

ESG IMPACTS ON FISCAL RESILIENCE: COST OF CAPITAL AND MANUFACTURING FIRM VALUE

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ABSTRACT

The global investment paradigm shift emphasizes the role of Environmental Social Governance (ESG) Performance in creating sustainable firm value, yet empirical evidence in emerging markets remains inconsistent. This study addresses this gap by simultaneously examining the effect of ESG on Firm Value (Tobin's Q) and the efficiency of the Cost of Capital (CoD and CoE), focusing on the high risk Indonesian Manufacturing Sector. Employing Fixed Effect Panel Data Regression on 225 observations from 2019–2023, the main results demonstrate that ESG positively and significantly affects Tobin's Q (supporting Signaling Theory) and negatively and significantly affects CoE (confirming Risk Mitigation). Conversely, ESG does not significantly affect CoD. The study's primary contribution is the simultaneous empirical validation of the effectiveness of ESG in value creation and equity cost savings in the Indonesian equity market post OJK regulation. The policy implications highlight that ESG is a core financial strategy for management and underscore the need for regulatory intervention to internalize ESG in bank credit risk models.

Keywords: *Cost of Capital, ESG Performance, Fiscal Resilience, Firm Value, Manufacturing Sector.*

A. INTRODUCTION

The trajectory of global business and investment development in this decade has undergone a fundamental paradigm shift, moving from a sole focus on short term profit optimization toward the creation of sustainable firm value. The concept of value has expanded beyond traditional financial metrics and now explicitly incorporates Environmental, Social, and Governance (ESG) (Rodineau, 1998). This transformation is driven by a growing global awareness that business activities neglecting environmental dimensions (such as carbon emissions and pollution) and social dimensions (such as unethical labor practices) will create significant operational and financial risks in the future (Lins et al., 2017). Consequently, for modern investors, ESG performance has transformed from a mere ethical consideration into a crucial variable in risk and return analysis.

In Indonesia, the pressure to integrate ESG into business strategy and financial reporting is increasingly palpable. The Financial Services Authority (OJK) has issued regulations encouraging public companies to prepare and publish Sustainability Reports, emphasizing the importance of non financial accountability (Otoritas Jasa Keuangan, 2017). In the capital market, global investment funds are increasingly allocated through Sustainable and Responsible Investment (SRI) mechanisms. Global asset managers utilize ESG scores and ratings as a mandatory filter. Research confirms that investors actively use ESG data to assess corporate resilience amid external shocks, indicating that ESG performance is viewed as a proxy for a firm's risk management quality (Amir & Serafeim, 2018). Thus, a company's ability to demonstrate solid ESG performance is believed to unlock greater access to foreign and domestic capital, while simultaneously mitigating disincentive risks from regulators and stakeholders (Darsono et al., 2025).

This research specifically focuses on the Manufacturing Sector in Indonesia, a sector that bolsters economic growth while simultaneously serving as a critical arena for ESG implementation. The manufacturing sector leaves a large environmental footprint, often characterized by high energy consumption, significant waste generation, and greenhouse gas emissions. Socially, this sector is vulnerable to issues regarding fair labor practices, occupational health and safety (OHS), and complex industrial relations. These high risk characteristics make the ESG performance of manufacturing firms highly sensitive to firm value. An environmental or social scandal in this sector can rapidly destroy reputation, trigger consumer boycotts, and lead to substantial regulatory fines. Conversely, investments in cleaner production technologies or transparent governance practices can substantially enhance reputation and operational sustainability.

Theoretically, the relationship between ESG performance and firm value is analyzed through the frameworks of Stakeholder Theory and Signaling Theory (Sumarno & Pratomo, 2025). Stakeholder Theory argues that companies that successfully manage relationships with all stakeholders, not just shareholders (Freeman & MvVea, 1984), will be more stable and highly valued by the market due to the creation of a strong social license to operate. Superior ESG performance serves as a credible signal to the capital market that the company possesses management with integrity, the ability to foresee long term risks, and superior managerial capabilities (Connelly et al., 2011). Investors are believed to respond to

these signals by assigning a premium to the company's market (Ida Ayu Putu & Devi, 2024). Other studies also indicate that the governance (G) component has a particularly strong impact on increasing firm value by reducing information asymmetry between management and investors, often measured using the Tobin's Q ratio as a proxy for firm value (Falikhatun et al., 2020; Gillan & Starks, 2003).

Beyond influencing stock market valuation, ESG also maintains a strong correlation with the Cost of Capital from a Financial Management perspective. This relationship is primarily driven by the concept of risk reduction. Robust ESG practices (e.g., strict environmental compliance or transparent governance) effectively reduce the probability of adverse non systematic risk events, such as environmental disasters, lawsuits, or fraud (Eccles et al., 2014; Fiorillo et al., 2025a). From an investor's standpoint, this risk reduction means the company becomes a safer investment. Based on asset pricing models (such as CAPM), lower risk directly decreases the required rate of return by investors. Consequently, companies demonstrating a high commitment to ESG are expected to access equity capital at a lower Cost of Equity and secure debt with more competitive interest rates, resulting in a lower Cost of Debt. The dominant consensus in financial literature suggests a positive correlation between ESG Performance and firm financial performance, with risk mitigation serving as a significant mediating mechanism that lowers the cost of capital (Friede et al., 2015; Rahman et al., 2025).

Despite the strong theoretical logic and global trends, empirical evidence in emerging markets like Indonesia still shows mixed results. Some studies find a positive relationship between ESG and Firm Value, while others find no effect or even a negative influence, often due to differences in ESG measurement methods (disclosure index vs. rating score) or non specific sectoral focuses. Furthermore, there is a lack of attention toward measuring E, S, and G components separately, even though each component contributes differently to risk (for instance, G-risk is more legal oriented, while E-risk is more operational oriented). This constitutes a critical gap that needs to be addressed. Moreover, over time, the commitment of manufacturing companies in Indonesia toward ESG disclosure has continued to grow. This trend is reflected in the increasing number of issuers publishing Sustainability Reports in recent years, indicating that the available data have become more comprehensive and representative. This assessment is based on the Annual Reports and Sustainability Reports of manufacturing sector issuers listed on the Indonesia Stock Exchange (IDX), as presented in Table 1:

Table 1.
Trends in the Number of Manufacturing Issuers Publishing Sustainability Reports (2019–2023)

Year	Number of Manufacturing Issuers Publishing Sustainability Reports	Percentage of Total Manufacturing Firms on the IDX
2019	40	17%
2020	55	23%
2021	68	29%
2022	80	34%
2023	90	38%

Source: Author's analysis, 2024.

The upward trend in disclosure shown in Table 1 demonstrates the availability of adequate panel data for the 2019–2023 period, which represents a crucial timeframe following the implementation of OJK regulations regarding Sustainability Reports. However, a question that remains inconsistently answered in Indonesia is whether the significant differences in valuation and cost of capital indicated by the descriptive data are truly caused by the quality of ESG performance itself, once other financial factors, such as firm size, leverage, and profitability; are controlled. The inconsistency of findings in prior research concerning ESG and financial performance (e.g., the review by Friede et al., 2015) further reinforces the need for a focused and methodologically robust study. Such a study, specifically examining the Indonesian manufacturing sector, is essential to provide clear guidance for corporate management and investors. Therefore, this research aims to empirically and deeply examine whether ESG performance exerts a significant and consistent influence on Firm Value (Tobin's Q) and Cost of Capital efficiency within a sample of manufacturing companies in Indonesia.

This study possesses a primary differentiating factor compared to previous literature through its specific focus on the manufacturing sector in Indonesia during the 2019–2023 period. Unlike general cross-sectoral studies, this research captures the phenomenon following the implementation of OJK regulations, specifically POJK No. 51/2017, where sustainability disclosure has begun to show a consistent upward trend. Furthermore, this study addresses a critical research gap by simultaneously examining two fiscal mediation mechanisms, which are value creation and risk mitigation, within a single and comprehensive empirical model.

B. LITERATURE STUDY

Recent developments in modern Financial Management and Accounting literature demonstrate a significant convergence of focus toward non-financial factors, specifically Environmental, Social, and Governance (ESG), as key determinants of long-term corporate performance and sustainability. Theoretically, the relationship between ESG performance and Corporate Financial Performance (CFP) is analyzed through two primary lenses: Stakeholder Theory and Signaling Theory (Freeman & MvVea, 1984; Lins et al., 2017). Stakeholder Theory argues that companies that successfully manage relationships with all stakeholders, beyond just shareholder interests, tend to mitigate social and reputational conflicts, thereby

creating more stable value. Meanwhile, Signaling Theory explains that a company's commitment to superior ESG disclosure and performance serves as a credible signal to the capital market. This signal indicates that management possesses superior quality, is forward-looking, and is capable of managing non-financial risks, which fundamentally reduces information asymmetry issues between the company and its investors.

The relationship between ESG performance and Firm Value, often proxied using Tobin's Q is the subject of extensive empirical research (Yang, 2024). The Tobin's Q ratio is chosen because it reflects the market's valuation of a company's assets, which is more sensitive to growth prospects and intangible assets such as reputation and goodwill generated from ESG practices, compared to book based metrics (Tobin, 1969). Most global literature reviews, including the comprehensive study by Friede et al. (2015), find a positive correlation between ESG performance and firm value. This positive correlation is supported by the argument that strong ESG performance can generate a competitive advantage and open new market opportunities, which investors reward through a valuation (Eccles et al., 2014). Specifically, the Governance (G) component is often found to have the most consistent influence on firm value because it directly affects the quality of managerial decisions and the protection of shareholder rights (Gillan & Starks, 2003). However, these findings are not always universal; some research, particularly in emerging markets, finds neutral or negative results. This inconsistency is attributed to the "Cost Hypothesis," which views ESG investments as expenses that suppress short-term profits, or to immature ESG disclosure quality that is poorly understood by domestic investors, justifying the need for focused and up to date research.

From a Financial Management perspective, ESG also serves a primary function as a risk mitigation mechanism that influences the Cost of Capital. Robust ESG performance reduces a company's non systematic risks, such as litigation risk, regulatory fines, or reputational scandals. According to Capital Market Theory, this reduction in risk directly lowers the required rate of return by investors (Sharpe, 1964). Consequently, firms with superior ESG performance are expected to enjoy a lower Cost of Equity, as investors are willing to accept lower returns for investments perceived as safer and more stable (Fiorillo et al., 2025b; Shi et al., 2024). Similarly, creditors view high ESG companies as lower risk entities, thus offering more competitive loan interest rates, which translates to a decrease in the Cost of Debt (Ng & Rezaee, 2015). Empirical studies support this argument, where firms with high ESG ratings are found to issue bonds with lower spreads, indicating savings in borrowing costs (El Ghouli & Karoui, 2017). Nonetheless, in Indonesia, findings regarding the sensitivity of debt costs to ESG still require confirmation, given that domestic financial institutions may still prioritize physical collateral and liquidity ratios over long term non financial risks. Therefore, this study aims to confirm the cost of capital reduction hypothesis within the unique context of the Indonesian manufacturing sector by testing the specific contribution of each ESG component (E, S, and G) toward financing efficiency.

Despite strong theoretical support in global literature, the critical gap in this research lies in the inconsistent empirical findings within emerging markets.

Specifically, this study addresses the scarcity of simultaneous research examining the two primary mediation mechanisms of ESG, value creation and risk mitigation, within a single model. By focusing on the vulnerable Indonesian Manufacturing Sector, this study aims to test the validity of Signaling and Stakeholder Theories to confirm whether positive ESG signals truly generate valuation premiums and cost of capital efficiency following the strengthening of OJK regulations. Accordingly, the hypotheses in this study are:

- H₁ : ESG performance (Environmental, Social, and Governance) has a positive and significant effect on Firm Value (Tobin's Q) in the Indonesian Manufacturing Sector.
- H₂ : ESG performance (Environmental, Social, and Governance) has a negative and significant effect on the Cost of Debt in the Indonesian Manufacturing Sector.
- H₃ : ESG performance (Environmental, Social, and Governance) has a negative and significant effect on the Cost of Equity in the Indonesian Manufacturing Sector.

C. RESEARCH METHOD

This study adopts a quantitative approach with an empirical causal study design to examine the relationship between ESG performance, firm value, and the cost of capital. This design was selected to statistically confirm the validity of Signaling Theory and Stakeholder Theory within the Indonesian capital market. The primary research gap addressed is the inconsistency of findings (mixed evidence) in prior literature regarding the impact of ESG on two crucial financial performance metrics: Value Creation (Firm Value) and Risk Mitigation (Cost of Capital), particularly in the manufacturing sector. This sector is a critical focus due to its high exposure to environmental and social risks (high ESG materiality), which potentially affects valuation and capital structure more significantly than in other sectors. The study focuses on the 2019–2023 period and utilizes Panel Data Regression analysis.

Data, Population, and Sampling Technique

The research population consists of all manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the observation period from 2019 to 2023. This timeframe was chosen to encompass the pre pandemic, pandemic, and post pandemic consolidation phases, during which ESG pressures and disclosures intensified. The sampling technique employed is Purposive Sampling, based on the following primary criteria:

1. Companies must be consistently listed in the manufacturing sector of the IDX throughout the 2019–2023 period.
2. Companies must have published both Annual Financial Reports and Sustainability Reports (or provided adequate ESG data disclosure) for the same period.

Table 2.
Variables, Measurements, and Data Sources

Variable	Variable Classification	Measurement (Proksi)	Data Source
ESG Performance	Independent	ESG Disclosure Index (Score 0 to 1) through Content Analysis (Binary scoring 1/0) based on GRI Standards.	Sustainability Reports & Annual Reports
Firm Value (Q)	Dependent (Model I)	$Tobin's Q = \frac{MVE + Debt}{Total Assets}$	Annual Reports & Stock Price Data (IDX)
Cost of Debt (CoD)	Dependent (Model II)	$CoD: \frac{Interest Expense}{Average short and Long Term Debt}$	Annual Reports (IDX)
Cost of Equity (CoE)	Dependent (Model II)	$CAPM: R_e = R_f + \beta(R_m - R_f)$	SBI/SPN Rates, IHS Market Data
Firm Size (Size)	Control	Size = Ln (Total Assets)	Annual Reports (IDX)
Profitability (ROA)	Control	$ROA_{i,t} = \frac{Net Income}{Total Assets}$	Annual Reports (IDX)

Source: Author's Analysed, 2025

Panel Data Regression Model

Model I: Testing Hypothesis H₁ (ESG vs. Firm Value)

This model is designed to test Hypothesis H₁, which examines the impact of ESG Performance on Firm Value (proxied by Tobin's Q). The hypothesis tested is $\beta_1 > 0$ (a positive and significant effect). The econometric equation for Model I is as follows:

$$Tobin's Q_{i,t} = \beta_0 + \beta_1 ESG_{i,t} + \beta_2 Size_{i,t} + \beta_3 Leverage_{i,t} + \beta_4 ROA_{i,t} + \mu_i + \epsilon_{i,t} \quad (1)$$

Model II: Testing Hypotheses H₂ and H₃ (ESG vs. Cost of Capital)

This model is used to test hypotheses H₂ and H₃, specifically the influence of ESG Performance on the Cost of Capital (proxied by the Cost of Debt and Cost of Equity). The hypothesis being tested is $\gamma_1 < 0$, (exerting a negative influence, indicating cost mitigation

$$Coc_{i,t} = \gamma_0 + \gamma_1 ESG_{i,t} + \gamma_2 Size_{i,t} + \gamma_3 Leverage_{i,t} + \gamma_4 ROA_{i,t} + \mu_i + \epsilon_{i,t} \quad (2)$$

In this model, $Q_{i,t}$ denotes firm value measured by Tobin's Q, which reflects the market valuation of firm i at time t . The variable $Coc_{i,t}$ represents the Cost of Capital, proxied by either the Cost of Debt or the Cost of Equity as an indicator of financing cost. $ESG_{i,t}$ refers to ESG Performance, capturing the firm's environmental, social, and governance performance level. Firm size, $Size_{i,t}$, is measured using the natural logarithm of total assets to standardize scale differences. $Leverage_{i,t}$ indicates the firm's debt ratio, measured by DER or DAR, representing

capital structure risk. Finally, $ROA_{i,t}$ measures profitability through Return on Assets, indicating how efficiently the firm generates earnings from its assets.

D. RESULTS AND DISCUSSION

This research provides an in depth explanation regarding the strategic role of ESG as an instrument for fiscal resilience in emerging markets. A theoretical differentiating factor identified in this research is that the Indonesian equity market has begun to demonstrate maturity by appreciating non-financial signals as components of corporate intrinsic value, which supports the Signaling Theory. However, an anomaly exists in the risk mitigation mechanism where cost efficiency only occurs in equity capital, whereas in the debt market, traditional factors such as Leverage and Size still dominate risk assessment by creditors. This provides a new perspective that the internalization of ESG within the Indonesian financial system remains selective and has not been fully integrated across all financing instruments. To substantiate these findings, the following sections detail the empirical analysis, starting with an overview of the research sample.

Overview of the Research Sample

Based on the purposive sampling technique applied to the population of manufacturing companies listed on the Indonesia Stock Exchange (IDX) from 2019 to 2023, this study yielded a final sample of 45 companies that met all predetermined criteria. With a five year observation period, the total number of observations used for the panel data regression analysis is 225 observations. This sample size is considered adequate and representative for drawing valid conclusions regarding the relationship between ESG Performance, firm value, and cost of capital within this critical sector.

Table 3.
Descriptive Statistics

Var.	Obs.	Mean	Median	Std. Dev.	Min	Max
ESG Performance	225	0.654	0.680	0.152	0.310	0.950
Firm Value (Q)	225	1.341	1.150	0.789	0.850	4.560
Cost of Debt (CoD)	225	0.057	0.055	0.019	0.030	0.110
Cost of Equity (CoE)	225	0.112	0.108	0.035	0.065	0.205
Size (Ln Aset)	225	29.56	29.80	1.55	26.10	33.15

Source: Author's Analysed, 2025

Based on the Descriptive Statistics Table from 225 observations of the manufacturing company sample, the general overview of the research variables reveals trends that are crucial for hypothesis testing. The ESG Performance variable has a mean value of 0.654 with a median of 0.680, indicating that the majority of companies have achieved above average ESG disclosure levels (a distribution slightly skewed to the left). However, the moderate standard deviation (0.152) reflects significant heterogeneity in ESG commitment within this sector, ranging from companies with minimal scores (0.310) to those near perfection (0.950). This disparity represents a vital gap to be tested: whether these broad differences in ESG performance truly impact financial performance.

Regarding the dependent variables, Firm Value (Q) shows a relatively high mean (1.341), well above the book value (1.0), with a maximum value reaching 4.560. This high average suggests that the market assigns a significant valuation premium to the sampled manufacturing firms, consistent with Signaling Theory, which hypothesizes that intangible assets, such as ESG reputation, are highly valued. Most critical is the very high standard deviation (0.789), which underscores extreme disparities in market valuation between companies. This substantial variability reinforces the necessity of this study to examine whether ESG Performance can explain such substantial valuation differences.

Furthermore, the Cost of Capital components (reflecting Fiscal Resilience) show a more homogeneous pattern. Both the Cost of Debt (CoD) (Mean 0.057) and Cost of Equity (CoE) (Mean 0.112) have relatively small standard deviations (0.019 and 0.035, respectively). This homogeneity indicates that, on average, the credit and equity risks of manufacturing companies are assessed fairly uniformly by investors. However, the low average CoD (5.7%) and reasonable CoE (11.2%) provide a solid baseline. Hypothesis testing (H₂ and H₃) will subsequently focus on whether the slight variations in these capital costs can be explained by ESG Performance, in line with Risk Mitigation Theory, which claims that ESG can suppress the required rate of return demanded by investors. In summary, the descriptive data reveals high variability in ESG Performance and Firm Value (the primary variables), contrasting with low variability in the Cost of Capital, providing a strong empirical basis for testing the causal relationships among these variables.

Analysis of Panel Data Regression Hypothesis Testing

Hypothesis testing (H₁, H₂, and H₃) was conducted using the Fixed Effect Model (FEM), selected based on the consistency of the Chow Test and Hausman Test results. This model effectively controls for unobserved heterogeneity among the sampled manufacturing companies. The regression estimation results indicate that Environmental, Social, and Governance (ESG) Performance exerts significantly different influences on the two primary mechanisms of corporate fiscal resilience: value creation and financing risk mitigation. The predictive power of the models proved adequate, with Adjusted R-squared (R^2) values ranging from 41.1% to 48.5%.

Table 4.
Panel Data Regression Results

Variable	Coeff: I:Q)	P_{value}	Coeff (Model IIa: CoD)	P- value	Coeff (Model IIb: CoE)	P_{value}
ESG	0.845***	0.003	-0.009	0.125	-0.032**	0.021
Size	0.152*	0.041	-0.002**	0.035	0.005	0.187
Leverage	-0.450***	0.001	0.015***	0.000	0.045***	0.000
ROA	1.201***	0.000	-0.008	0.105	-0.010	0.065
R^2	0.485		0.352		0.411	

Source: Author's Analysis, 2025

The Influence of ESG Performance on Firm Value (H₁)

The regression results for Model I indicate that ESG Performance has a positive and highly significant coefficient of 0.845 ($p = 0.003$). This result supports Hypothesis H₁, confirming a positive and significant relationship between ESG Performance and Firm Value (Tobin's Q). This finding is consistent with Signaling Theory; the Indonesian capital market assigns a substantial valuation premium (0.845 units per unit increase in ESG) to manufacturing firms that excel in sustainable practices. In a sector with high environmental and social risks, solid ESG performance serves as a credible signal of management quality, long term risk management capabilities, and generated goodwill, all of which are highly valued by investors through an increase in Tobin's Q. This suggests that transparency in ESG aspects effectively mitigates information asymmetry, allowing investors to perceive sustainability as a proxy for a firm's fiscal resilience against future non-financial uncertainties. This finding is supported by similar research stating that ESG performance is no longer merely a compliance cost but a strategic investment that creates competitive advantage and enhances corporate value (Fatemi et al., 2018; Rahman et al., 2025; Wong et al., 2021).

The Influence of ESG Performance on the Cost of Debt (H₂)

In Model IIA, the ESG Performance variable shows a negative coefficient of -0.009 with a P_{value} of 0.125. Since the P_{value} exceeds the significance threshold ($\alpha = 5\%$ or 10%), it is concluded that ESG Performance has no statistically significant effect on the Cost of Debt (CoD). Consequently, Hypothesis H₂ is rejected. This finding contrasts with general risk mitigation logic but can be explained within the context of emerging credit markets. Creditors in Indonesia, particularly in the manufacturing sector, tend to prioritize traditional financial indicators, such as Leverage and physical collateral (evidenced by the significantly positive Leverage coefficient on CoD), over long term non financial risks (ESG) when determining loan interest rates. This suggests that the role of ESG in improving fiscal efficiency has not yet been fully internalized within debt pricing mechanisms. This suggests a selective internalization of ESG within the Indonesian financial system, where debt markets lag behind equity markets in appreciating sustainability signals. This finding is consistent with prior research indicating that in emerging economies, creditors often focus more on immediate solvency and leverage than on ESG transparency when assessing default risks (Bae et al., 2021; Eliwa et al., 2021).

The Influence of ESG Performance on the Cost of Equity (H₃)

The regression results for Model IIB show that ESG Performance has a negative and significant coefficient of -0.032 ($p = 0.021$). This result supports Hypothesis H₃, confirming that ESG Performance has a negative and significant effect on the Cost of Equity (CoE). This finding strongly supports the role of ESG as a risk mitigation mechanism. The decrease in CoE indicates that equity investors are willing to lower their required rate of return because high ESG firms are perceived as more stable and possess lower non systematic failure risks. With a lower CoE, manufacturing companies can access equity capital more efficiently,

directly strengthening their fiscal resilience. This suggests that superior sustainability performance serves as a powerful instrument to reduce the firm's risk profile, thereby lowering the risk premium demanded by the market. This finding is consistent with previous studies which demonstrate that high-quality ESG disclosure effectively reduces equity financing costs by decreasing information asymmetry and enhancing investor confidence (Dhaliwal et al., 2011; Ng & Rezaee, 2015).

Analysis of Control Variables

Beyond the primary variables, the regression results provide critical insights from the control variables. In Model I (Firm Value), the positive and significant effects of Firm Size (0.152, $p = 0.041$) and Profitability/ROA (1.201, $p = 0.000$) align with the Resource-Based View (RBV), where larger scale and superior efficiency are perceived as competitive advantages that drive market valuation (Fama & French, 1992). Conversely, the negative impact of Leverage (-0.450, $p = 0.001$) suggests that in the Indonesian context, high debt is viewed as a financial distress signal rather than a tax shield benefit.

In Models IIA and IIB, the significant positive influence of Leverage on both Cost of Debt (0.015, $p = 0.000$) and Cost of Equity (0.045, $p = 0.000$) strongly confirms the Trade-off Theory, where increased financial risk directly escalates the risk premium demanded by both creditors and shareholders (Modigliani & Miller, 1963). The negative effect of Size on CoD (-0.002, $p = 0.035$) further validates the 'too-big-to-fail' perception among creditors, granting larger firms lower interest rates due to higher collateral capacity. Overall, the consistent behavior of these control variables reinforces the integrity of the model, ensuring that the observed impact of ESG Performance is isolated from financial biases.

E. CONCLUSIONS

This study concludes that ESG Performance plays a critical role in determining the fiscal resilience and market value of manufacturing companies in Indonesia, although its impact is selective. The results of the hypothesis testing provide strong support for Signaling Theory and Risk Mitigation Theory within the equity market. ESG Performance is proven to have a positive and significant effect on Firm Value (Tobin's Q), confirming that the market assigns a substantial valuation premium as a reward for long term risk management and the goodwill generated by ESG. Consistent with this, ESG Performance also exerts a negative and significant influence on the Cost of Equity (CoE), demonstrating that robust ESG practices effectively reduce the required rate of return demanded by investors, thereby enhancing corporate fiscal efficiency through lower equity financing costs. However, the impact of ESG on the Cost of Debt (CoD) was found to be statistically insignificant, indicating that creditors in Indonesia still heavily prioritize traditional financial risk indicators, such as Leverage and Size, over long term nonfinancial risks (ESG) when determining interest rates. Overall, ESG serves as a primary driver for value creation and equity cost savings, but it has not yet been fully internalized within the debt pricing mechanisms of the manufacturing sector.

These findings offer concise policy implications for regulators and practitioners. For corporate management in the manufacturing sector, this study provides empirical justification that investing in ESG is not merely an expense, but a core financial strategy to enhance market valuation and suppress the cost of equity, which is vital for long term sustainability and fiscal resilience. Management should prioritize ESG disclosure as a credible signaling tool. For the Financial Services Authority (OJK), these results indicate that regulatory interventions have successfully increased equity market sensitivity toward ESG; however, more specific regulations should be considered to encourage the banking sector and credit institutions to integrate ESG scores as a mandatory variable in credit risk assessment models. This would ensure that the impact of ESG on debt cost efficiency can be fully materialized in the future.

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