operational frameworks, enabling firms to achieve both short-term financial goals and long-term sustainable growth [27-30]. By adopting a value-based approach to sustainability, firms can bridge the gap between ESG practices and improved firm value, providing stakeholders with a clearer understanding of how ESG contributes to organizational success [31, 32].

This article explores the complex relationships among ESG performance, firm performance, and firm value, with sustainability value-based performance serving as an intervening variable. By examining these interdependencies, the study aims to provide insights into how firms can strategically implement ESG initiatives to drive both performance and value creation. Additionally, this research contributes to the growing body of literature on sustainable business practices, offering practical implications for managers, policymakers, and investors. In particular, it highlights the role of sustainability value-based performance as a mechanism through which ESG initiatives yield tangible benefits, ultimately enhancing firm competitiveness and resilience in an increasingly complex global market.

2. Literature Review and Hypothesis Development

2.1. The Relationship between ESG Performance and Firm Value

The growing importance of Environmental, Social, and Governance (ESG) performance has transformed how firms are evaluated, with stakeholders increasingly prioritizing sustainability and ethical considerations alongside traditional financial metrics. "ESG performance reflects a firm's commitment to minimizing environmental impact, fostering social responsibility, and upholding strong governance practices, which collectively influence its long-term competitiveness and market value [31, 33, 34]. From an environmental perspective, firms that implement initiatives to reduce carbon emissions, conserve resources, and promote sustainable operations can lower operational costs, mitigate regulatory risks, and build a favorable reputation with consumers and investors. Socially responsible firms that prioritize employee welfare, diversity, and community engagement foster stronger stakeholder relationships and improve their brand equity [35-38]. Similarly, sound governance practices, including transparency, ethical leadership, and shareholder protection, enhance investor confidence and reduce agency problems. These combined factors suggest that superior ESG performance can serve as a signal of operational excellence, risk management, and sustainable growth potential, leading to increased firm value.

Building on signaling theory and stakeholder theory, it can be argued that firms with higher ESG performance are more likely to attract investors and other key stakeholders who view sustainability as a critical driver of long-term value [39, 40]. ESG-conscious investors increasingly integrate non-financial indicators into their decision-making processes, rewarding firms that demonstrate accountability, resilience, and alignment with global sustainability goals. Strong ESG performance reduces information asymmetry, signaling to investors that the firm is forward-thinking, well-managed, and less vulnerable to environmental, social, and governance-related risks [41]. This, in turn, translates into higher firm valuations, reduced capital costs, and enhanced access to financial resources. However, while the positive relationship between ESG performance and firm value is widely supported, it may also depend on industry characteristics, firm-specific contexts, and the degree of market emphasis on sustainability [15, 16, 18, 19, 23, 26, 42-44]." Based on this understanding, the following hypothesis is proposed:

$H_{1:}$ ESG performance has a positive and significant effect on firm value.

2.2. The Relationship between Firm Performance and Firm Value

Firm performance, typically measured through financial indicators such as profitability, return on sales (ROS), return on assets (ROA), and return on equity (ROE), serves as a critical determinant of firm value. "The relationship between firm performance and firm value is rooted in the fundamental principle that a company's financial success reflects its ability to generate profits, sustain growth, and efficiently allocate resources [17, 45, 46]. Strong financial performance signals to investors and stakeholders that the firm is well-managed, capable of achieving operational efficiency, and positioned for future growth, thereby increasing investor confidence. Firms that exhibit consistent and superior performance are more likely to experience a rise in stock prices, greater market capitalization, and enhanced shareholder wealth. Moreover, financial performance reflects the firm's capacity to create value through sound business strategies, effective cost management, and market competitiveness, all of which contribute to improving firm value in both short-term and long-term horizons [47-49].

From the perspective of resource-based theory, firms that achieve high levels of performance gain competitive advantages through the efficient utilization of resources and capabilities, which ultimately translates into higher firm value [50-52]. Investors are inclined to reward firms that demonstrate strong performance, as it reduces uncertainty and signals stability in future cash flows and returns. Firms with superior financial outcomes also enjoy better access to capital, lower costs of financing, and improved investor perceptions, which positively affect their market value. Conversely, poor financial performance raises concerns about operational inefficiencies, liquidity issues, and long-term viability, thereby diminishing firm value. While the positive relationship between firm performance and firm value is generally well-established, its magnitude may be influenced by external factors such as market conditions, industry dynamics, and investor expectations [15, 17, 45, 47, 48, 53].

Based on this reasoning, the following hypothesis is proposed:

$H_{2:}$ Firm performance has a positive and significant effect on firm value.

2.3. The Relationship between ESG Performance and Sustainability Value-based Performance

Environmental, Social, and Governance (ESG) performance has emerged as a key driver of organizational sustainability by integrating non-financial aspects into a firm's strategic and operational framework. "ESG performance reflects a firm's proactive efforts to address environmental challenges, strengthen social responsibility, and establish strong governance structures. These efforts directly contribute to sustainability value-based performance, which emphasizes creating tangible and intangible value through sustainable business practices. Firms that adopt environmentally friendly initiatives, such as energy efficiency programs, carbon footprint reduction, and waste management, can achieve cost savings, operational efficiency, and reduced regulatory risks. Similarly, social practices that prioritize employee welfare, community engagement, and consumer satisfaction enhance productivity, employee loyalty, and brand reputation. Strong governance mechanisms, including transparency, ethical leadership, and accountability, foster trust among stakeholders and improve managerial decision-making, which further supports the firm's sustainability-driven outcomes. Collectively, these ESG-driven actions strengthen the firm's ability to generate sustainability value-based performance by aligning financial objectives with long-term environmental and social impacts [21, 30, 51, 53-55].

Drawing on stakeholder theory and the concept of value-based performance, firms that excel in ESG performance are better equipped to create value for both their internal and external stakeholders. ESG initiatives enable firms to build trust, strengthen stakeholder relationships, and differentiate themselves in competitive markets, ultimately leading to enhanced performance outcomes rooted in sustainability principles [31, 34, 35, 38, 40]. By integrating ESG considerations into core business strategies, firms can transform their operations to achieve resource optimization, innovation, and resilience. For instance, firms that adopt renewable energy technologies or fair labor practices not only fulfill stakeholder expectations but also create measurable value through efficiency gains, cost reductions, and risk mitigation. This alignment of ESG performance with sustainability value-based performance highlights the synergistic role of ESG efforts in fostering long-term success and sustainable growth. Based on this reasoning, the following hypothesis is proposed:

$H_{3:}$ ESG performance has a positive and significant effect on sustainability value-based performance.

2.4. The Relationship between Firm Performance and Sustainability Value-based Performance

Firm performance, often measured through financial metrics such as profitability, revenue growth, and return on assets (ROA), serves as a foundation for firms to invest in sustainable practices that drive sustainability value-based performance.

"Firms with strong financial performance have greater access to resources, capital, and capabilities, allowing them to pursue long-term strategic initiatives aimed at creating sustainable value. Financially successful firms are better positioned to implement advanced technologies, optimize resource usage, and innovate eco-friendly solutions that align with sustainability goals. For instance, firms with consistent profitability can invest in energy-efficient systems, sustainable supply chains, and employee welfare programs, which not only enhance operational performance but also contribute to broader environmental and social impacts. This ability to allocate resources effectively toward sustainability initiatives enables firms to create tangible and intangible value, such as cost savings, stakeholder satisfaction, and long-term resilience.

From a strategic perspective, firm performance also acts as a driver for firms to adopt sustainability-focused practices to secure a competitive advantage and long-term growth. The resource-based theory suggests that firms with superior financial outcomes have the capacity to leverage their resources in ways that enhance sustainability-driven performance. Financial success enables firms to address stakeholder expectations, improve organizational processes, and innovate sustainable business models that balance profitability with environmental and social contributions. For example, firms that perform well financially can allocate resources to develop products with reduced environmental footprints, invest in employee development, and strengthen governance practices. These actions not only create sustainability value-based performance but also enhance the firm's reputation, brand equity, and stakeholder trust. Based on this reasoning, the following hypothesis is proposed:

$H_{4:}$ Firm performance has a positive and significant effect on sustainability value-based performance.

2.5. The Relationship between Sustainability Value-based Performance and Firm Value

Sustainability value-based performance represents a firm's ability to generate long-term value through sustainable practices that align environmental, social, and economic objectives. "By integrating sustainability principles into core operations, firms can enhance efficiency, reduce costs, and mitigate risks, all of which contribute to improved firm value. For example, firms that prioritize sustainable resource management, energy efficiency, and waste reduction can achieve significant cost savings and operational resilience, strengthening their ability to deliver consistent financial returns. Additionally, sustainability value-based performance enhances intangible assets such as brand reputation, stakeholder trust, and employee satisfaction, all of which are critical for driving firm value. These sustainability-driven initiatives signal to investors and other stakeholders that the firm is forward-looking, well-prepared for future challenges, and committed to long-term growth, thereby enhancing investor confidence and market valuation.

From a theoretical perspective, sustainability value-based performance aligns with the principles of stakeholder theory, which emphasize the importance of balancing financial goals with the needs and expectations of various stakeholders. Firms that excel in creating sustainable value are more likely to attract socially conscious investors, retain loyal customers, and motivate employees, which collectively contribute to increased firm value. Moreover, sustainability-driven performance reduces the firm's exposure to environmental, social, and governance (ESG) risks, protecting its long-term financial stability and competitiveness. In today's market environment, investors increasingly reward firms that demonstrate sustainable value creation, as these firms are perceived to be better positioned for long-term success and less vulnerable to external shocks. Therefore, sustainability value-based performance acts as a bridge between sustainable business practices and firm value, enabling firms to enhance their financial and non-financial outcomes. Based on this reasoning, the following hypothesis is proposed:

$H_{5:}$ Sustainability value-based performance has a positive and significant effect on firm value.

2.6. The Role of Sustainability Value-based Performance as an Intervening Variable

The growing emphasis on Environmental, Social, and Governance (ESG) performance highlights its role in influencing firm value; however, the pathway through which ESG translates into tangible financial outcomes often requires the presence of an intervening mechanism. "Sustainability value-based performance serves as this critical mechanism by capturing how firms leverage ESG initiatives to create measurable value that bridges environmental and social impacts with economic performance [53, 56]. Firms that excel in ESG practices, such as reducing carbon emissions, fostering fair labor practices, and ensuring governance transparency, can generate sustainability-driven outcomes, including cost efficiency, operational resilience, and enhanced stakeholder trust. These outcomes, in turn, contribute to improved sustainability value-based performance, which signals a firm's ability to align sustainable practices with financial objectives. Through this process, firms create both tangible value, such as lower operating costs, and intangible value, such as brand reputation and risk mitigation, which collectively enhance their overall firm value. Thus, sustainability value-based performance mediates the relationship between ESG performance and firm value by transforming ESG initiatives into quantifiable benefits that drive long-term market valuation. Based on this reasoning, the following hypothesis is proposed:

$H_{6:}$ Sustainability value-based performance mediates the relationship between ESG performance and firm value.

Similarly, the relationship between firm performance and firm value can be strengthened through sustainability value-based performance as an intervening variable. Firms with strong financial performance have the capacity to invest in sustainability-driven strategies that create long-term value. Financially successful firms are able to implement sustainable innovations, optimize resources, and improve their social and governance practices, all of which contribute to sustainability value-based performance. For example, firms with robust financial outcomes can invest in energy-efficient technologies, employee well-being programs, and ethical supply chain management, enabling them to generate both short-term operational benefits and long-term sustainability gains. Sustainability value-based performance, in this context, serves as a critical link that channels firm performance into higher firm value by enhancing the firm's reputation, reducing operational risks, and meeting stakeholder expectations. By aligning financial success with sustainability objectives, firms not only strengthen their competitive advantage but also create enduring value for investors and other stakeholders.” Based on this understanding, the following hypothesis is proposed:

H_7: Sustainability value-based performance mediates the relationship between firm performance and firm value.

Based on the hypothesis development, the relationship among variables (constructs) is figure out in the conceptual framework as shown in Figure 1.

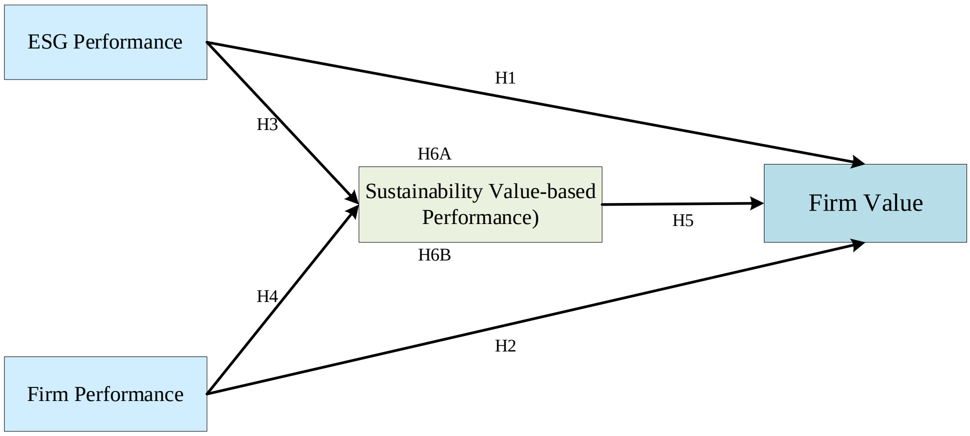

Figure 1.
Conceptual Framework.

3. Research Method

This study employs a quantitative approach [57-59]. “It examines the relationships among ESG performance, firm performance, sustainability value-based performance, and firm value. The quantitative method allows for systematic measurement and analysis of the variables to rigorously test the proposed hypotheses. The data were gathered from 100 manufacturing companies listed on the Indonesia Stock Exchange (BEI) over five consecutive years, from 2019 to 2023. Manufacturing companies were selected due to their significant environmental and social impact, which makes them ideal candidates for analyzing sustainability and performance-based relationships. Secondary data were collected from annual reports, sustainability reports, and financial statements disclosed by these firms, focusing on ESG-related indicators, financial performance metrics, and firm valuation measures.

The analysis was conducted using the Structural Equation Model – Partial Least Squares (SEM-PLS) approach, which is suitable for testing complex relationships involving multiple variables and mediating effects. SEM-PLS is a robust statistical technique that does not require strict assumptions about data distribution, making it particularly useful for analyzing real-world corporate data. This method enables the simultaneous examination of direct and indirect relationships among the study's variables, providing comprehensive insights into the mediating role of sustainability value-based performance. The SmartPLS 3.0 software was employed for data processing and hypothesis testing, as it offers advanced tools for model estimation, path analysis, and bootstrapping techniques to assess the significance of relationships [60].”

4. Research and Discussion

SmartPLS allows the measurement of constructs through a variety of indicators, including loading factors, Cronbach’s Alpha, Composite Reliability, AVE, and discriminant validity. “The process ensures that the measurement model is robust and that the constructs are accurately represented by their corresponding items. Validating the measurement model using these criteria is crucial for confirming that the constructs in the model are reliable, valid, and meaningful before proceeding to test structural relationships between them.

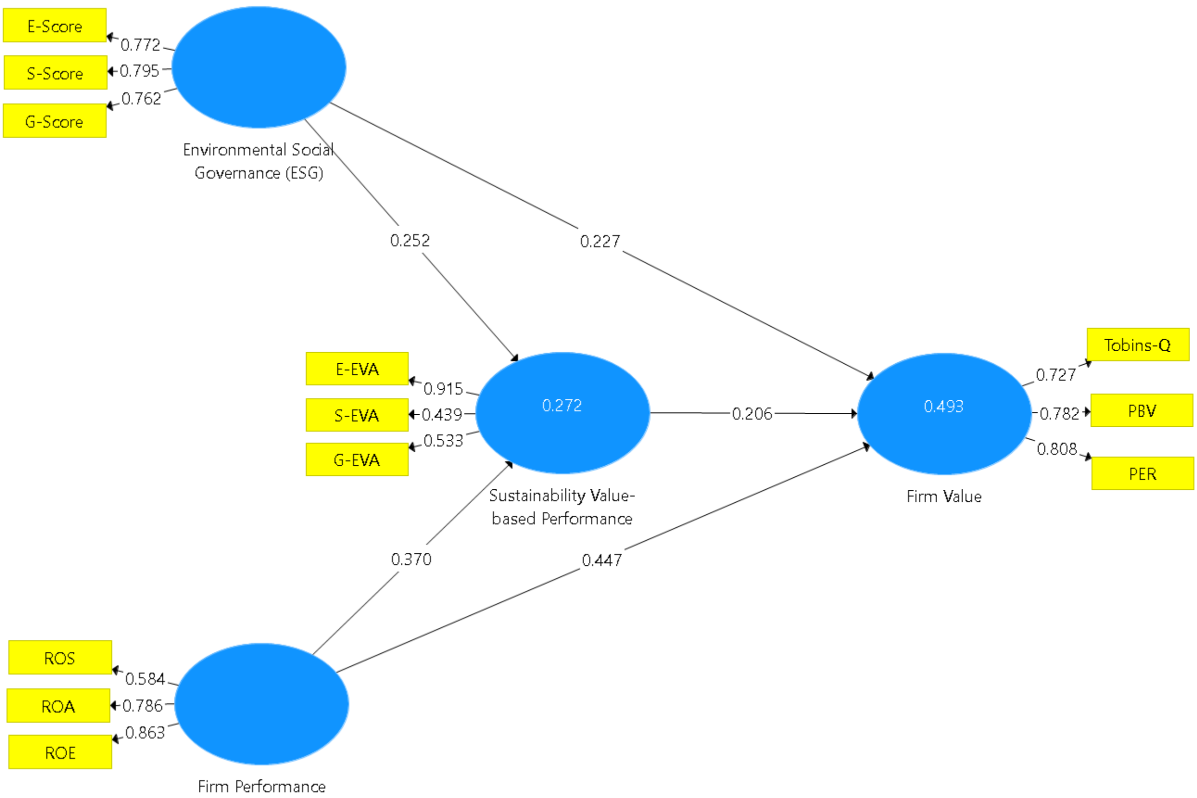

Figure 2.
The Result of Structural Model – Algorithm Analysis.

In the context of Structural Equation Modeling (SEM) with SmartPLS, the measurement of a construct refers to the process of assessing how well the observed variables (or items) represent the underlying latent variables (or constructs). This is a critical step in developing a robust SEM model, as it ensures the validity and reliability of the measurement model before testing the relationships between constructs.

Table 1.
Measurement of the Constructs.

Construct	Items	Loading Factors	Cronbach's Alpha	Composite Reliability	AVE
Environmental Social Governance (ESG)	E-Score	0.772	0.770	0.820	0.603
	S-Score	0.795			
	G-Score	0.762			
Firm Performance	ROS	0.584	0.712	0.894	0.568
	ROA	0.786			
	ROE	0.863			
Sustainability Value-based Performance	E-EVA	0.915	0.783	0.878	0.538
	S-EVA	0.539			
	G-EVA	0.633			
Firm Value	Tobins-Q	0.727	0.762	0.816	0.597
	PBV	0.782			
	PER	0.808			

Based on Table 1, the constructs in this model generally demonstrate good validity and reliability. However, some items, such as ROS in the Firm Performance construct and S-EVA, G-EVA in the Sustainability Value-based Performance construct, have lower loadings and may require reconsideration. The AVE values for all constructs are above 0.5, suggesting good convergent validity, while the Cronbach's alpha and composite reliability scores indicate that the constructs are internally consistent and reliable. Future revisions may involve refining the measurement model to improve the reliability of weaker items, ensuring even stronger construct validity.

Discriminant validity is assessed to ensure that constructs are distinct from one another. It checks whether a construct is sufficiently different from other constructs in the model. One common method to assess discriminant validity in SmartPLS is the Fornell-Larcker criterion, which compares the square root of the AVE for each construct with the correlations between constructs. If the square root of the AVE is higher than the correlation between constructs, discriminant validity is established.

Table 2.
Discriminant Validity – Fornell-Laker Criteria.

	Environmental Social Governance (ESG)	Firm Performance	Firm Value	Sustainability Value-based Performance
Environmental Social Governance (ESG)	0.776			
Firm Performance	0.382	0.753		
Firm Value	0.478	0.629	0.773	
Sustainability Value-based Performance	0.394	0.467	0.504	0.662

In SmartPLS, the direct effect refers to the immediate relationship between two constructs in the structural model, represented by path coefficients. It indicates the strength and significance of the direct connection between an independent variable and a dependent variable without any intervening constructs.

Table 3.
The Result of Direct Effect Assessment.

Direct Effect	Original Sample (O)	Sample Mean (M)	Std Dev (STDEV)	T Statistics (O/STDEV)	P Values
Environmental Social Governance (ESG) -> Firm Value	0.227	0.229	0.043	5.253	0.000
Firm Performance -> Firm Value	0.447	0.447	0.033	13.417	0.000
Environmental Social Governance (ESG) -> Sustainability Value-based Performance	0.252	0.258	0.042	6.078	0.000
Firm Performance -> Sustainability Value-based Performance	0.370	0.370	0.042	8.869	0.000
Sustainability Value-based Performance -> Firm Value	0.206	0.207	0.045	4.582	0.000

The table presents the direct effects of the relationships among key constructs in the study, with values for the path coefficients (Original Sample), sample means, standard deviations, t-statistics, and p-values. "The relationship between Environmental Social Governance (ESG) and Firm Value shows a positive and significant direct effect with a coefficient of 0.227 (t-statistic = 5.253, p = 0.000), indicating that ESG performance has a measurable impact on enhancing firm value. Similarly, the relationship between Firm Performance and Firm Value reveals the strongest direct effect with a coefficient of 0.447 (t-statistic = 13.417, p = 0.000), suggesting that firm performance plays a pivotal role in increasing firm value. Both results emphasize that firms achieving higher financial outcomes and integrating ESG practices can directly contribute to their market value.

The table also highlights the mediating construct, Sustainability Value-based Performance. The effect of ESG on Sustainability Value-based Performance is significant with a coefficient of 0.252 (t-statistic = 6.078, p = 0.000), illustrating that ESG initiatives significantly improve sustainability outcomes. Additionally, Firm Performance to Sustainability Value-based Performance has a direct effect of 0.370 (t-statistic = 8.869, p = 0.000), confirming that strong financial performance enables firms to enhance their sustainability-related value creation. Lastly, Sustainability Value-based Performance to Firm Value shows a significant positive effect with a coefficient of 0.206 (t-statistic = 4.582, p = 0.000). This result demonstrates that sustainability performance serves as a bridge, converting both ESG and financial performance into enhanced firm value, thereby reinforcing its mediating role in the relationship."

The indirect effect occurs when the relationship between two constructs is mediated by one or more intervening variables, such as a mediator.

Table 4.
The Result of Direct Effect Assessment.

Indirect Effect	Original Sample (O)	Sample Mean (M)	Std Dev (STDEV)	T Statistics (O/STDEV)	P Values
Environmental Social Governance (ESG) -> Sustainability Value-based Performance -> Firm Value	0.052	0.053	0.015	3.550	0.000
Firm Performance -> Sustainability Value-based Performance -> Firm Value	0.076	0.076	0.018	4.220	0.000

The table presents the indirect effects of the relationships among the constructs, highlighting the role of Sustainability Value-based Performance as a mediating variable. "The relationship between Environmental Social Governance (ESG) → Sustainability Value-based Performance → Firm Value shows a significant indirect effect with a path coefficient of 0.052 (t-statistic = 3.550, p = 0.000). This indicates that sustainability value-based performance partially mediates the impact of ESG on firm value, suggesting that firms leveraging ESG practices achieve improved firm value by enhancing their sustainability-related outcomes. Similarly, the indirect effect of Firm Performance → Sustainability Value-based Performance → Firm Value has a higher coefficient of 0.076 (t-statistic = 4.220, p = 0.000), demonstrating that sustainability value-based performance significantly mediates the relationship between firm performance and firm value. This result highlights that firms with strong financial performance are able to enhance their sustainability-driven initiatives, which subsequently translate into higher firm value. The significant t-statistics and low p-values confirm that these indirect effects are statistically robust. The findings emphasize that sustainability value-based performance serves as a critical pathway, converting both ESG practices and financial performance into measurable improvements in firm value. This underscores the importance of integrating sustainability efforts into business strategies to maximize both economic and stakeholder-related outcomes.

The findings of this study underscore the critical relationships between Environmental Social Governance (ESG) performance, firm performance, sustainability value-based performance, and firm value, offering significant theoretical and practical insights. Firstly, the direct effect results show that ESG performance positively influences firms, reflecting the growing importance of corporate sustainability in driving financial outcomes. This relationship highlights how investors and stakeholders value companies that demonstrate responsible environmental practices, fair social policies, and strong governance structures. Companies with better ESG performance are increasingly seen as less risky, more innovative, and resilient in the face of market challenges. Additionally, the study shows that firm performance has a stronger direct effect on firm value, emphasizing the fundamental role of financial performance in enhancing firm value. Firms that achieve superior profitability, operational efficiency, and financial growth are better positioned to maximize shareholder wealth and improve their market valuation.

The findings also reveal the significant influence of sustainability value-based performance as a mediating variable, creating an essential link between ESG performance, firm performance, and firm value. “The indirect effect results show that ESG performance positively impacts sustainability value-based performance, which subsequently enhances firm value. This suggests that firms with strong ESG practices leverage sustainability strategies such as energy efficiency, reduced environmental risks, and social responsibility initiatives to create both tangible and intangible benefits. Sustainability value-based performance allows companies to translate their ESG initiatives into measurable outcomes like cost reductions, stakeholder satisfaction, and operational improvements. Likewise, firm performance also positively influences sustainability value-based performance, which enhances firm value. Firms with strong financial performance are more likely to invest in sustainability-driven innovations, resource optimization, and ethical business practices that align short-term financial success with long-term value creation.

Overall, these findings highlight the crucial role of sustainability value-based performance as a bridge between ESG performance, firm performance, and firm value. While ESG initiatives and financial performance remain significant drivers of firm value, integrating sustainability-focused strategies amplifies their impact by fostering stakeholder trust, operational resilience, and competitive advantage. For companies, this demonstrates that adopting sustainability-driven practices is not only a response to external pressures but also a strategic opportunity to improve long-term financial performance and firm value. Managers should consider sustainability as a value-creation tool that strengthens their market positioning and enhances investor confidence. Policymakers and regulators can leverage these findings to promote sustainability practices across industries, encouraging firms to prioritize ESG performance as a pathway to financial success and stakeholder value. By integrating sustainability into core business strategies, firms can achieve long-term growth while addressing global challenges, such as environmental degradation and social inequality.

5. Implication

5.1. Theoretical Implications

This study contributes to the growing body of literature on sustainability and corporate performance by offering a comprehensive understanding of the relationships among ESG performance, firm performance, sustainability value-based performance, and firm value. “By incorporating sustainability value-based performance as a mediating variable, the study expands existing theories, such as stakeholder theory and resource-based theory, which emphasize the importance of balancing stakeholder interests and leveraging firm resources for sustainable outcomes. The findings demonstrate that ESG performance and firm performance influence firm value not only directly but also indirectly through sustainability-driven outcomes. This provides empirical evidence supporting the idea that sustainability value creation acts as a critical mechanism in translating responsible business practices and financial success into long-term firm value. The research also highlights the role of structural equation modelling (SEM-PLS) in examining complex relationships and mediation effects, thereby advancing methodological approaches in sustainability and corporate finance studies.

5.2. Practical/Managerial Implications

From a managerial perspective, the findings emphasize the importance of integrating ESG initiatives into business strategies to drive sustainability value-based performance, which, in turn, enhances firm value. Managers should view ESG performance not as a cost burden but as a strategic investment that generates tangible and intangible value. For example, implementing environmentally sustainable practices such as resource optimization, waste reduction, and energy efficiency can yield operational cost savings and risk mitigation benefits. Additionally, focusing on social initiatives, including employee well-being, ethical supply chains, and community engagement, can enhance employee productivity, stakeholder trust, and brand reputation. Managers are encouraged to adopt a value-based sustainability framework that aligns ESG objectives with financial performance goals, ensuring long-term competitiveness and resilience. The study also provides insights for firms on measuring sustainability value-based performance as an essential metric that bridges the gap between ESG practices and financial outcomes, helping managers communicate the value of their sustainability efforts to investors and other stakeholders effectively.

5.3. Policy Implications

The study offers valuable implications for policymakers and regulatory bodies aiming to promote sustainable corporate practices. The findings highlight the significant role of ESG performance in driving firm value through sustainability value-based performance, underscoring the need for policies that encourage firms to adopt sustainability-focused initiatives. Policymakers can introduce incentives, such as tax breaks, subsidies, or access to green financing, for firms that implement and report on their ESG efforts. Additionally, mandatory ESG disclosures and standardized reporting frameworks can ensure transparency, accountability, and comparability across firms, allowing investors to make informed decisions. Regulators can also emphasize sustainability performance metrics as part of corporate governance guidelines to encourage firms to align financial goals with environmental and social responsibilities. By fostering an environment where firms are rewarded for creating sustainability value, policymakers can drive the adoption of responsible business practices that contribute to economic growth, environmental preservation, and societal well-being.

6. Conclusion

This study provides valuable insights into the complex relationships between Environmental, Social, and Governance (ESG) performance, firm performance, sustainability value-based performance, and firm value. “By demonstrating that sustainability value-based performance acts as a critical mediating variable, the research highlights how firms can translate ESG efforts and financial performance into long-term value. The findings indicate that both strong ESG practices and solid financial performance are essential for enhancing firm value. However, it is the sustainability-driven outcomes such as improved operational efficiency, enhanced brand reputation, and stakeholder trust that truly mediate this relationship. This study not only confirms the significance of ESG performance in contributing to firm value but also emphasizes that achieving sustainability value-based performance is crucial for firms aiming to create long-term competitive advantages and resilience in an increasingly sustainability-conscious market.

Furthermore, the research underscores the need for companies to integrate sustainability into their strategic frameworks in a way that goes beyond mere compliance or reputation-building. Firms that actively pursue ESG practices are better positioned to generate value through cost reductions, risk mitigation, and enhanced stakeholder relationships. Sustainability value-based performance, as shown in this study, is not just a byproduct of ESG efforts but an essential component that links responsible business practices with tangible financial outcomes. The findings encourage managers to recognize the importance of aligning environmental, social, and governance considerations with core business strategies, viewing them as a pathway to creating both financial and non-financial value. This strategic alignment can lead to more informed decision-making and greater shareholder satisfaction, making sustainability a key driver of business success.

Finally, this study offers several practical implications for policymakers and regulators. By recognizing the role of sustainability value-based performance in mediating the effects of ESG performance on firm value, policymakers can implement regulatory frameworks that incentivize firms to adopt comprehensive sustainability practices. This may include offering tax incentives, promoting ESG disclosures, or developing guidelines that help firms integrate sustainability into their operations. Such policies not only support the transition toward a more sustainable economy but also ensure that firms are held accountable for their ESG efforts, ultimately contributing to long-term economic, environmental, and social benefits. For investors, the study emphasizes the importance of incorporating sustainability metrics into investment strategies, as firms with strong sustainability value-based performance are likely to be more resilient and deliver better long-term returns. Overall, the study highlights that sustainable business practices are not only ethically imperative but also strategically beneficial, offering a clear roadmap for firms and policymakers alike to navigate the future of responsible corporate growth.

While this study provides valuable insights into the relationship between ESG performance, firm performance, sustainability value-based performance, and firm value, there are several limitations that must be considered. First, the research is limited to manufacturing companies listed on the Indonesia Stock Exchange (BEI), which may not fully represent the broader spectrum of industries or regions. The findings may, therefore, be context-specific and may not be directly applicable to firms in other sectors or countries with different regulatory, economic, and cultural environments. Additionally, the reliance on secondary data from publicly available reports may introduce biases or inconsistencies, as firms might selectively disclose their ESG initiatives or financial performance metrics, potentially affecting the accuracy of the data.

Further research could address these limitations by expanding the sample size to include firms from various sectors, regions, or emerging markets, thereby enhancing the external validity of the findings. Additionally, exploring the impact of specific ESG dimensions, such as environmental sustainability, social practices, and governance, separately could offer deeper insights into which aspects of ESG performance have the most significant influence on sustainability value-based performance and firm value. Future studies could also investigate the role of corporate governance structures and leadership styles in shaping ESG performance and sustainability outcomes, as these factors may mediate or moderate the relationships explored in this study.

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