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Economic Value Added, Sustainability Reporting, and Firm Value: The Moderating Role of Risk Level

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ABSTRACT

This study examines the effect of Economic Value Added (EVA) and sustainability reporting on firm value, as well as the moderating role of risk level in these relationships. The sample consists of basic material manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2022–2024 period. Secondary data were obtained from companies' annual reports accessed through the official IDX website and corporate websites. Using a purposive sampling technique, 42 firms were selected as the research sample. Panel data regression analysis with a moderating variable was employed, and the data were processed using EViews 12. The results indicate that Economic Value Added has a positive and significant effect on firm value, while sustainability reporting has a negative and insignificant effect. Furthermore, the risk level moderates the relationship between EVA and firm value by weakening its effect, but it does not moderate the relationship between sustainability reporting and firm value. These findings provide important implications for managers, investors, and policymakers in formulating value creation strategies, enhancing risk management practices, and optimizing sustainability disclosure.

Keywords: Economic Value Added; Sustainability Reporting; Risk Level; Firm Value

INTRODUCTION

In an increasingly competitive and uncertain global business environment, firm value has become a central concern for corporate managers, investors, and policymakers. Firm value reflects the market's assessment of a company's ability to generate sustainable returns and long-term growth, and it serves as a key indicator of managerial performance and shareholder wealth maximization (Aydoğmuş et al., 2022). Traditionally, firm value has been evaluated primarily through accounting-based performance measures; however, these measures have been criticized for their inability to fully capture economic profitability and long-term sustainability (Cardillo & Basso, 2025). As a result, both scholars and practitioners have increasingly emphasized value-based performance measures and non-financial disclosures as complementary tools in assessing corporate performance.

One widely recognized value-based performance measure is Economic Value Added (EVA), which reflects a firm's ability to generate economic profit after accounting for the full cost of capital (Chen et al., 2023). Unlike conventional accounting profits, EVA incorporates the opportunity cost of invested capital, thereby providing a more accurate representation of true value creation. From an agency theory perspective, EVA is considered an effective mechanism for aligning managerial incentives with shareholder interests, as it evaluates performance based on wealth creation rather than accounting earnings (Chen et al., 2023). Prior studies suggest that firms with positive and higher EVA tend to be perceived more favorably by the market, as they signal efficient capital utilization and superior managerial decision-making (Masliza et al., 2021). Consequently, EVA has been widely adopted in both academic research and managerial practice as a benchmark for assessing firm value.

In parallel with the growing emphasis on financial value creation, corporate sustainability has emerged as a critical dimension of firm performance. Increasing environmental degradation, social inequality, and governance failures have heightened stakeholder awareness and regulatory pressure on corporations to operate responsibly (Handoyo, 2024). Sustainability reporting, particularly those based on the Global Reporting Initiative (GRI) standards, has become an important medium through which firms communicate their environmental, social, and governance (ESG)

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practices to stakeholders (Bais et al., 2024). From the perspective of stakeholder theory, sustainability disclosure enhances transparency, strengthens stakeholder trust, and reduces information asymmetry, which may ultimately contribute to improved firm value (An et al., 2025). Investors increasingly demand non-financial information to assess corporate resilience, ethical conduct, and long-term viability, especially in industries with significant environmental and social impacts.

Despite the theoretical arguments supporting the positive role of both EVA and sustainability reporting in enhancing firm value, empirical evidence remains mixed. Numerous studies document a positive relationship between EVA and firm value, suggesting that markets reward firms that generate economic profits beyond their cost of capital (Tudose et al., 2021). Conversely, other studies report insignificant or even negative effects, indicating that the relevance of EVA may vary across industries, economic conditions, and firm-specific characteristics (P. M. Tripathi et al., 2023). Similarly, sustainability reporting has been found to positively influence firm value in some contexts, while other studies reveal weak or insignificant effects, particularly in emerging markets where sustainability practices may not yet be fully integrated into investment decision-making (Suhartini et al., 2024). These inconsistencies highlight the need for further investigation into the conditions under which financial and non-financial performance measures affect firm value.

One important factor that may explain these mixed findings is firm risk. Risk plays a crucial role in shaping investor perceptions and valuation decisions, as it reflects the uncertainty associated with a firm's future cash flows and financial stability (Almansour et al., 2023). High-risk firms may face greater skepticism from investors, even when they demonstrate strong financial performance or extensive sustainability disclosures (Hossain & Siddiqua, 2022). In this context, risk may not only directly affect firm value but also moderate the relationship between performance indicators and market valuation. The integration of risk considerations is therefore essential in understanding how EVA and sustainability reporting influence firm value (Zahra et al., 2025). This study incorporates firm risk as a moderating variable, proxied by the Altman Z-Score, which is widely used to assess financial distress and bankruptcy risk. From an agency theory standpoint, firms with higher risk levels may be more prone to managerial opportunism and suboptimal decision-making, potentially weakening the credibility of value creation signals such as EVA (Mlawu et al., 2025). Similarly, under stakeholder theory, high-risk conditions may limit the effectiveness of sustainability initiatives, as investors and stakeholders may prioritize short-term financial stability over long-term sustainability commitments. Accordingly, risk is expected to alter how investors interpret both financial and non-financial disclosures in valuing firms (Elshandidy & Zeng, 2022).

The manufacturing sector, particularly the basic materials industry, provides a compelling context for examining these relationships. Firms in this sector play a vital role in economic development but are also characterized by high capital intensity, exposure to commodity price volatility, and significant environmental impact (Chau et al., 2025). In Indonesia, manufacturing firms in the basic materials sector are among the largest contributors to hazardous waste generation, making sustainability reporting especially relevant (Suhartini et al., 2024). At the same time, fluctuations in global demand and regulatory changes expose these firms to substantial financial and operational risks (Ardiyono & Patunru, 2023). These characteristics make the sector an ideal setting for analyzing the interplay between value creation, sustainability disclosure, risk, and firm value.

This study focuses on manufacturing companies in the basic materials sector listed on the Indonesia Stock Exchange during the period 2022–2024. The selected period captures the post-pandemic economic environment, during which firms face heightened uncertainty alongside increasing regulatory emphasis on sustainability disclosure. Using panel data regression and moderated regression analysis, this research empirically examines the effect of EVA and sustainability reporting on firm value, as well as the moderating role of risk.

LITERATURE REVIEW

Agency Theory and Stakeholder Theory

This study is grounded in two major theoretical frameworks commonly applied in accounting and corporate governance research: Agency Theory and Stakeholder Theory. Agency Theory, developed by (Jensen & Meckling, 1976), explains the contractual relationship between principals (shareholders) and agents (managers). Due to

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differences in objectives and information asymmetry, managers may pursue personal interests at the expense of shareholder wealth, giving rise to agency costs. Consequently, effective performance measurement systems are required to align managerial decisions with shareholder value maximization. Value-based performance measures, such as EVA, are considered particularly effective in mitigating agency conflicts because they account for the cost of capital and focus on economic profit rather than accounting earnings (Chen et al., 2023).

Stakeholder Theory, introduced by (Freeman, 1984), expands the firm's responsibility beyond shareholders to include a broader set of stakeholders, such as employees, customers, communities, regulators, and the environment. According to this theory, firms that manage stakeholder relationships effectively are more likely to achieve long-term sustainability and superior performance. Sustainability reporting serves as a key mechanism through which firms communicate their social, environmental, and governance practices, thereby enhancing transparency, legitimacy, and stakeholder trust (Pizzi et al., 2024). In the context of firm valuation, stakeholder-oriented practices may contribute to improved reputation, reduced risk, and enhanced access to resources, ultimately influencing firm value.

Economic Value Added and Firm Value

EVA is a value-based performance measure that reflects the surplus generated by a firm after deducting the full cost of capital from its operating profit. EVA is calculated as the difference between Net Operating Profit After Tax (NOPAT) and capital charges, which represent the weighted average cost of capital multiplied by invested capital (Hegedűs et al., 2025). Unlike traditional accounting measures, EVA captures the true economic profit generated for shareholders and creditors.

From an agency theory perspective, EVA provides a more accurate signal of managerial performance because it discourages value-destroying investments that may increase accounting profits but fail to cover the cost of capital (Chen et al., 2023). Firms with positive EVA demonstrate efficient capital utilization and are more likely to create shareholder value. Empirical studies generally support the relevance of EVA in explaining firm value. Prior research finds that EVA is positively associated with market-based measures of firm value, such as Tobin's Q and stock prices, indicating that investors reward firms that generate economic profit.

However, the empirical evidence is not entirely consistent. Several studies report insignificant or negative relationships between EVA and firm value, suggesting that the effectiveness of EVA as a value indicator may depend on contextual factors such as industry characteristics, economic conditions, and firm-specific risk. These mixed findings indicate that while EVA is theoretically sound, its impact on firm value may not be uniform across all settings, particularly in emerging markets where capital markets may be less efficient.

Sustainability Reporting and Firm Value

Sustainability reporting refers to the disclosure of a firm's economic, environmental, and social performance, commonly structured according to GRI standards (Dindar, 2025). Sustainability reports provide stakeholders with non-financial information that complements traditional financial statements and enhances corporate transparency. Under Stakeholder Theory, sustainability disclosure reflects a firm's commitment to responsible business practices and responsiveness to stakeholder expectations (Sulemana et al., 2025).

A growing body of literature suggests that sustainability reporting can positively influence firm value by reducing information asymmetry, strengthening corporate reputation, and improving investor confidence. Empirical studies in various contexts find that firms with higher levels of sustainability disclosure tend to exhibit higher market valuations, as investors perceive such firms as less risky and more capable of sustaining long-term performance (Xu et al., 2025).

Nevertheless, the relationship between sustainability reporting and firm value remains inconclusive. Some studies report insignificant or even negative effects, particularly in developing economies (Du et al., 2026). One possible explanation is that investors may view sustainability initiatives as cost-intensive activities that reduce short-term profitability. Additionally, sustainability reporting may be perceived as symbolic or compliance-driven rather than value-enhancing, especially when disclosure quality is low or when sustainability practices are not integrated into core business strategies (Zahra et al., 2025). These contrasting findings highlight the need to examine sustainability reporting within specific institutional and industry contexts.

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Risk Level as a Moderating Variable

Risk plays a critical role in firm valuation, as it reflects uncertainty regarding future cash flows and financial stability (Kaya et al., 2025). In accounting and finance research, firm risk is commonly associated with financial distress, leverage, and volatility. This study measures risk using the Altman Z-Score, which integrates multiple financial ratios to assess the likelihood of financial distress. A higher Z-Score indicates lower risk and greater financial stability.

Risk may not only directly affect firm value but also moderate the relationship between performance indicators and market valuation. From an agency theory perspective, high-risk firms may face greater agency problems, as managers operating under financial pressure may engage in opportunistic behavior (Pouryousof et al., 2025). Consequently, signals of value creation, such as EVA, may be discounted by investors when firm risk is high. Similarly, under stakeholder theory, sustainability initiatives may be less effective in enhancing firm value when firms face significant financial risk, as stakeholders may prioritize short-term survival over long-term sustainability (Suhartini et al., 2024).

Prior empirical evidence supports the moderating role of risk in performance–value relationships. Studies show that the positive impact of financial performance and sustainability practices on firm value tends to weaken under high-risk conditions (Zahra et al., 2025). This suggests that investors incorporate risk considerations when evaluating both financial and non-financial information.

Hypotheses Development

Based on the theoretical framework and empirical evidence discussed above, the following hypotheses are proposed:

H1: Economic Value Added has a positive and significant effect on firm value.

H2: Sustainability reporting has a positive and significant effect on firm value.

H3: Risk level weakens the relationship between Economic Value Added and firm value.

H4: Risk level weakens the relationship between sustainability reporting and firm value.

METHODS

Research Design

This study adopts a quantitative research design with a causal approach to examine the effect of EVA and sustainability reporting on firm value, as well as the moderating role of risk level. A quantitative approach is appropriate because the study aims to test hypotheses derived from established theories using numerical data and statistical techniques. The causal design enables the identification of cause-and-effect relationships among the variables, particularly how value-based financial performance and non-financial disclosure influence market valuation under varying levels of risk. Panel data analysis is employed, combining cross-sectional and time-series data, to enhance the robustness of the empirical results. Panel data allow for greater variability, reduced multicollinearity, and improved efficiency of parameter estimates compared to purely cross-sectional or time-series data.

Population and Sample Selection

The study examines all manufacturing companies in the basic materials sector listed on the Indonesia Stock Exchange (IDX), focusing on sustainability disclosure and risk considerations due to the sector's capital intensity, environmental impact, and commodity price volatility. The observation period spans from 2022 to 2024, reflecting a post-pandemic era marked by economic uncertainty and a regulatory push for sustainability reporting. A purposive sampling technique identified 42 firms that met specific criteria, resulting in 126 firm-year observations.

Data Sources and Data Collection

This study employs secondary data sourced from publicly available channels, primarily annual reports and financial statements from the Indonesia Stock Exchange and company websites. Data on sustainability disclosures is gathered from sustainability or integrated annual reports. A documentary research method is implemented for systematic

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review and extraction of relevant information, with financial figures cross-verified against audited statements to ensure reliability.

Variable Measurement

Firm value is assessed using Tobin's Q, indicating market value relative to asset replacement cost. EVA calculates economic profit after deducting capital charges (WACC times invested capital). Sustainability reporting utilizes a binary scoring index based on GRI Standards, measuring the ratio of disclosed items to total GRI indicators. Risk level is represented by the Altman Z-Score, combining financial ratios to evaluate a firm's financial distress likelihood, with higher scores indicating lower risk and better stability.

Model Specification

To test the proposed hypotheses, the study employs panel data regression models. The baseline model examines the direct effects of EVA and sustainability reporting on firm value. To assess the moderating role of risk, interaction terms between risk level and the independent variables are included in the regression model.

The general regression model is specified as follows:

$$\text{Firm Value} = \beta_0 + \beta_1 \text{EVA} + \beta_2 \text{Sustainability} + \beta_3 \text{Risk} + \beta_4 (\text{EVA} \times \text{Risk}) + \beta_5 (\text{Sustainability} \times \text{Risk}) + \varepsilon$$

Where β represents regression coefficients and ε denotes the error term.

Estimation Technique

Panel data regression utilizes three models: Common Effect, Fixed Effect, and Random Effect. Model selection is performed via the Chow and Hausman tests. Classical assumption tests, including those for multicollinearity, heteroskedasticity, and autocorrelation, are essential for validating regression results. Moderated Regression Analysis (MRA) assesses interaction effects between risk level and independent variables, with analysis executed using EViews 12.

RESULTS

Descriptive Statistics

Table 1 presents descriptive statistics from a study of 126 firm-year observations of manufacturing companies in the basic materials sector on the Indonesia Stock Exchange from 2022 to 2024. Firm Value, ranging from 0.067 to 5.165 with a mean of 0.832, is positively skewed (skewness of 2.722) and leptokurtic (kurtosis of 12.410), indicating outliers and non-normal distribution (Jarque-Bera value 0.000). Economic Value Added (EVA) spans from -342 billion to 889 billion, with a mean of 86.3 billion, also showing positive skewness (2.341) and leptokurticity (kurtosis 9.878), resulting in non-normality (Jarque-Bera value 0.000). The Sustainability Report variable ranges from 0 to 0.991, with a mean of 0.363, exhibiting a symmetrical distribution (skewness 0.149) but platykurtic characteristics (kurtosis 1.398) and non-normality (Jarque-Bera value 0.000). Risk Level ranges from 0.219 to 25.375, averaging 4.426, with a notable skewness of 2.471 and a leptokurtic distribution (kurtosis 10.352), also demonstrating non-normality (Jarque-Bera value 0.000).

Table 1 Statistical Test Descriptive

	Company Values	Economic Value Added	Sustainability Report	Level Risk
Mean	0.832	86,300,000,000	0.363	4,426
Median	0.634	17,600,000,000	0.428	3,172
Maximum	5,165	889,000,000,000	0.991	25,375
Minimum	0.067	-342,000,000,000	0,000	0.219
Std. Dev.	0.774	168,000,000,000	0.348	4,065
Skewness	2,722	2,341	0.149	2,471
Kurtosis	12,410	9,878	1,398	10,352
Jarque-Bera	620,605	363,585	13,935	412,090

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Probability	0,000	0,000	0,000	0,000
Observations	126	126	126	126

Panel Data Model Selection

The Chow test based on table 2 shows a probability value of 0.000 which is smaller than 0.05, so the selected estimation model is the FEM which is better for estimating the first panel data regression than the common effect model.

Table 2 Chow Test

Effects Test	*Statistics*	*df*	*Prob.*
Cross-section F	5,622	(41.81)	0,000
Cross-section Chi-square	169,730	41	0,000

The Hausman test indicates a probability value of 0.027, which is below 0.05, leading to the selection of the FEM for multiple regression and moderation testing. This choice is supported by both the Hausman test and the Chow test, while the Lagrange multiplier test is disregarded (table 3).

Table 3 Hausman test

Test Summary	*Chi-Sq. Statistic*	*Chi-Sq. df*	*Prob.*
Random cross-section	9,132	3	0.027

Assumptions Classic

The multicollinearity test (table 4) indicates no multicollinearity problem, as the correlation value between variables is below 0.9.

Table 4 Multicollinearity

	Company Values	**Economic Value Added**	**Sustainability Report**	**Risk Level**
Company Values	1,000	0.292	0.293	-0.012
Economic Value Added	0.292	1,000	0.435	-0.065
Sustainability Report	0.293	0.435	1,000	-0.033
Risk Level	-0.012	-0.065	-0.033	1,000

The regression results indicate that economic value added, sustainability reports, and risk level do not have a significant direct effect on firm value ($p > 0.05$). The Harvey test also indicates no heteroscedasticity, indicating that the regression model meets classical assumptions, and the estimated results can be used for further analysis, including testing the moderating effect of risk level (table 5).

Table 5 Heteroscedasticity Test

Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	-6,569	1,896	-3,463	0.009
Economic Value Added	0,000	0,000	0.460	0.646
Sustainability Report	3,108	4,894	0.635	0.527
Risk Level	-0.079	0.121	-0.652	0.515

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The test results indicate that the du value (1.758) is less than the dw value (2.197), which is in turn less than the 4-du value (2.242). Consequently, it is concluded that the data shows no signs of autocorrelation symptoms (table 6).

Table 6 Autocorrelation Test

Root MSE	**0.368**	**R-squared**	**0.771**
Mean dependent var	0.832	Adjusted R-squared	0.646
SD dependent var	0.774	SE of regression	0.460
Akaike info criterion	1,557	Sum squared residual	17,144
Schwarz criterion	2,570	Log likelihood	-53,124
Hannan-Quinn criter	1,969	F-statistic	6,202
Durbin-Watson stat	2,197	Prob(F-statistic)	0,000

Hypothesis Testing

Equation Y = 1.433 + 0.000*X1 – 2.008*X2 demonstrates that economic value added significantly positively affects firm value, shown by a positive coefficient of 0.000 and a p-value of 0.017. Conversely, the sustainability report negatively impacts firm value with a coefficient of -2.008, but is not statistically significant (p-value of 0.064) Table 7).

Table 7 Partial T-Test

Variable	***Coefficient***	***Std. Error***	***t-Statistic***	***Prob.***
C	*1,433*	*0.396*	*3,616*	*0,000*
Economic value added	*0,000*	*0,000*	*2,434*	*0.017*
Sustainability report	*-2,008*	*1,071*	*-1,874*	*0.064*

The table 8 shows an adjusted r-square value of 0.679, indicating that 67.9% of the company's value is influenced by the variables economic value added, sustainability report, risk level, X1Z, and X2Z. The remaining 32.1% is influenced by other variables outside this research model.

Table 8 Coefficient Test Determination

Root MSE	**0.347**	**R-squared**	**0.797**
Mean dependent var	0.832	Adjusted R-squared	0.679
SD dependent var	0.774	SE of regression	0.438
Akaike info criterion	1,468	Sum squared residual	15,191
Schwarz criterion	2,526	Log likelihood	-45,505
Hannan-Quinn criter	1,898	F-statistic	6,750
Durbin-Watson stat	2,265	Prob(F-statistic)	0,000

The moderated regression analysis reveals that the risk level variable negatively moderates the relationship between EVA and firm value, with a significant interaction coefficient of -1.240 (p = 0.003). This suggests that higher risk levels diminish the positive impact of EVA on firm value. Conversely, risk level does not significantly affect firm value directly (coefficient = -0.043, p = 0.282) but serves as a contingent factor influencing how EVA is valued in the market. Additionally, the interaction between sustainability reports and risk level shows a positive coefficient of

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0.069 but is statistically insignificant (p = 0.408), indicating that risk level does not moderate the relationship between sustainability reports and firm value (table 9).

Table 9 Regression Analysis (MRA) Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1,715	0.414	4,134	0,000
Economic Value Added	0,000	0,000	3,964	0,000
Sustainability Report	-1,965	1,048	-1,874	0.064
Risk Level	-0.043	0.040	-1,081	0.282
Economic Value Added x Risk Level	-0,000	0,000	-3,052	0.003
Sustainability Report x Risk Level	0.069	0.083	0.830	0.408

Summary of Hypotheses Testing

Table 10 summarizes the results of hypothesis testing. Hypothesis H1, which proposes a positive effect of EVA on firm value, is supported. Hypothesis H2, which predicts a positive effect of sustainability reporting on firm value, is not supported. Hypothesis H3, regarding the moderating effect of risk on the EVA firm value relationship, is supported, while Hypothesis H4, which posits a moderating effect of risk on the sustainability reporting firm value relationship, is not supported.

Table 10 Hypothesis Test Results

	Hypothesis	Results
H1	Economic Value Added Has a Significant Positive Effect on Company Value.	Accepted
H2	Sustainability Has a Significant Positive Effect on Company Value.	Rejected
H3	Risk Level Weakens the Effect of Economic Value Added on Company Value.	Accepted
H4	Risk Level Weakens the Effect of Sustainability on Company Value.	Rejected

Overall, the empirical results indicate that value-based financial performance plays a significant role in explaining firm value, while sustainability reporting does not exert a direct influence in the observed context. Risk level emerges as an important factor that conditions the effectiveness of economic value creation in enhancing firm value.

DISCUSSION

Economic Value Added and Firm Value

The results demonstrate that EVA has a positive and statistically significant effect on firm value, as measured by Tobin's Q. This finding is consistent with Agency Theory, which posits that firm value increases when managerial decisions align with shareholder interests (Zhu et al., 2024). EVA explicitly incorporates the cost of capital, ensuring that managerial performance is evaluated based on economic profit rather than accounting earnings. Consequently, positive EVA signals efficient capital utilization and value creation, which are rewarded by the market. From a valuation perspective, EVA provides investors with a clear and credible indicator of whether a firm generates returns above its capital costs (Chen et al., 2023). In capital-intensive industries such as the basic materials sector, where large investments and long project horizons are common, investors are particularly sensitive to the efficiency of capital allocation (Santos et al., 2025). The significant relationship between EVA and firm value suggests that market participants rely on value-based performance measures to assess whether firms can sustain long-term profitability.

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Furthermore, the finding indicates that EVA remains relevant in an emerging market context. Despite potential market inefficiencies and information asymmetry, investors appear capable of recognizing and pricing economic value creation. This supports the argument that EVA serves as a robust performance measure across different institutional environments, particularly when financial reporting quality and audit standards are well established (Chen et al., 2023).

Sustainability Reporting and Firm Value

In contrast to EVA, sustainability reporting does not exhibit a significant direct effect on firm value. This result suggests that sustainability disclosure, as currently practiced, does not materially influence market valuation in the observed context. From a Stakeholder Theory perspective, sustainability reporting is expected to enhance firm value by improving transparency, legitimacy, and stakeholder trust (Sulemana et al., 2025). However, the empirical findings indicate that these theoretical benefits may not yet be fully realized in the capital market. One possible explanation is that investors in emerging markets prioritize short-term financial performance and risk considerations over long-term sustainability outcomes. Sustainability initiatives often require substantial investment and may not generate immediate financial returns, leading investors to perceive them as cost centers rather than value drivers (Hermundsdottir & Aspelund, 2021). Additionally, sustainability reporting may be viewed as compliance-oriented or symbolic, particularly when disclosure quality varies widely across firms. Another explanation relates to the maturity of sustainability practices and ESG awareness among market participants (Khatri & Kjærland, 2023). While regulatory requirements for sustainability reporting have increased, the integration of ESG information into investment decision-making may still be limited. As a result, sustainability disclosure alone may not provide a sufficiently strong signal to influence firm valuation, especially in industries characterized by high operational risk and earnings volatility.

The Moderating Role of Risk on EVA and Firm Value

The moderating analysis reveals that risk level significantly weakens the positive relationship between EVA and firm value. This finding highlights the importance of risk considerations in valuation decisions and aligns with the risk–return trade-off framework in finance theory. Even when firms generate positive economic value, high financial risk can undermine investor confidence and reduce the market's willingness to reward value creation (Bagh et al., 2025). From an agency theory perspective, high-risk conditions may exacerbate agency problems, as managers face greater pressure to meet financial obligations and may engage in short-term or opportunistic behavior (Zhu et al., 2024). Under such circumstances, investors may discount the credibility of EVA as a performance signal, leading to a weaker impact on firm value (V. Tripathi et al., 2024). This suggests that value creation alone is insufficient to enhance firm value if it is accompanied by elevated financial risk. The finding also implies that investors adopt a risk-adjusted approach when evaluating performance indicators. EVA is positively valued, but its effectiveness depends on the firm's financial stability. Firms with lower risk profiles are better positioned to translate economic value creation into higher market valuation (Chau et al., 2025).

Risk and Sustainability Reporting

The results show that risk level does not significantly moderate the relationship between sustainability reporting and firm value. This finding indicates that variations in financial risk do not alter how the market responds to sustainability disclosure. Combined with the insignificant main effect of sustainability reporting, this suggests that sustainability information does not play a central role in valuation decisions, regardless of risk conditions. From a stakeholder theory perspective, this result may reflect the limited integration of sustainability considerations into investor risk assessments (Erin & Adegboye, 2022; Sulemana et al., 2025). While sustainability initiatives are often framed as risk management tools, particularly in environmentally sensitive industries, investors may not yet perceive sustainability disclosure as a reliable indicator of reduced financial or operational risk (Schulte & Knuts, 2022). Consequently, sustainability reporting does not significantly influence firm value even under varying risk levels.

Implications for Emerging Markets and the Basic Materials Sector

The findings of this study have important implications for firms operating in emerging markets and high-impact industries. The dominance of EVA as a determinant of firm value suggests that investors place greater emphasis on

measurable financial performance than on non-financial disclosure. In the basic materials sector, where environmental and operational risks are inherently high, investors appear to prioritize economic value creation and financial stability over sustainability communication. This does not imply that sustainability is irrelevant but rather that its value relevance depends on its integration with financial performance and risk management. Sustainability initiatives that are not clearly linked to economic outcomes may fail to influence market valuation. Therefore, firms need to demonstrate how sustainability practices contribute to long-term profitability and risk mitigation to enhance their valuation impact.

Contribution to Accounting Literature

This study contributes to accounting and finance literature by providing empirical evidence on the conditional role of risk in the relationship between EVA and firm value. The findings extend agency theory by highlighting that performance-based measures are not evaluated in isolation but are assessed within a risk-adjusted framework. Additionally, the study adds to the sustainability reporting literature by showing that disclosure alone may be insufficient to influence firm value in emerging markets. By integrating financial performance, sustainability disclosure, and risk, this study offers a more comprehensive understanding of firm valuation and responds to calls for holistic approaches in accounting research.

CONCLUSSION

This study examines the effect of Economic Value Added (EVA) and sustainability reporting on firm value, with risk level acting as a moderating variable, using a sample of manufacturing companies in the basic materials sector listed on the Indonesia Stock Exchange during the period 2022–2024. By integrating value-based financial performance, non-financial disclosure, and risk considerations within a panel data framework, this study provides a more comprehensive understanding of the determinants of firm value in an emerging market context.

The empirical results indicate that EVA has a positive and significant effect on firm value. This finding confirms that firms capable of generating economic profits beyond their cost of capital are rewarded by the market through higher valuation. In contrast, sustainability reporting does not exhibit a significant direct effect on firm value, suggesting that sustainability disclosure alone does not materially influence investor valuation decisions in the observed context. Furthermore, risk level plays a critical moderating role by weakening the positive relationship between EVA and firm value, indicating that high financial risk diminishes the market's response to economic value creation. However, risk level does not significantly moderate the relationship between sustainability reporting and firm value.

Overall, the findings highlight the dominant role of value-based financial performance and financial stability in shaping firm value, while suggesting that sustainability disclosure has not yet become a decisive valuation factor in the basic materials sector in Indonesia.

Theoretical Implications

From a theoretical perspective, this study contributes to the accounting and finance literature by extending Agency Theory and Stakeholder Theory within a unified empirical framework. The positive effect of EVA on firm value supports the agency theory argument that performance measures incorporating the cost of capital effectively align managerial actions with shareholder interests. The moderating role of risk further refines this perspective by demonstrating that agency-aligned performance signals are evaluated by investors in a risk-adjusted manner.

The insignificant effect of sustainability reporting challenges the universal applicability of stakeholder theory in explaining firm value, particularly in emerging markets. While stakeholder-oriented practices are theoretically expected to enhance firm value, the findings suggest that their valuation relevance depends on institutional context, investor preferences, and the maturity of sustainability practices. This study thus contributes to ongoing debates regarding the conditions under which sustainability disclosure translates into economic value.

Practical Implications

The findings of this study offer several practical implications for corporate managers, investors, and regulators. For managers, the results emphasize the importance of focusing on economic value creation while maintaining effective risk management. Generating positive EVA is essential for enhancing firm value, but its impact can be undermined

by high financial risk. Therefore, managers should balance value creation initiatives with prudent financial policies to ensure long-term market confidence. Regarding sustainability reporting, managers should recognize that disclosure alone may not be sufficient to influence firm value. To enhance its valuation relevance, sustainability initiatives should be integrated into core business strategies and clearly linked to financial performance and risk mitigation. High-quality, consistent, and credible sustainability reporting may improve investor perception over time, particularly as ESG awareness continues to evolve. For investors, the findings suggest that EVA remains a relevant indicator of firm value, especially when evaluated alongside financial risk. Investors are encouraged to adopt a holistic approach that considers both value creation and risk conditions when assessing firm performance. For regulators and policymakers, the results highlight the need to strengthen the effectiveness and credibility of sustainability reporting frameworks. Enhancing standardization, assurance, and enforcement may improve the usefulness of sustainability information in capital market decision-making.

Limitations and Future Research Directions

Despite its contributions, this study has several limitations that provide opportunities for future research. First, the study focuses exclusively on manufacturing firms in the basic materials sector, which may limit the generalizability of the findings to other industries. Future research could extend the analysis to other sectors, such as services or technology, to examine whether the observed relationships differ across industries. Second, sustainability reporting is measured using a disclosure index based on the extent of reported items, which does not fully capture the quality or credibility of the disclosures. Future studies may incorporate qualitative assessments, third-party assurance, or ESG performance ratings to better reflect sustainability reporting quality. Third, the study uses the Altman Z-Score as a proxy for risk, which primarily captures financial distress risk. Future research could consider alternative risk measures, such as market-based risk, volatility, or environmental and regulatory risk, to provide a more comprehensive assessment of risk conditions. Finally, the relatively short observation period may not fully capture the long-term effects of sustainability initiatives on firm value. Longitudinal studies with extended time horizons may offer deeper insights into the dynamic relationship between sustainability practices and market valuation.

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