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The mediating role of financial performance in the relationship between green accounting, leverage, and firm value in basic materials sector companies listed on Indonesia Sharia Stock Index

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ABSTRACT

Introduction

Islamic In recent years, the growing emphasis on sustainability and ethical investment has prompted firms to integrate green accounting and financial management practices into their business strategies. However, evidence regarding the impact of green accounting and leverage on firm value, particularly within Islamic capital markets, remains inconclusive. This study investigates how green accounting and leverage affect firm value, with financial performance acting as a mediating variable, among basic materials firms listed on the Indonesia Sharia Stock Index (ISSI).

Objectives

This research aims to analyze the direct and indirect effects of green accounting and leverage on firm value through financial performance. It also seeks to determine whether sustainability-oriented accounting practices contribute to firm valuation and to evaluate the mediating role of profitability in shaping these relationships within an Islamic financial context.

Method

A quantitative research design was employed using panel data from six basic materials firms listed on the ISSI during 2019–2023. Green accounting was measured using environmental cost disclosure, leverage by the debt-to-equity ratio, financial performance by return on assets, and firm value by Tobin's Q. Data were analyzed using path analysis and the Random Effect Model, supported by classical assumption and Sobel tests to assess mediation effects.

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Results
The findings indicate that green accounting and leverage do not have significant direct effects on either financial performance or firm value. However, financial performance significantly mediates the relationship between green accounting and firm value, suggesting that sustainability initiatives enhance firm valuation indirectly through profitability. In contrast, financial performance does not mediate the relationship between leverage and firm value. These results demonstrate that environmental accountability contributes to firm value when translated into financial efficiency but not through debt-financed strategies.

Implications
This study highlights the need for firms to integrate environmental expenditures as strategic investments rather than operational costs. It underscores the importance of aligning sustainability initiatives with financial management and governance frameworks to optimize firm value. Policymakers should strengthen regulatory incentives for environmental reporting and enhance investor awareness to bridge the gap between sustainability performance and market valuation.

Originality/Novelty
This study contributes to sustainability accounting and Islamic finance literature by empirically establishing the mediating role of financial performance in the relationship between green accounting and firm value. It provides new insights into how environmentally responsible practices create value in emerging Islamic capital markets.

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INTRODUCTION

The growing urgency for sustainable business practices has reshaped how corporations measure and report their performance. The increasing global focus on environmental, social, and governance (ESG) concerns has led companies—especially in emerging economies—to adopt *green accounting* and environmental cost disclosures as integral elements of corporate governance and strategic planning. Scholars such as Sreepriya J. et al. (2023) and Purwanti (2024) emphasize that environmental transparency not only enhances a firm's reputation but also contributes to long-term value creation through risk mitigation, operational efficiency, and stakeholder trust. In manufacturing and basic materials sectors, where environmental externalities are substantial, firms are under heightened scrutiny to internalize ecological costs and align their reporting with international standards such as the Global Reporting Initiative (GRI). As markets evolve, sustainable operations have

transitioned from voluntary initiatives into strategic imperatives essential for maintaining competitiveness and legitimacy in both domestic and global markets.

The growing body of literature suggests that sustainability-oriented disclosure strengthens firm value by improving investor confidence and corporate accountability (Bania & Biswas, 2024; Chaidir et al., 2024; Ja'afar et al., 2024). These findings underscore the economic potential of sustainability frameworks that integrate green financing, social responsibility, and governance mechanisms. In emerging markets, however, compliance with such frameworks varies, influenced by differences in institutional maturity and stakeholder pressure (Nurim & Asmara, 2019). The urgency for convergence toward internationally recognized sustainability standards is evident in studies by Girón et al. (2021), who demonstrate that firms implementing comprehensive environmental reporting achieve superior financial performance in Asian and African markets. Consequently, the incorporation of green accounting within corporate strategy has become both a financial and ethical necessity, linking sustainable behavior with long-term profitability and social legitimacy.

Despite the increasing popularity of sustainability reporting, many firms struggle to balance financial performance with environmental responsibility. Legitimacy and stakeholder theories offer critical frameworks for understanding this challenge. Legitimacy theory posits that companies seek to justify their existence within societal norms, while stakeholder theory emphasizes the importance of addressing the interests of multiple groups, investors, customers, regulators, and civil society. Gezgin et al. (2024) argue that non-financial disclosures serve as instruments for maintaining legitimacy, demonstrating conformity with social expectations. Similarly, Mishra et al. (2020) and Emalia & Shauki (2023) highlight that environmental transparency often arises from legitimacy crises or stakeholder pressures. Firms facing negative public perceptions or regulatory scrutiny frequently resort to sustainability disclosures to restore trust and reestablish their social license to operate.

Empirical evidence further indicates that stakeholder engagement drives corporate commitment to environmental accounting. Ceesay (2020) and Priyadarshanie et al. (2023) reveal that non-governmental organizations and consumer activism influence corporate behavior by demanding greater environmental accountability. Farooq et al. (2018) and Li et al. (2017) suggest that sustainability disclosure operates as a strategic response to stakeholder demands and a mechanism for mitigating legitimacy threats. As a result, firms are incentivized to integrate ESG metrics into their operations and reporting systems to maintain competitiveness, credibility, and access to capital. The convergence of legitimacy and stakeholder theories thus provides a strong theoretical foundation for exploring how environmental disclosures affect financial and market performance.

At the same time, financial structure remains a determining factor in corporate performance. Numerous studies confirm a generally negative correlation between leverage, commonly measured by the debt-to-equity ratio (DER), and financial performance indicators such as return on assets (ROA). Zulkifli & Agustina (2024), Neacșu & Georgescu (2024), and Hussain et al. (2023) report that higher leverage often

undermines profitability due to increased financial risk and debt-servicing costs. However, the relationship is not universally linear. Pham & Nguyen (2019) and Ghardallou (2023) observe that, under certain conditions, leverage can facilitate growth when effectively managed and aligned with investment opportunities. These contrasting findings highlight that while excessive debt may constrain operational flexibility, moderate leverage can optimize capital structure and support expansion, particularly in industries with stable cash flows or strong asset bases.

Financial performance also mediates the relationship between environmental disclosure, leverage, and firm value. Rinsman & Prasetyo (2020) and Hardiningsih et al. (2023) show that environmental practices enhance financial performance, which subsequently contributes to improved firm value. Studies by Hassan (2018), Zirman et al. (2021), and Kurnia et al. (2020) reveal that the pathway from environmental disclosure to firm value operates largely through profitability metrics like ROA. Firms that demonstrate operational efficiency alongside sustainability commitments tend to attract investors and achieve superior market valuations. Conversely, when leverage is high, financial strain can offset the benefits of environmental transparency. This suggests that the interplay between sustainability, financial health, and market valuation is complex, dependent on both strategic alignment and economic context.

In emerging and Islamic financial markets, unique institutional characteristics further shape corporate environmental behavior. Sharia-compliant finance, grounded in ethical investment principles, prohibits activities involving excessive uncertainty (gharar) and interest (riba), thereby fostering stability and ethical accountability. Damayanti (2025) and Judijanto et al. (2025) observe that the Islamic capital market promotes socially responsible and environmentally sustainable investments, encouraging firms to implement robust CSR and environmental stewardship programs. Khaddafi et al. (2025) and Batubara & Nasution (2023) show that instruments such as *sukuk* (Islamic bonds) facilitate funding for sustainable projects, linking financial returns with moral obligations. Furthermore, fintech innovations in Sharia-compliant crowdfunding have expanded access to ethical financing for green enterprises (Jasmine & Rohim, 2024). Such developments illustrate that Islamic finance not only aligns economic activity with ethical norms but also supports sustainable growth models distinct from conventional markets.

The literature converges on the view that environmental accounting, leverage management, and financial performance are interconnected determinants of firm value, yet the precise mechanisms and magnitudes of these relationships remain contested. While prior studies confirm that sustainability disclosures foster legitimacy and enhance profitability, empirical results are inconsistent across industries and institutional settings. Particularly in emerging economies such as Indonesia, where Sharia-based financial systems coexist with conventional markets, the mediating role of financial performance between green accounting, leverage, and firm value remains underexplored. This research gap underscores the need for sector-specific investigations—especially within the basic materials industry—to determine whether

environmental initiatives translate into tangible economic benefits under Islamic capital market principles.

Accordingly, the present study aims to examine the direct and indirect effects of green accounting and leverage on firm value, mediated by financial performance, in firms listed on the Indonesia Sharia Stock Index (ISSI) between 2019 and 2023. The novelty of this research lies in integrating environmental accounting concepts with Islamic financial frameworks and mediation modeling within an emerging market context. By doing so, the study contributes to theoretical refinement of stakeholder and legitimacy perspectives while offering practical insights for policymakers, investors, and corporate managers seeking to balance environmental responsibility with financial sustainability. Ultimately, this investigation seeks to clarify whether environmentally conscious behavior under Islamic financial governance can serve as a strategic lever for enhancing both firm value and societal welfare.

LITERATURE REVIEW

Green Accounting and Corporate Value Creation

A growing body of empirical research underscores the link between green accounting, environmental cost disclosure, and firm value, particularly in emerging economies. Studies consistently show that firms integrating comprehensive environmental reporting tend to achieve higher market valuations and enhanced stakeholder confidence. Altarawneh (2023) demonstrated a significant positive relationship between environmental disclosure and firm value, indicating that transparent sustainability practices foster trust and improve investor perception. Similarly, previous studies (Chang, 2015; Nurhayati et al., 2025; Tamasiga et al., 2024) found that higher-quality environmental information disclosure correlates with superior financial performance, reinforcing that sustainability-oriented reporting can function as both a governance mechanism and a strategic asset.

Further evidence from Emuebie et al. (2021) showed that environmental disclosure positively impacts the performance of listed consumer goods firms in Nigeria, while Younis (2023) confirmed that sustainability reporting in Saudi Arabia enhances firm valuation. However, mixed findings persist. Deswanto & Siregar (2018) observed no significant market response to environmental disclosures, suggesting contextual dependence. Likewise, Emovon & Izedonmi (2023) found negative associations in the oil and gas sector, emphasizing that incomplete disclosures may reduce credibility. Sectoral insights from Zhou et al. (2024) reveal that heavily polluting industries gain more from environmental transparency, whereas Radhouane et al. (2020) note that even compliant disclosures in sensitive sectors may not yield immediate valuation benefits. Regulatory pressure (Yang et al., 2020) and mediating financial performance (Rinsman & Prasetyo, 2020) further explain these variations, confirming that external factors and firm efficiency shape how sustainability information translates into financial value.

Financial Performance as a Mediating Variable

Recent studies identify financial performance, measured through indicators like ROA and ROE, as a crucial mediator between environmental disclosure, leverage, and firm value. Kristari & Teruna (2022) observed that carbon emission disclosure enhances operational efficiency and profitability in Indonesian manufacturing firms, implying that sustainability transparency indirectly drives firm valuation through improved financial metrics. Nur et al. (2023) similarly found that environmental disclosure positively affects the financial performance of Sharia-compliant mining companies, reinforcing the notion that environmental responsibility and profitability are mutually reinforcing.

Conversely, leverage complicates this dynamic. Rinsman & Prasetyo (2020) concluded that financial performance mediates both the environmental and financial determinants of firm value, suggesting that effective environmental disclosure can mitigate the adverse effects of high debt ratios. Yet Deswanto & Siregar (2018) found that financial performance may not always directly mediate this relationship, as external pressures can override internal efficiencies. Zirman et al. (2021) further highlighted environmental performance as a mediating element, where reputational gains enhance both financial returns and market value. Zhou et al. (2024) confirmed that firms in high-regulation sectors exhibit stronger mediation effects due to public scrutiny. Collectively, this literature affirms that profitability not only reflects internal efficiency but also serves as a transmission channel through which environmental practices influence firm valuation.

Theoretical Foundations: Stakeholder and Legitimacy Theories

Stakeholder Theory

Stakeholder theory provides a behavioral foundation for sustainability reporting, positing that corporations must balance the interests of various groups—shareholders, employees, regulators, and the public. Firms that address stakeholder expectations through transparent environmental disclosures reinforce accountability and legitimacy. Bogart (2013), Smith (2013), and Riahi et al. (2024) found that large firms engage more in CSR to align with stakeholder expectations, while Dwivedi & Nigám (2025) demonstrated that effective environmental disclosure enhances investor confidence and brand reputation. Cheng et al. (2025) further highlighted how sustained stakeholder dialogue motivates adaptive disclosure, promoting trust and long-term relational capital.

Legitimacy Theory

Legitimacy theory complements stakeholder theory by emphasizing firms' need to conform to social norms to maintain societal acceptance. Ogunode (2022) argued that firms use sustainability disclosure to justify their actions within societal expectations. Ramadhan et al. (2025) showed that public scrutiny of environmental impact compels companies to adopt transparent environmental practices, especially in sectors like mining. Similarly, Mgilane et al. (*2023*) found that companies facing legitimacy crises increase sustainability disclosures to repair reputations. Integrative frameworks such

as those by Sun et al. (2022) and Kim & Peng (2024) merge these perspectives, revealing that successful environmental reporting satisfies both stakeholder demands and societal legitimacy requirements. Together, these theories establish that environmental reporting serves as both a social contract and a strategic response to external legitimacy pressures.

Leverage, Capital Structure, and Firm Performance

Financial Leverage and Firm Performance

Empirical research reveals a nuanced relationship between financial leverage and firm performance, especially in capital-intensive sectors. Yaghi & Tomaszewski (2024) observed that leverage, when efficiently managed, can enhance productivity and profitability through optimal capital utilization. However, excessive reliance on debt increases financial distress and risk exposure. Ahmed et al. (2023) stressed the ethical implications of high leverage, arguing that while debt may improve growth potential, it can compromise long-term sustainability if not aligned with governance ethics.

Capital Structure and Sectoral Variations

Simion & Ouma (2023) found that optimizing capital structure enhances firm performance by balancing tax advantages against bankruptcy costs, aligning with trade-off theory. Ramli et al. (2022) revealed that leverage serves as a mediating factor between capital structure and performance, varying across industries. Deng (2024) and Tao (2024) confirmed that capital-intensive sectors exhibit stronger leverage effects on profitability due to asset-heavy operations, while Triana & Puspa (2021) warned that long-term overleveraging can erode firm value. These findings indicate that leverage can either drive or damage firm performance depending on strategic management, sectoral characteristics, and macroeconomic stability.

Islamic Finance, ESG Integration, and Corporate Sustainability

ESG Integration within Islamic Finance

Islamic finance principles inherently align with ESG objectives by emphasizing justice, ethical conduct, and sustainability. Shaharuddin et al. (2025) argue that ESG values are congruent with *Maqasid al-Shariah*, which aims to preserve life, intellect, and wealth through equitable economic practices. Najid et al. (2024) highlighted that Islamic banking's prohibition of *riba* (interest) and *gharar* (excessive uncertainty) fosters ethical financing conducive to sustainability. Agustin et al. (2023) observed that Sharia-compliant banks increasingly adopt ESG criteria, promoting green *sukuk* and responsible lending that support social and environmental well-being.

Impact on Performance and Reporting

Integrating ESG into Islamic finance yields measurable benefits. Muneer et al. (2025) demonstrated a positive link between ESG adoption and financial sustainability in Islamic banks, while Khamisu et al. (2025) found that ESG compliance enhances investment attractiveness among ethically driven investors. Shalhoob (2025) emphasized that ESG alignment improves risk management and organizational

resilience. Furthermore, Upadhyay (2024) and Siregar (2025) reported that Islamic institutions excel in sustainability reporting by embedding ESG indicators into Sharia-compliant accounting systems, increasing transparency and stakeholder trust. Consequently, Islamic finance's ethical infrastructure not only advances sustainability objectives but also enhances firm reputation and competitive advantage in global markets.

Research Gap and the Significance of the Study

Despite the growing body of research linking green accounting, leverage, and firm value, empirical findings remain inconsistent across sectors, economic contexts, and regulatory environments. Prior studies demonstrate both positive and insignificant effects of environmental disclosure on firm value (Deswanto & Siregar, 2018; Emovon & Izedonmi, 2023), indicating that contextual variables, such as industry type, governance mechanisms, and market awareness, moderate these relationships. Moreover, limited research in emerging markets, particularly within Islamic financial systems, constrains the understanding of how Sharia-based governance and ESG integration shape corporate financial outcomes (Najid et al., 2024; Shaharuddin et al., 2025). These inconsistencies reveal a crucial empirical gap requiring examination within Islamic, sustainability-oriented market structures.

Addressing this research gap holds both theoretical and practical significance. Theoretically, it advances stakeholder and legitimacy frameworks by incorporating Islamic financial ethics into the analysis of environmental accounting and firm value. Empirically, it enriches sustainability literature by evaluating how green accounting and leverage interact under the mediating influence of financial performance in Sharia-compliant firms. Practically, the findings can inform policymakers and investors about the strategic integration of ethical finance and sustainability reporting to enhance firm competitiveness and accountability (Khamisu et al., 2025; Muneer et al., 2025). Hence, this study contributes to refining cross-disciplinary discourse connecting environmental responsibility, financial structure, and Islamic corporate governance.

METHOD

Research Design

This study employs a quantitative descriptive approach to examine the effects of *green accounting* and *leverage* on *firm value* with *financial performance* as an intervening variable. The quantitative approach allows the researcher to statistically assess causal relationships among variables based on empirical data. Following Sugiyono's definition, the descriptive quantitative method aims to provide an accurate depiction of observed phenomena without drawing generalized conclusions beyond the sample scope. The research design thus integrates descriptive statistics to summarize sample characteristics and inferential analysis through path modeling to test hypothesized relationships among variables.

This study applies causal-comparative design principles, identifying cause-and-effect relationships between variables without direct manipulation. It evaluates whether differences in green accounting expenditure and leverage levels influence firm value directly and indirectly through financial performance. The use of panel data analysis (cross-sectional and time-series) covering five fiscal years allows for more robust estimation of both firm-specific and temporal effects.

Population and Sample

The population includes 23 companies in the basic materials sector listed on the Indonesia Sharia Stock Index (ISSI) for the 2019–2023 period. This sector is strategically chosen because it represents environmentally intensive industries, such as mining, cement, and metals, where sustainability and capital structure significantly affect operational outcomes.

Sampling was conducted using the purposive sampling technique, which selects cases based on specific inclusion criteria to ensure data completeness and relevance to the research objectives. The applied criteria are:

1. Companies listed consistently in ISSI from 2019–2023.
2. Companies that disclose environmental costs in their annual or sustainability reports during the study period.
3. Companies publishing complete annual financial statements for the observed years.
4. Companies providing full data availability for all research variables.

After applying these filters, six firms met all criteria, resulting in 30 firm-year observations. The relatively small sample size reflects the limited number of ISSI-listed firms engaging in consistent green accounting disclosure—a common limitation in sustainability accounting research within emerging markets.

Variables and Operational Definitions

Independent Variables

1. Green Accounting (X_1). It can be defined as the identification, measurement, and disclosure of environmental costs associated with operational activities (Ningsih & Rachmawati, 2017). It captures corporate spending related to pollution control, waste management, or environmental restoration. The study operationalizes green accounting as the environmental cost ratio extracted from annual reports, consistent with prior studies (Sapulette & Limba, 2021).
2. Leverage (X_2). Leverage reflects the extent to which a firm is financed through debt compared to equity. Measured using the Debt to Equity Ratio (DER), this variable shows the firm's capital structure risk and financing policy. DER is calculated by dividing a company's total liabilities by its total equity. This ratio helps determine whether debt financing significantly affects profitability and firm value (Lubis & Nugroho, 2023).

Intervening Variable: Financial Performance (Z)

Financial performance assesses a firm's efficiency in managing assets to generate profits, measured through Return on Assets (ROA). ROA represents the net income to total assets ratio. It indicates how effectively the company utilizes its resources to achieve profitability (Muflihah & Pamungkas, 2024).

Dependent Variable: Firm Value (Y)

Firm value is proxied by Tobin's Q, a widely recognized measure reflecting market perception of a firm's future growth potential. Tobin's Q integrates both market and book values (Yuliani & Prijanto, 2022). Higher values indicate that investors expect superior growth and performance.

Data Collection Methods

The research relies on secondary data collected from annual reports, sustainability reports, and official publications of sample companies listed on the ISSI for the period 2019–2023. Data were obtained through the Indonesia Stock Exchange (IDX) website and company websites. Each variable was extracted according to the defined indicators: environmental costs (for green accounting), DER (for leverage), ROA (for financial performance), and Tobin's Q (for firm value).

The data collection process involved three key steps:

1. Identification and verification of companies meeting inclusion criteria.
2. Extraction and tabulation of relevant financial and environmental data from reports.
3. Data cleaning to ensure consistency and comparability across years and firms.

Data Analysis Techniques

The study employs path analysis using EViews 12 Enterprise (QSR International, 2017), as it allows for simultaneous evaluation of direct and indirect causal relationships. The path model examines whether financial performance mediates the effects of green accounting and leverage on firm value.

Model Specification

Two sub-structural equations are used:

1. Sub-structure 1 (intervening equation):

   $$Z = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon_1$$

   where Z represents financial performance, X_1 green accounting, and X_2 leverage.

2. Sub-structure 2 (dependent equation):

   $$Y = \alpha + \beta_3 X_1 + \beta_4 X_2 + \beta_5 Z + \varepsilon_2$$

   where Y denotes firm value.

Classical Assumption Tests

Before hypothesis testing, the models were subjected to standard econometric diagnostics to ensure validity:

1. Normality Test: Jarque–Bera probability values above 0.05 indicated normally distributed residuals.
2. Multicollinearity Test: All correlation coefficients among independent variables were below 0.80, confirming the absence of multicollinearity.
3. Heteroscedasticity Test: Probability values exceeding 0.05 demonstrated homoscedastic residuals.

Model Selection Tests

The appropriate regression model was determined sequentially through:

- Chow Test (Fixed vs. Common Effects),
- Hausman Test (Fixed vs. Random Effects), and
- Lagrange Multiplier Test (Random vs. Pooled).

The combined results favored the Random Effect Model (REM) as the most suitable specification, as probability values exceeded 0.05 in the Hausman test, indicating random effects yielded efficient estimations.

Hypothesis Testing

Hypotheses were tested using t-tests for partial effects, F-tests for simultaneous effects, and Sobel tests for mediation.

1. t-test: Assesses the significance of each independent variable's individual effect on dependent or intervening variables.
2. F-test: Evaluates the joint effect of green accounting and leverage on financial performance and firm value.
3. Sobel Test: Determines whether financial performance significantly mediates the relationship between independent and dependent variables. The Sobel statistic compares calculated *t-values* against the critical *t-table* (df = n − k, α = 0.05).

Analytical Framework

The conceptual framework integrates *stakeholder theory* and *legitimacy theory*. Green accounting represents corporate responsiveness to stakeholder environmental expectations, while leverage reflects management's capital structure strategy under financial and social accountability constraints. Financial performance acts as a channel translating sustainability and capital decisions into perceived firm value. This integrative design reflects the study's attempt to test theoretical linkages empirically within an Islamic capital market context. Using ISSI-listed companies introduces an ethical governance layer that may influence the causal mechanism between sustainability accounting, financial policy, and firm valuation.

RESULTS

Model Selection and Preliminary Diagnostics

The Chow Test

The empirical analysis began with a series of diagnostic tests to identify the most appropriate regression model for the panel data structure. The Chow Test was initially performed to compare the *Fixed Effect Model (FEM)* against the *Common Effect Model (CEM)*. For both sub-structural models, the probability value was less than the 0.05 significance threshold, indicating that the FEM provided a better fit.

Table 1

Chow Test Results (Sub-Structural Model 1)

Effects Test	Statistic	d.f.	Prob.
Cross-section F	5.092897	(5, 22)	0.0030
Cross-section Chi-square	23.068177	5	0.0003

Source: Secondary data. Author's Estimation using EViews.

The probability values in Table 1 for both the Cross-section F (0.0030) and Cross-section Chi-square (0.0003) are below the 0.05 significance level. This indicates that the null hypothesis—stating that the Common Effect Model is sufficient—should be rejected. Hence, the Fixed Effect Model (FEM) is more appropriate for the panel data structure.

Table 2

Chow Test Results (Sub-Structural Model 2)

Effects Test	Statistic	d.f.	Prob.
Cross-section F	31.477734	(5, 21)	0.0000
Cross-section Chi-square	64.183268	5	0.0000

Source: Secondary data. Author's Estimation using EViews.

Both probability values for the Cross-section F (0.0000) and Cross-section Chi-square (0.0000) in Table 2 are below the 0.05 significance threshold, leading to the rejection of the null hypothesis that the Common Effect Model is sufficient. Therefore, the Fixed Effect Model (FEM) is confirmed as the most appropriate model for this sub-structural equation.

The Hausman Test

Subsequently, the Hausman Test was used to determine whether the FEM or the *Random Effect Model (REM)* was more appropriate. The probability values obtained exceeded 0.05 for both sub-structural models, implying that the REM was statistically superior due to greater efficiency and consistent estimations under the null hypothesis of no correlation between individual effects and regressors.

Table 3

Hausman Test Results (Sub-Structural Model 1)

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	2.920382	2	0.2322

Source: Secondary data. Author's Estimation using EViews.

The probability value of 0.2322 in Table 3, which is greater than the 0.05 significance level, indicates that the null hypothesis cannot be rejected. Therefore, the Random Effect Model (REM) is preferred over the Fixed Effect Model (FEM), suggesting that the variation across entities is assumed to be random and uncorrelated with the independent variables in the model.

Table 4

Hausman Test Results (Sub-Structural Model 2)

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.213800	3	0.9753

Source: Secondary data. Author's Estimation using EViews.

The probability value of 0.9753 in Table 4, which is far greater than the 0.05 significance threshold, indicates that the null hypothesis cannot be rejected. Consequently, the Random Effect Model (REM) is preferred over the Fixed Effect Model (FEM). This result implies that individual effects across firms are random and uncorrelated with the explanatory variables, confirming that REM is the most appropriate estimation approach for this panel data model.

The Lagrange Multiplier (LM) Test

The model comparison was finalized with the Lagrange Multiplier (LM) Test, which assessed whether the REM outperformed the CEM. The cross-section probability values for both sub-models were below 0.05, affirming the superiority of the REM. Accordingly, all subsequent estimations were conducted using the Random Effect Model (REM), as it minimized bias while capturing unobserved heterogeneity across firms and over time.

Table 5

Results of Lagrange Multiplier (LM) Test for Random Effects (Sub-Structural Model 1)

Test	Cross-section	Time	Both
Breusch-Pagan	5.341168 (0.0208)	1.730712 (0.1883)	7.071880 (0.0078)
Honda	2.311097 (0.0104)	1.315855 (0.0942)	2.584437 (0.0052)
King-Wu	2.311097 (0.0104)	1.315855 (0.0942)	2.521296 (0.0058)
Standardized Honda	3.653447 (0.0001)	1.752783 (0.0398)	0.803087 (0.2109)
Standardized King-Wu	3.653447 (0.0001)	1.752783 (0.0398)	0.739526 (0.2298)
Gourieroux et al.	–	–	7.071880 (0.0112)

Source: Secondary data. Author's Estimation using EViews.

The Breusch-Pagan LM test in Table 5 shows a probability value of 0.0078 under the "Both" hypothesis, which is below the 0.05 significance level. This leads to the rejection

of the null hypothesis of no random effects. Therefore, the Random Effect Model (REM) is more appropriate than the Common Effect Model (CEM) for this panel dataset. The results are further supported by the Honda and King-Wu tests, which also indicate significant random effects across cross-sections, confirming the suitability of the REM estimation approach.

Table 6

Results of Lagrange Multiplier (LM) Test for Random Effects (Sub-Structural Model 2)

Test	Cross-section	Time	Both
Breusch-Pagan	42.39834 (0.0000)	1.919082 (0.1859)	44.31801 (0.0000)
Honda	6.511401 (0.0000)	–1.385159 (0.9171)	3.824546 (0.0001)
King-Wu	6.511401 (0.0000)	–1.385159 (0.9171)	3.308229 (0.0005)
Standardized Honda	9.498909 (0.0000)	–1.150308 (0.8782)	2.321408 (0.0101)
Standardized King-Wu	9.498909 (0.0000)	–1.150308 (0.8782)	1.895520 (0.0290)
Gourieroux et al.	–	–	42.39834 (0.0000)

Source: Secondary data. Author's Estimation using EViews.

The Breusch-Pagan LM test in Table 6 produces a probability value of 0.0000 under the "Both" hypothesis, which is well below the 0.05 significance level, leading to the rejection of the null hypothesis of no random effects. This confirms that the Random Effect Model (REM) is more appropriate than the Common Effect Model (CEM) for this panel data. Supporting evidence from the Honda and King-Wu tests also demonstrates significant random effects across cross-sections, while the Gourieroux et al. statistic further reinforces the robustness of this conclusion. Therefore, the REM is selected as the optimal model for further analysis.

Classical Assumption Testing

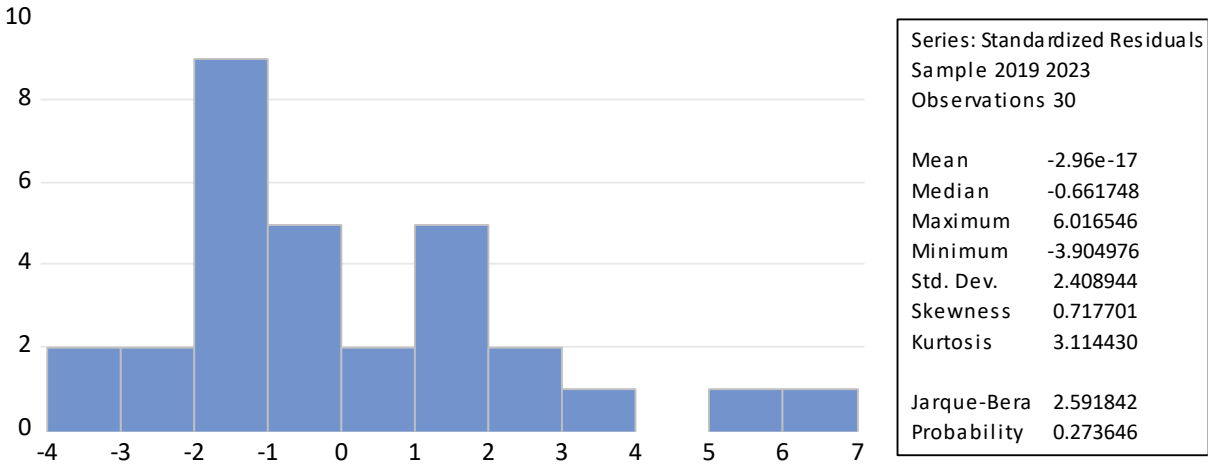
Before proceeding to hypothesis testing, the data were evaluated for compliance with classical regression assumptions to ensure robustness and reliability.

Normality Test

The Jarque–Bera (JB) test results for both sub-models indicated that probability values exceeded 0.05. Thus, the residuals followed a normal distribution, satisfying the assumption of normality essential for valid inference.

Figure 1

Normality Test Result (Sub-Structural Model 1)

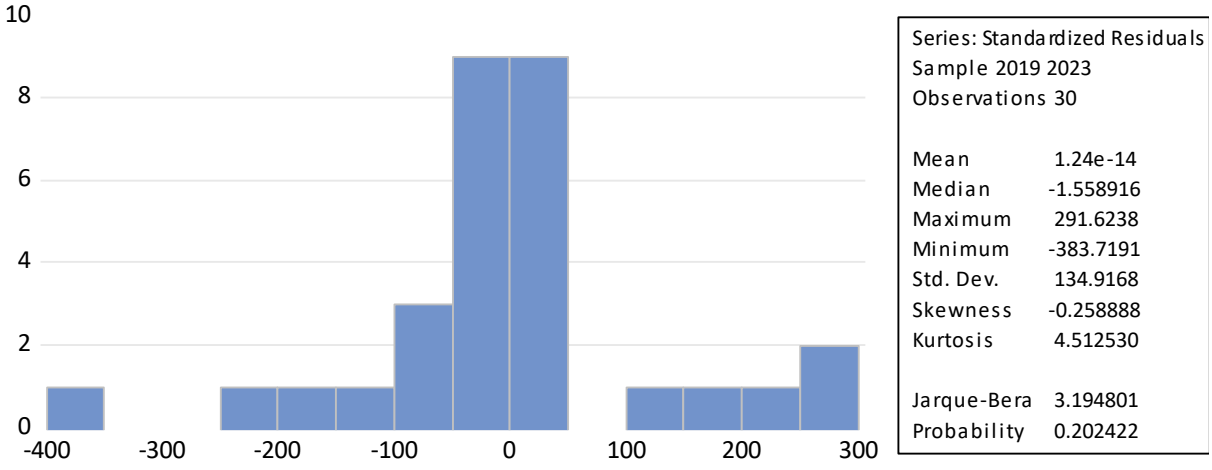


Source: Secondary data. Author's Estimation using EViews.

The results of the normality test for Sub-Structural 1, as shown in Figure 1, indicate that the residuals are normally distributed. This conclusion is based on the Jarque-Bera statistic value of 2.591842 with a probability of 0.273646, which is higher than the 0.05 significance level. Therefore, the null hypothesis stating that the residuals follow a normal distribution cannot be rejected. The histogram also exhibits a symmetrical shape, further supporting the assumption of normality. Consequently, the data used in Sub-Structural 1 meet the normality assumption required for regression analysis, confirming that the model's residuals are distributed normally and free from systematic bias.

Figure 2

Normality Test Result (Sub-Structural Model 2)



Source: Secondary data. Author's Estimation using EViews.

The results of the normality test for Sub-Structural 2, as presented in Figure 2, indicate that the residuals are normally distributed. The Jarque-Bera statistic value is 3.194801 with a probability of 0.202422, which is greater than the 0.05 significance threshold. Therefore, the null hypothesis stating that the residuals are normally

distributed cannot be rejected. The histogram also shows a relatively symmetrical distribution, with skewness and kurtosis values close to zero, further confirming normality. These results demonstrate that the data in Sub-Structural 2 satisfy the normality assumption required for regression analysis, ensuring that the estimation results are reliable and free from distributional bias.

Multicollinearity Test

Correlation matrices were used to assess inter-variable relationships. The results showed that all correlation coefficients among independent variables were below 0.80, confirming the absence of multicollinearity. This implies that the predictors, green accounting and leverage, operate independently without excessive interdependence that could distort parameter estimates.

Table 7

Multicollinearity Test Results (Sub-Structural Model 1)

Variable	X1	X2
X1	1.000000	0.288398
X2	0.288398	1.000000

Source: Secondary data. Author's Estimation using EViews.

The results of the multicollinearity test for Sub-Structural 1, as shown in Table 7, indicate that no multicollinearity problem exists among the independent variables. The correlation coefficient between X1 (Green Accounting) and X2 (Leverage) is 0.288398, which is well below the threshold value of 0.80. This suggests that there is no strong linear relationship between the two variables. Furthermore, each variable's correlation with itself equals 1.000000, confirming the reliability of the measurement. Therefore, the data used in Sub-Structural I meet the assumption of no multicollinearity, meaning that the independent variables can be used simultaneously in the regression model without causing estimation bias or instability in the coefficients.

Table 8

Multicollinearity Test Results (Sub-Structural Model 2)

Variable	X1	X2	Z
X1	1.000000	0.288398	-0.367401
X2	0.288398	1.000000	-0.511071
Z	-0.367401	-0.511071	1.000000

Source: Secondary data. Author's Estimation using EViews.

The correlation matrix in Table 8 shows that all correlation coefficients among the independent variables, X1 (Green Accounting), X2 (Leverage), and Z (Financial Performance, are below 0.80, indicating the absence of multicollinearity. The correlations range from -0.511071 to 0.288398, suggesting moderate or weak relationships that do not pose a statistical problem. Therefore, the data in Sub-Structural Model II satisfy the multicollinearity assumption, confirming that the regression model can produce reliable and unbiased coefficient estimates.

Heteroskedasticity Test

The Breusch–Pagan test indicated that the probability values for all independent variables exceeded 0.05. Consequently, no evidence of heteroskedasticity was found, ensuring that the error variance remained constant across observations. Collectively, these diagnostics confirmed the model's validity for further analysis.

Table 9

Heteroskedasticity Test Results (Sub-Structural Model 1)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.075907	0.032752	2.317624	0.0283
X1	-0.090046	0.129701	-0.694257	0.4935
X2	-9.30E-05	0.000233	-0.399879	0.6924

Source: Secondary data. Author's Estimation using EViews.

Note: Dependent variable: ABS(RESID), Method: Panel EGLS (Cross-section random effects)

The results of the heteroskedasticity test for Sub-Structural Model 1 in Table 9 show that all probability values for the independent variables—X1 (Green Accounting) and X2 (Leverage)—are greater than the 0.05 significance level, with values of 0.4935 and 0.6924, respectively. This indicates that there is no significant heteroskedasticity problem in the model. Therefore, the residuals have a constant variance, satisfying the classical assumption of homoskedasticity. The model can thus be considered reliable, as the error terms are distributed evenly and do not bias the regression estimates.

Table 10

Heteroskedasticity Test Results (Sub-Structural Model 2)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	651.8950	173.7432	3.752060	0.0009
X1	-534.8299	606.6884	-0.881556	0.3861
X2	-0.893024	0.915135	-0.975839	0.3381
Z	-1006.781	548.8657	-1.834295	0.0781

Source: Secondary data. Author's Estimation using EViews.

Note: Dependent variable: ABS(RESID), Method: Panel EGLS (Cross-section random effects)

The results of the heteroskedasticity test for Sub-Structural Model 2 in Table 10 indicate that all independent variables, X1 (Green Accounting), X2 (Leverage), and Z (Financial Performance, have probability values greater than the 0.05 significance threshold, at 0.3861, 0.3381, and 0.0781, respectively. This means that the null hypothesis of homoskedasticity cannot be rejected. Consequently, the model is free from heteroskedasticity problems, and the residuals exhibit constant variance across observations. Therefore, the regression estimates in Sub-Structural Model 2 can be considered efficient, reliable, and valid for further analysis.

Path Analysis Results

The study's analytical framework employed path analysis to estimate both direct and indirect effects among variables. Two sub-structural equations were analyzed: the first assessed the influence of green accounting and leverage on financial performance, while the second examined their direct and mediated effects on firm value.

Sub-Structural Model 1: Determinants of Financial Performance

The first regression model in Table 11 estimated the impact of green accounting (X_1) and leverage (X_2) on financial performance (Z), proxied by Return on Assets (ROA). The estimated equation was:

$$Z = 0.1864 - 0.1888X_1 - 0.00035X_2 + \varepsilon$$

The *t*-statistic for green accounting was –1.198 with a *p*-value of 0.241, indicating no significant effect on ROA. Similarly, leverage showed a *t*-statistic of –1.107 with a *p*-value of 0.278, also non-significant. The *F*-test yielded a probability of 0.220, exceeding 0.05, confirming that both variables jointly did not significantly explain variations in financial performance among ISSI-listed basic materials firms.

Table 11

Results of Regression Analysis (Independent Variables on Intervening Variable)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.186449	0.041503	4.492399	0.0001
X1	-0.188775	0.157541	-1.198263	0.2412
X2	-0.000350	0.000316	-1.107010	0.2781
Statistic			**Value**	
R-squared			0.106029	
Adjusted R-squared			0.039809	
S.E. of regression			0.065339	
Sum squared resid			0.115269	
F-statistic			1.601168	
Prob (F-statistic)			0.220223	
Durbin-Watson stat			1.559633	

Source: Secondary data. Author's Estimation using EViews.

Note: Dependent variable: Z, Method: Panel EGLS (Cross-section random effects)

These findings suggest that neither environmental expenditures nor capital structure had a meaningful short-term influence on profitability. The results may indicate that environmental costs were perceived primarily as expenses rather than value-creating investments. Firms with higher leverage might also have faced higher financial obligations, thereby constraining profitability.

Sub-Structural Model 2: Determinants of Firm Value

The second regression model in Table 12 evaluated the influence of green accounting (X_1), leverage (X_2), and financial performance (Z) on firm value (Y), represented by *Tobin's Q*. The equation was:

$$Y = 507.448 - 330.304X_1 - 0.905X_2 - 661.233Z + \varepsilon$$

Table 12

Results of Regression Analysis (Independent and Intervening Variables on Dependent Variable)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	507.4483	350.0194	1.449772	0.1591
X1	-330.3036	1227.1170	-0.269171	0.7899
X2	-0.905124	1.028645	-0.879919	0.3870
Z	-661.2331	629.8453	-1.049834	0.3035
Statistic			**Value**	
R-squared			0.071880	
Adjusted R-squared			-0.035300	
S.E. of regression			181.4106	
Sum squared resid			855654.7	
F-statistic			0.670406	
Prob (F-statistic)			0.577892	
Durbin-Watson stat			1.655652	

Source: Secondary data. Author's Estimation using EViews.

Note: Dependent variable: Y, Method: Panel EGLS (Cross-section random effects)

The results revealed that all three predictors, green accounting, leverage, and financial performance, had negative but statistically insignificant coefficients. Specifically, green accounting produced a *t*-statistic of −0.269 ($p = 0.790$), leverage had a *t*-statistic of −0.880 ($p = 0.387$), and financial performance generated a *t*-statistic of −1.050 ($p = 0.304$). The *F*-statistic yielded a probability value of 0.578, confirming that the three variables collectively had no significant explanatory power for firm value.

These findings imply that within the observed period, investors did not perceive environmental expenditure, leverage management, or profitability as determining factors in firm valuation. This may reflect limited investor awareness regarding environmental performance, inconsistent disclosure standards, or insufficient integration of sustainability metrics into capital market assessments.

Mediation Testing Using the Sobel Method

The mediating effect of financial performance (ROA) on the relationships between the independent variables and firm value was examined using the Sobel test, which measures the significance of indirect effects in path analysis.

Mediation of Green Accounting and Firm Value

For the path $X_1 \rightarrow Z \rightarrow Y$, the Sobel test produced a *t*-value of 23.35, far exceeding the critical *t*-table value of 0.361 (df = 28, $\alpha = 0.05$). Thus, the mediating effect of financial performance between green accounting and firm value was statistically significant. This result indicates that while green accounting may not directly increase firm value, it indirectly contributes to value enhancement through improved profitability. The finding aligns with stakeholder theory, which posits that transparent environmental

practices can strengthen stakeholder trust and ultimately improve corporate performance and valuation.

Mediation of Leverage and Firm Value

For the path $X_2 \rightarrow Z \rightarrow Y$, the Sobel test yielded a *t*-value of 0.0075, below the critical threshold of 0.361. This indicates that financial performance does not mediate the relationship between leverage and firm value. Hence, while leverage might affect profitability directly, its impact does not translate into firm value enhancement via financial performance. This suggests that capital structure decisions in ISSI-listed basic materials firms did not substantially influence market perception or profitability during the observed period.

Hypothesis Testing Summary

Based on the regression outputs, nine hypotheses were evaluated. The summarized results are presented in Table 13.

Table 13

Hypothesis Testing Summary

Hypothesis	Statement	Result	Significance
H1	Green accounting → financial performance	Not supported	$p = 0.241$
H2	Leverage → financial performance	Not supported	$p = 0.278$
H3	Green accounting & leverage → financial performance	Not supported	$p = 0.220$
H4	Green accounting → firm value	Not supported	$p = 0.790$
H5	Leverage → firm value	Not supported	$p = 0.387$
H6	Financial performance → firm value	Not supported	$p = 0.304$
H7	Green accounting, leverage, & financial performance → firm value	Not supported	$p = 0.578$
H8	Green accounting → firm value (via financial performance)	Supported	$t = 23.35$
H9	Leverage → firm value (via financial performance)	Not supported	$t = 0.0075$

Source: Secondary data. Author's Estimation using EViews.

These results collectively demonstrate that financial performance mediates the relationship between green accounting and firm value but not between leverage and firm value. In general, the direct effects among variables were statistically insignificant across all tested paths.

DISCUSSION

The Effect of Green Accounting on Financial Performance

The results of this study reveal that green accounting, proxied by environmental costs, exerts a negative but statistically insignificant effect on financial performance, as indicated by a *t*-statistic of –1.198 and a *p*-value of 0.241 (> 0.05). This finding implies that increasing environmental expenditures does not directly enhance profitability among basic materials firms listed on the ISSI. Instead, such costs may be perceived as

additional financial burdens rather than long-term investments that yield operational or financial gains. Although companies disclose environmental expenses to demonstrate accountability to stakeholders, these disclosures have yet to generate measurable improvements in financial performance. This outcome suggests that environmental initiatives, while beneficial for legitimacy and transparency, have not yet been internalized as profit-oriented strategies within this sector.

This result is consistent with prior studies that also found no significant influence of green accounting on firm performance. Nianty et al. (2023) and Gustinya (2022) similarly observed that environmental cost disclosures do not substantially enhance profitability, as firms tend to treat such expenditures as compliance-related rather than as efficiency-driven investments. Ratmono et al. (2024) and Hoai et al. (2023), however, reported that green accounting can improve profitability when effectively integrated with corporate social responsibility (CSR) and environmental performance initiatives. Their findings highlight that transparency in environmental reporting can enhance operational efficiency and investor confidence. Therefore, while the present study's results support the notion that environmental costs alone do not boost profitability, they also suggest that contextual factors, such as integration with governance and sustainability frameworks, play a crucial mediating role.

Contrary to this study's findings, several other empirical works demonstrate a significant and positive effect of green accounting on both financial performance and market valuation. Studies by Xu et al. (2024) and Rahman et al. (2024) show that companies adopting comprehensive environmental accounting practices experience higher stock prices and investor trust, reflecting the emergence of a "green premium" in the market. Similarly, Pratiwi et al. (2023) found that in developing economies with strong regulatory enforcement, firms that align their green accounting practices with environmental policies achieve measurable gains in firm value. These discrepancies may stem from differing institutional frameworks: while advanced regulatory environments reward sustainability efforts, the Indonesian context, particularly within Islamic financial markets, may lack the enforcement or investor awareness necessary to translate environmental disclosure into financial success.

Theoretically, the findings reinforce stakeholder and legitimacy theories by illustrating that while firms disclose environmental costs to maintain legitimacy, such actions alone do not automatically yield financial rewards without deeper strategic alignment. Practically, the results underscore the importance for corporate managers to integrate environmental expenditures into long-term operational strategies rather than treating them as mere compliance costs. Strengthening the link between green accounting, governance, and performance evaluation systems could help firms achieve both environmental and financial sustainability. From a policy perspective, regulators and the Financial Services Authority (*Otoritas Jasa Keuangan* abbriviated OJK) should enhance reporting standards and incentivize sustainability integration within Islamic capital markets. Doing so could transform green accounting from a symbolic disclosure into a tangible driver of financial performance and corporate value.

The Effect of Leverage on Financial Performance

The results of this study indicate that leverage, as measured by the Debt-to-Equity Ratio (DER), has a negative but statistically insignificant effect on financial performance (ROA), as shown by a *t*-statistic of −1.107 and a *p*-value of 0.278 (> 0.05). This finding implies that higher leverage does not necessarily improve profitability for basic materials firms listed on the ISSI. On the contrary, increased debt levels may burden firms with higher interest and repayment obligations, reducing net income and overall financial performance. These results suggest that companies within this sector may not be utilizing borrowed funds efficiently to generate returns, possibly due to high capital costs and limited flexibility in managing financial risk.

This finding is consistent with previous studies that reported a negative relationship between leverage and profitability. Pambudi et al. (2024) and Ramdhani & Prijanto (2024) found that firms with higher leverage tend to exhibit lower profitability, as excessive debt increases financial risk and constrains operational efficiency. Similarly, Coleman & Baidoo (2020) and Begum et al. (2024) demonstrated that high leverage levels elevate the likelihood of financial distress, especially during economic downturns. These studies collectively reinforce the notion that while leverage may facilitate expansion, mismanagement of debt can lead to deteriorating financial health and reduced investor confidence.

However, contrasting evidence exists in the literature suggesting that under certain conditions, leverage can positively influence financial performance. Studies by Ima et al. (*2024*) and Wahyudi (2023) revealed that firms with well-structured debt utilization can achieve higher profitability by financing growth opportunities through leverage. Chen et al. (2024) further found that in some industries, such as hospitality, leverage can signal financial stability and managerial confidence, thereby improving market valuation. Khan (2024) emphasized that in periods of economic stability, leveraged firms may deliver better shareholder returns, highlighting the role of contextual and firm-specific factors in moderating the impact of leverage on financial outcomes.

Theoretically, this study supports the trade-off theory, which posits that firms must balance the tax benefits of debt against the risks of financial distress (Abel, 2018; Fama & French, 2002; Hackbarth et al., 2007). The insignificant effect of leverage on financial performance suggests that ISSI-listed firms have not yet achieved an optimal capital structure. Practically, the findings emphasize the need for prudent debt management, where firms must align borrowing decisions with profitability targets and risk tolerance. From a policy perspective, regulators and financial authorities should promote capital structure guidelines and risk disclosure frameworks that encourage responsible leverage practices. Such initiatives can strengthen financial resilience and ensure that debt financing contributes positively to firm performance within Islamic capital markets.

The Simultaneous Effect of Green Accounting and Leverage on Financial Performance

The findings of this study demonstrate that green accounting, proxied by environmental costs, and leverage, measured by the Debt-to-Equity Ratio (DER), do not jointly influence financial performance (ROA) among basic materials firms listed on the ISSI. The *F*-test result with a probability value of 0.220 (> 0.05) confirms the rejection of the hypothesis, suggesting that neither environmental expenditures nor financial structure significantly contribute to profitability. This indicates that environmental spending has not yet been internalized as a strategic investment, and leverage management remains peripheral to operational efficiency. Together, these results imply that sustainability reporting and capital structure policies have yet to serve as major determinants of financial performance within Indonesia's Islamic capital market context.

These findings align with previous research that also found limited effects of green accounting and leverage on financial outcomes. Erlangga et al. (2021) concluded that environmental costs did not significantly affect ROA, emphasizing that environmental initiatives often represent compliance expenditures rather than profit-enhancing strategies. Similarly, Maria & Elisabeth (2022) observed that DER was not a significant determinant of profitability, suggesting that capital structure decisions may not directly translate into improved firm performance. Such results underscore the notion that both environmental and financial variables contribute to broader corporate legitimacy and accountability but may not yield immediate economic benefits without stronger strategic integration.

Contrasting evidence exists in several empirical studies that highlight potential synergies between green accounting and leverage when effectively managed. Purwohawati et al. (2020) found that green accounting positively influences firm earnings and stock valuations, particularly in environmentally sensitive industries. Wahyudi (2023) demonstrated that moderate leverage enhances profitability by providing capital for expansion, while Jiddan & Hapsari (2023) reported that the combination of green accounting and balanced leverage policies leads to sustainable growth and higher profitability. Moreover, Al Frijat et al. (2025) showed that green credit policies can strengthen financial performance and foster long-term stability. These contrasting results indicate that the effectiveness of both factors may depend on the degree of managerial commitment, regulatory enforcement, and stakeholder engagement.

Theoretically, these results support the view within stakeholder and legitimacy theories that environmental accountability and prudent financial management must operate synergistically to influence firm outcomes. The absence of significant effects suggests that firms have yet to align sustainability initiatives and debt strategies within coherent governance frameworks. Practically, companies should integrate green accounting into core financial decision-making, ensuring that environmental expenditures create tangible operational efficiencies. From a policy perspective,

regulators and financial authorities should strengthen incentives for firms adopting sustainable financing mechanisms and environmental reporting standards. Such coordinated efforts can transform green accounting and leverage from mere compliance instruments into strategic levers for improving financial performance and competitiveness in Islamic capital markets.

The Effect of Green Accounting on Firm Value

The findings of this study show that green accounting, proxied by environmental costs, does not have a direct and significant impact on firm value (Tobin's Q) among basic materials firms listed on the ISSI. The *t*-statistic of −0.269 and a *p*-value of 0.7899 (> 0.05) indicate that the allocation of environmental expenditures has not translated into improved market valuation. This suggests that investors may not yet perceive environmental spending as an indicator of long-term profitability or sustainability, viewing it instead as an operational cost. Consequently, environmental disclosures have not succeeded in signaling a strong commitment to sustainability that influences investor behavior or enhances market confidence.

This finding is consistent with previous studies that also report no significant relationship between green accounting and firm value. Anggita et al. (2022) acknowledged that while green accounting enhances transparency, its short-term financial impact remains limited, particularly when environmental expenditures are not strategically aligned with profitability objectives. Similarly, Liu et al. (2024) found that firms engaging in environmentally driven mergers or investments often face higher costs without immediate market returns, leading to reduced firm value. These studies collectively reinforce the notion that green accounting initiatives require stronger market recognition and integration into corporate value creation strategies before producing tangible financial benefits.

However, several studies present contrasting evidence, demonstrating a positive relationship between green accounting practices and firm value when supported by effective governance and investor awareness. Helmina et al. (2022) found that firms adopting green accounting experience improved market valuations as they attract environmentally conscious investors. Meng et al. (2022) further noted that the combination of green accounting and prudent financial management enhances financial resilience and market reputation, while Khan et al. (2021) emphasized that firms balancing sustainability with leverage optimization achieve superior performance. These findings suggest that the effect of green accounting on firm value is conditional on contextual factors such as corporate governance quality, regulatory enforcement, and market maturity.

Theoretically, this result aligns with legitimacy theory, which posits that firms adopt environmental initiatives primarily to fulfill social expectations rather than to maximize short-term economic gains (Chiu & Sharfman, 2011; Crossley et al., 2021; Filatotchev & Nakajima, 2014). Practically, it underscores that environmental spending should be integrated with long-term strategic objectives to enhance firm reputation and investor trust. Firms need to shift their perspective from viewing environmental costs as

obligations to recognizing them as value-generating investments. Policymakers and regulators should also strengthen sustainability disclosure frameworks and incentivize environmentally responsible investments, especially within Islamic capital markets, where ethical principles can be harmonized with economic objectives to improve both corporate legitimacy and firm value.

The Effect of Leverage on Firm Value

The results of this study show that leverage, proxied by the Debt-to-Equity Ratio (DER), has a negative but statistically insignificant effect on firm value, with a *t*-statistic of –0.8799 and a *p*-value of 0.387 (> 0.05). This indicates that leverage does not directly influence the market valuation of basic materials firms listed on the ISSI. The negative coefficient suggests that higher debt levels may slightly reduce firm value, likely due to increased financial risk and investor concern over repayment capability. These findings imply that within this sector, debt utilization has not been effectively managed to generate value creation, and investors may perceive high leverage as a signal of financial vulnerability rather than strength or growth potential.

This result aligns with the findings of Afiyah et al. (2023), who concluded that leverage has no significant effect on firm value, suggesting that debt-financed operations do not necessarily enhance market perception or performance. Studies such as those by Coleman & Baidoo (2020) and Begum et al. (2024) also observed that excessive debt can lead to declining investor confidence and reduced valuation due to elevated financial distress risks. These results reinforce the trade-off theory, which posits that while leverage can offer tax advantages and enhance returns, the marginal costs of financial distress often outweigh these benefits when debt levels become excessive (Agyei et al., 2020; Purnanandam, 2008; Yinusa, 2017).

Conversely, other studies report differing outcomes. Faizah (2020) found that leverage positively affects firm value, arguing that debt can signal managerial confidence and financial stability, particularly when used strategically in expanding productive capacity. Similarly, Chen et al. (2023) and Khan et al. (2021) demonstrated that well-managed leverage in specific industries, such as hospitality and manufacturing, can enhance firm value by funding long-term growth opportunities and signaling operational resilience. However, these contrasting findings may arise from contextual differences in governance quality, regulatory frameworks, and investor behavior across sectors and financial systems, particularly when comparing conventional and Islamic markets.

Theoretically, this study supports signaling theory and trade-off theory, suggesting that while leverage can convey strength under stable conditions, it may instead indicate financial risk in uncertain environments. Practically, the results highlight the need for prudent debt management to maintain investor confidence and firm stability. Managers should balance the benefits of debt financing against potential market penalties for over-leverage. From a policy perspective, regulators within Islamic capital markets should encourage firms to adopt transparency in debt management and provide clearer disclosures regarding financial risk exposure. Strengthening

governance frameworks will ensure that leverage decisions align with both Sharia principles and sustainable corporate value creation.

The Effect of Financial Performance on Firm Value

The findings of this study demonstrate that financial performance, as measured by Return on Assets (ROA), has a negative and statistically insignificant effect on firm value, represented by Tobin's Q, among basic materials firms listed on the ISSI. With a *t*-statistic of –1.0498 and a *p*-value of 0.3035 (> 0.05), the results indicate that profitability does not directly enhance market valuation. This suggests that investors may not base their valuation decisions solely on accounting profitability but rather on broader strategic or non-financial indicators such as market expectations, corporate governance, and sustainability disclosures. Thus, while ROA reflects operational efficiency, it may not fully capture intangible elements influencing firm value within capital-intensive and environmentally sensitive industries.

This result aligns with earlier findings by Asjuwita & Agustin (2020), who found that ROA had no significant impact on firm value, suggesting that profitability alone does not determine market valuation. Similarly, Selvia & Sulfitri (2023) reported a negative relationship between ROA and firm value, reinforcing that short-term profitability does not necessarily translate into long-term investor confidence. These studies imply that market participants may interpret profitability differently depending on macroeconomic stability and sectoral performance, particularly in cyclical industries like basic materials where returns are heavily influenced by global demand fluctuations and commodity price volatility.

However, other studies present contrasting evidence. Soriya & Rastogi (2023) and Dang et al. (2019) demonstrated that higher ROA significantly improves firm value, as profitable firms tend to attract investor trust and achieve higher market valuations. Ramachandra & Rahman (2023) also emphasized the role of good corporate governance in strengthening the positive link between financial performance and firm value. Additionally, Kurniawan & Susanti (2023) noted that in manufacturing industries with efficient asset utilization, high ROA leads to significant improvements in Tobin's Q. These differing outcomes suggest that the impact of profitability on firm value depends on governance quality, financial structure, and the extent to which profits are reinvested in sustainable and growth-oriented initiatives.

Theoretically, this study reinforces that while financial performance is a key determinant of internal efficiency, it may not be the dominant driver of market valuation—supporting perspectives from stakeholder and legitimacy theories. Investors increasingly value transparency, governance, and sustainability over short-term profitability. Practically, firms should focus on integrating profitability with long-term strategic communication, particularly by aligning financial reporting with environmental, social, and governance (ESG) frameworks to attract responsible investors. From a policy perspective, regulators should encourage disclosure practices that link financial and non-financial performance indicators, enabling capital markets to better evaluate corporate value beyond traditional accounting measures.

The Simultaneous Effect of *Green Accounting*, Leverage, and Financial Performance on Firm Value

The results of this study reveal that green accounting, leverage, and financial performance, when tested simultaneously, do not significantly influence firm value among basic materials firms listed on the ISSI. The *F*-test probability of 0.5779 (> 0.05) indicates that these variables collectively fail to explain variations in firm valuation. This finding implies that environmental spending, capital structure, and profitability have yet to be perceived as decisive factors by investors in assessing firm value. It suggests that market participants prioritize other elements, such as industry growth potential, macroeconomic stability, or investor sentiment, over sustainability and financial efficiency indicators. Consequently, these variables, while essential for internal management, may not yet carry substantial signaling power within Islamic capital market contexts.

This result is consistent with the findings of Kumala & Priantilianingtiasari (2023), who reported that environmental disclosures had no significant effect on firm value, indicating that sustainability reporting remains undervalued by the market. Similarly, Kholmi & Nafiza (2022) found that leverage did not significantly influence firm value, implying that debt structure alone is not a primary consideration for investors. The combined insignificance of green accounting, leverage, and financial performance aligns with these studies, reinforcing that investors may not recognize or reward corporate sustainability and financial efficiency unless they visibly translate into profitability or reputational enhancement. This pattern highlights the limited market awareness and institutional support for integrating sustainability metrics into firm valuation in emerging economies.

Conversely, other studies provide contrasting evidence showing that a synergistic approach to green accounting, leverage, and financial performance can enhance firm value. Gharsalli (2019) and Kazemian et al. (2022) demonstrated that firms practicing transparent green accounting experience improved legitimacy and market appeal. Dalcı & Özyapıcı (2020) and Khan & Gupta (2024) found that well-managed leverage contributes positively to firm performance when aligned with profitability and sustainability goals. Furthermore, Zavala & Salgado (2018) emphasized that profitability mediates the relationship between environmental responsibility and firm value, strengthening the link between ecological initiatives and market perception. These studies suggest that the absence of such effects in this research may result from weak investor responsiveness and underdeveloped sustainability governance in the Indonesian Islamic capital market.

Theoretically, this study offers limited support for stakeholder theory and legitimacy theory, as the insignificant findings indicate that companies' environmental and financial actions have not yet gained sufficient acknowledgment from stakeholders. Practically, the results emphasize the need for firms to enhance the visibility and credibility of their sustainability reporting, aligning it with measurable performance outcomes that investors can recognize. Corporate managers should develop

integrated strategies combining sustainability, debt management, and profitability objectives to strengthen long-term valuation. From a policy perspective, regulators should enforce stricter sustainability disclosure standards and offer incentives for firms demonstrating effective integration of green accounting with sound financial governance. Such measures could bridge the gap between sustainable practices and market recognition, fostering more mature, sustainability-oriented investment behavior.

The Effect of Green Accounting on Firm Value with Financial Performance as a Mediator Variable

The findings of this study reveal that financial performance, measured by Return on Assets (ROA), mediates the relationship between green accounting—proxied by environmental costs—and firm value, represented by Tobin's Q. This result indicates that environmental accounting practices can indirectly enhance firm value through their positive influence on financial performance. When firms allocate resources to environmental initiatives, they not only improve compliance and reputation but also achieve operational efficiencies that enhance profitability. This outcome supports the stakeholder theory, which posits that companies gain legitimacy and trust by addressing the interests of diverse stakeholders, including regulators and the community. In this context, environmental investments serve as a strategic tool to improve both social standing and financial outcomes.

These findings align with previous studies emphasizing the mediating role of financial performance in translating green accounting into higher firm value. Khan and Gupta (2024) found that companies adopting green accounting experience improved profitability, which, in turn, boosts investor confidence and market valuation. Similarly, Helmina et al. (2022) confirmed that profitability significantly mediates the effect of environmental disclosure on firm value, highlighting how sustainability-driven efficiency gains enhance corporate valuation. Ratmono et al. (2024) further supported this perspective, showing that green accounting contributes to financial and reputational performance through improved corporate social responsibility (CSR) initiatives. Collectively, these studies reinforce that green accounting's impact is realized primarily through its financial implications rather than as a direct determinant of firm value.

In contrast, limited studies suggest that green accounting may not always result in financial benefits that translate into higher firm value, particularly when market recognition of sustainability initiatives remains weak. Liu et al. (2024) observed that firms engaging in environmentally focused mergers often face increased costs without immediate financial returns, leading to neutral or negative effects on valuation. Similarly, Khan et al. (2021) found that leverage and external risk factors can moderate the positive influence of green accounting, indicating that poor capital management or volatile market conditions may dilute the benefits of sustainability investments. These exceptions suggest that while the mediating role of financial performance is

generally supported, its strength depends on industry dynamics, governance quality, and investor responsiveness to sustainability signals.

Theoretically, this study strengthens the integration of stakeholder theory and legitimacy theory, demonstrating that firms gain legitimacy and economic advantage by embedding environmental responsibility into their operational and financial frameworks. Practically, it underscores that environmental expenditures should be perceived not as costs but as strategic investments yielding long-term financial and reputational returns. Managers are encouraged to align environmental initiatives with profitability targets to enhance both performance and value creation. From a policy standpoint, regulators and financial authorities should incentivize green accounting adoption through clearer sustainability reporting frameworks and tax benefits, particularly within Islamic capital markets. Such policies can strengthen transparency, attract responsible investors, and promote environmentally sustainable economic growth.

The Effect of Leverage on Firm Value with Financial Performance as a Mediator Variable

The findings of this study reveal that financial performance, proxied by Return on Assets (ROA), does not mediate the relationship between leverage, measured by the Debt-to-Equity Ratio (DER), and firm value, represented by Tobin's Q. This indicates that although leverage provides firms with access to external financing, its effects on firm value are not channeled through financial performance. In other words, profitability does not strengthen nor weaken the influence of leverage on firm valuation. The result suggests that within basic materials firms listed on the ISSI, debt utilization may not effectively enhance operational efficiency or profitability, limiting its capacity to generate higher market valuations. Consequently, the mediating role of financial performance in this relationship is statistically insignificant.

This result is consistent with prior research emphasizing that excessive leverage may elevate financial risk without delivering proportional performance gains. Bawazir et al. (2021) demonstrated that higher debt levels tend to reduce operational flexibility and financial stability, thereby constraining firm value. Similarly, Khan et al. (2021) found that while leverage can provide capital for expansion, its benefits diminish when firms are unable to convert financial resources into improved profitability. These findings indicate that leverage, in the absence of strong financial performance, may fail to deliver the expected signaling effect to investors and instead increase concerns about debt sustainability and credit risk, particularly in industries with volatile cash flows such as basic materials.

Conversely, several studies report differing outcomes, emphasizing that effective management of leverage can enhance financial performance and, subsequently, firm value. Jin & Xu (2022) showed that financial performance partially mediates the relationship between leverage and firm value when debt is optimally managed to fund productive investments. Firmasari et al. (2021) further noted that companies with efficient capital allocation and strong governance can utilize leverage to improve

profitability, which later enhances investor confidence. Similarly, Chaudhary et al. (2023) found that leverage may positively affect firm value during periods of economic stability, suggesting that the mediating role of financial performance is highly contingent on market conditions and managerial prudence. These contrasting results highlight that the leverage–value linkage is context-dependent and varies across industries and economic cycles.

Theoretically, this study refines the application of stakeholder theory and legitimacy theory by illustrating that financial performance alone is insufficient to mediate the relationship between leverage and firm value without adequate stakeholder trust or corporate legitimacy. Practically, it underscores the importance of balancing debt utilization with profitability objectives and transparent governance practices to mitigate financial distress risks. Managers should ensure that borrowed funds are used efficiently to create real economic value rather than merely expanding financial capacity. From a policy standpoint, regulators in Islamic capital markets should encourage firms to adopt prudent leverage policies and establish comprehensive disclosure frameworks that link capital structure decisions with long-term value creation and financial stability.

CONCLUSION

This study examined the effects of green accounting, leverage, and financial performance on firm value, with financial performance also tested as a mediating variable among basic materials firms listed on the Indonesia Sharia Stock Index (ISSI). The findings reveal that green accounting and leverage have no direct significant effect on either financial performance or firm value. However, financial performance mediates the relationship between green accounting and firm value, indicating that environmentally responsible practices can enhance firm valuation indirectly through improved profitability. Conversely, financial performance does not mediate the leverage–firm value relationship, suggesting that debt structure decisions in this sector do not contribute to market value without effective performance outcomes.

These results underscore the complex interplay between sustainability, capital structure, and financial outcomes in emerging Islamic capital markets. The findings support the stakeholder and legitimacy theories, emphasizing that corporate responsiveness to environmental concerns can foster social acceptance and financial benefits. Yet, the lack of a direct effect also reveals that Indonesian markets may still undervalue sustainability disclosures, highlighting a gap between environmental accountability and investor perception. The study demonstrates that sustainability-driven financial performance can serve as a strategic bridge linking corporate legitimacy with firm valuation, aligning ethical and economic imperatives in business operations.

Overall, this study contributes to the growing literature on sustainability accounting and Islamic finance by empirically illustrating how green accounting interacts with financial structure and profitability to influence firm value. It provides evidence that

financial performance is a critical channel through which environmental initiatives create value. The findings encourage firms to treat environmental expenditures not as operational burdens but as strategic investments in long-term legitimacy and competitiveness. Policymakers should strengthen regulatory incentives for green reporting and enhance investor literacy to integrate sustainability metrics into valuation practices, ensuring that ethical and environmental performance are more accurately reflected in market assessments.

Limitation of the Study

This research has several limitations that warrant acknowledgment. First, the study focused exclusively on basic materials firms listed on the ISSI, limiting the generalizability of findings to other sectors with different operational and financial characteristics. Second, the five-year observation period (2019–2023) may not fully capture long-term effects of environmental investment and leverage strategies on firm value, especially in industries with delayed sustainability outcomes. Third, the reliance on secondary financial and sustainability report data restricts the ability to measure qualitative aspects such as management attitudes, corporate culture, or stakeholder perception, which may influence green accounting implementation. Additionally, market inefficiencies in Indonesia's Islamic capital market could have moderated the relationships, suggesting that institutional and regulatory dynamics require deeper exploration.

Another limitation lies in the limited proxy selection. Green accounting was measured solely through environmental cost disclosure, while firm value was represented by Tobin's Q. These measures, although widely accepted, may not encompass the multidimensional nature of sustainability performance or market valuation behavior. The study also did not control for macroeconomic shocks, regulatory policy changes, or external environmental crises that may have influenced firms' financial results and investor sentiment. Future research could expand the scope to include cross-sectoral and regional comparisons, employ longer time horizons, and integrate mixed-method approaches to enrich contextual understanding of how green accounting and leverage affect corporate value dynamics.

Recommendations for Future Research

Future studies should broaden the sample beyond the basic materials sector to include industries with varying levels of environmental sensitivity, such as energy, finance, and consumer goods, to better understand cross-sectoral variations in green accounting practices and their impact on firm value. Researchers should also extend the observation period to assess long-term effects of sustainability strategies, as environmental initiatives often require time to yield financial and reputational benefits. Employing additional variables, such as environmental performance indices, carbon intensity, and corporate governance quality, could provide a more comprehensive understanding of how internal and external factors jointly shape firm valuation.

Furthermore, future research should consider incorporating qualitative or mixed-method designs to explore managerial decision-making, stakeholder engagement, and investor perception of sustainability disclosures. Comparative studies between Islamic and conventional financial markets could also reveal how differing ethical and regulatory frameworks influence the relationship between leverage, financial performance, and firm value. Finally, integrating behavioral finance and institutional perspectives may help explain why market participants in emerging economies often undervalue environmental initiatives. Such research will deepen the theoretical and practical insights into how sustainability and financial strategies can be harmonized to support long-term value creation.

Author Contributions

Conceptualization	R.I. & N.	Resources	R.I. & N.
Data curation	R.I. & N.	Software	R.I. & N.
Formal analysis	R.I. & N.	Supervision	R.I. & N.
Funding acquisition	R.I. & N.	Validation	R.I. & N.
Investigation	R.I. & N.	Visualization	R.I. & N.
Methodology	R.I. & N.	Writing – original draft	R.I. & N.
Project administration	R.I. & N.	Writing – review & editing	R.I. & N.

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Informed Consent Statement

Informed consent was not required for this study.

Data Availability Statement

The data presented in this study are available on request from the corresponding author.

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Conflicts of Interest

The authors declare no conflicts of interest.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

During the preparation of this work, the authors used ChatGPT, DeepL, Grammarly, and PaperPal to translate from Bahasa Indonesia into American English and improve the clarity of the language and readability of the article. After using these tools, the authors reviewed and edited the content as needed and took full responsibility for the content of the published article.

REFERENCES

Abel, A. B. (2018). Optimal debt and profitability in the trade-off theory. *The Journal of Finance*, *73*(1), 95–143. https://doi.org/10.1111/jofi.12590

Afiyah, H., Janna, B. S., & Junjunan, M. I. (2023). Pengaruh green accounting dan kinerja lingkungan terhadap nilai perusahaan dengan profitabilitas sebagai variabel intervening: (Studi empiris pada perusahaan yang terdaftar di BEI Indeks LQ45 pada tahun 2019-2022) [The effect of green accounting and environmental performance on firm value with profitability as an intervening variable: (Empirical study on companies listed on the IDX LQ45 Index in 2019-2022)]. *Jurnal Akuntansi Dan Ekonomi Bisnis*, *12*(2), 21–30. https://doi.org/10.33795/jaeb.v12i2.5122

Agustin, F., Muhtadi, R., & Sahal, S. (2023). The importance of implementing environment, social and government (ESG) and maqasid Sharia-based Islamic finance in Islamic bank. *Journal of Islamic Economic Laws*, *6*(2), 133–158. https://doi.org/10.23917/jisel.v6i2.21214

Agyei, J., Sun, S., & Abrokwah, E. (2020). Trade-off theory versus pecking order theory: Ghanaian evidence. *Sage Open*, *10*(3), 2158244020940987. https://doi.org/10.1177/2158244020940987

Ahmed, R. R., Pahi, M. H., Nadeem, S., Soomro, R. H., Parmar, V., Nasir, F., & Ahmed, F. (2023). How and when ethics lead to organizational performance: Evidence from South Asian firms. *Sustainability*, *15*(10), 8147. https://doi.org/10.3390/su15108147

Al Frijat, Y. S., Al-Msiedeen, J. M., & Elamer, A. A. (2025). How green credit policies and climate change practices drive banking financial performance. *Business Strategy & Development*, *8*(1), e70090. https://doi.org/10.1002/bsd2.70090

Altarawneh, M. S. (2023). The impact of environmental disclosure on value relevance: Moderating role of environmental performance. *Environmental Economics*, *14*(2), 69–86. https://doi.org/10.21511/ee.14(2).2023.06

Anggita, W., Nugroho, A. A., & Suhaidar. (2022). Carbon emission disclosure and green accounting practices on the firm value. *Jurnal Akuntansi*, *26*(3), 464–481. https://doi.org/10.24912/ja.v26i3.1052

Asjuwita, M., & Agustin, H. (2020). Engaruh kinerja lingkungan dan biaya lingkungan terhadap profitabilitas pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia tahun 2014-2018 [The effect of environmental performance and environmental costs on profitability in manufacturing companies listed on the Indonesia Stock Exchange in 2014-2018]. *Jurnal Eksplorasi Akuntansi*, *2*(3), 3327–3345. https://doi.org/10.24036/jea.v2i3.285

Bania, S., & Biswas, J. (2024). An analysis of key environmental, social and governance (ESG) metrics in several important manufacturing segments of India. *Indian Journal of Corporate Governance*, *17*(2), 202–233. https://doi.org/10.1177/09746862241276938

Batubara, M., & Nasution, I. W. (2023). Pasar modal syariah sebagai pilar pendukung pertumbuhan industri halal: Sebuah tinjauan komprehensif [Islamic capital market as a supporting pillar of halal industry growth: A comprehensive review]. *Reslaj: Religion Education Social Laa Roiba Journal*, *6*(3), 2170–2179. https://doi.org/10.47467/reslaj.v6i3.6008

Bawazir, H., Khayati, A., & AbdulMajeed, F. (2021). Corporate governance and the performance of non-financial firms: The case of Oman. *Entrepreneurship and Sustainability Issues*, *8*(4), 595–609. https://doi.org/10.9770/jesi.2021.8.4(36)

Begum, I. U., Wahab, A., Pranathi, A., Navyanjali, A., Begum, A., & Deekshitha, A. (2024). A study on profitability analysis at Shreejee Tex Print Pvt Ltd. *International Research Journal on Advanced Engineering and Management (IRJAEM)*, *2*(4), 634–638. https://doi.org/10.47392/IRJAEM.2024.0087

Bogart, K. A. S. (2013). Convergence of corporate governance and corporate social responsibility. *International Journal of Human Resources Development and Management*, *13*(4), 318–329. https://doi.org/10.1504/IJHRDM.2013.064072

Ceesay, L. B. (2020). Exploring the influence of NGOs in corporate sustainability adoption: Institutional-legitimacy perspective. *Jindal Journal of Business Research*, *9*(2), 135–147. https://doi.org/10.1177/2278682120968969

Chaidir, M., Irawan, D., & Santoso, S. (2024). Sustainable operations management practices: A comparative study of manufacturing industries. *International Journal of Management, Accounting & Finance (KBIJMAF)*, *1*(2), 1–9. https://doi.org/10.70142/kbijmaf.v1i2.186

Chang, K. (2015). The effect of environmental performance and preference disclosure on financial performance: Empirical evidence from unbalanced panel data of heavy-pollution industries in China. *Journal of Industrial Engineering and Management*, *8*(1), 21–36. https://doi.org/10.3926/jiem.1240

Chaudhary, G. M., Iqbal, Z., & Hussain, N. (2023). Financial leverage, distress, and firms performance: Global and local perspective. *Sustainable Business and Society in Emerging Economies*, *5*(3), 205–214. https://doi.org/10.26710/sbsee.v5i3.2680

Chen, Y., Valenzuela, E., & Capener, D. (2024). How hotel firm value fluctuates with alternative leveraging strategies. *The American Journal of Economics and Sociology*, *83*(1), 177–197. https://doi.org/10.1111/ajes.12528

Cheng, L., Sulemana, I., & Agyemang, A. O. (2025). Environmental accounting and corporate sustainability reports quality: Evidence from Ghana. *Corporate Social Responsibility and Environmental Management*, *32*(5), 6680–6689. https://doi.org/10.1002/csr.70057

Chiu, S.-C., & Sharfman, M. (2011). Legitimacy, visibility, and the antecedents of corporate social performance: An investigation of the instrumental perspective. *Journal of Management*, *37*(6), 1558–1585. https://doi.org/10.1177/0149206309347958

Coleman, M., & Baidoo, J. M. (2020). The interaction of financial leverage and firm's operational efficiency. *Business and Economic Research*, *10*(1), 235. https://doi.org/10.5296/ber.v10i1.16139

Crossley, R. M., Elmagrhi, M. H., & Ntim, C. G. (2021). Sustainability and legitimacy theory: The case of sustainable social and environmental practices of small and medium-sized enterprises. *Business Strategy and the Environment*, *30*(8), 3740–3762. https://doi.org/10.1002/bse.2837

Dalci, İ., & Özyapici, H. (2020). Debt, firm size, and accounting quality: Empirical evidence from Turkey. *Öneri Dergisi*, *15*(53), 147–157. https://doi.org/10.14783/maruoneri.676403

Damayanti, I. A. (2025). Islamic investment and capital market: Analysis of developments and challenges in the modern era. *Journal Corner of Education, Linguistics, and Literature*, *5*(1), 366–375. https://doi.org/10.54012/jcell.v5i001.586

Dang, H. N., Vu, V. T. T., Ngo, X. T., & Hoang, H. T. V. (2019). Study the impact of growth, firm size, capital structure, and profitability on enterprise value: Evidence of enterprises in Vietnam. *Journal of Corporate Accounting & Finance*, *30*(1), 144–160. https://doi.org/10.1002/jcaf.22371

Deng, K. (2024). A study of the relationship between capital structure and corporate performance. *Advances in Economics, Management and Political Sciences*, *95*(1), 99–105. https://doi.org/10.54254/2754-1169/95/2024MUR0071

Deswanto, R. B., & Siregar, S. V. (2018). The associations between environmental disclosures with financial performance, environmental performance, and firm value. *Social Responsibility Journal*, *14*(1), 180–193. https://doi.org/10.1108/SRJ-01-2017-0005

Dwivedi, S., & Nigam, S. K. (2025). Environmental disclosure practices affecting investor confidence and brand image. *International Journal For Multidisciplinary Research*, *7*(4), 51999. https://doi.org/10.36948/ijfmr.2025.v07i04.51999

Emalia, D., & Shauki, E. R. (2023). Analysis of PT XYZ's legitimation crisis and sustainability strategy due to land conflict with communities. *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)*, *6*(1), 79–94. https://doi.org/10.31538/iijse.v6i1.3100

Emovon, F. O., & Izedonmi, P. F. (2023). Sustainability disclosure and market value of quoted oil and gas companies in Nigeria. *ABUAD Journal of Social and Management Sciences*, *4*(2), 208–227. https://doi.org/10.53982/ajsms.2023.0402.03-j

Emuebie, E., Olaoye, S. A., & Ogundajo, G. O. (2021). Effect of social and environmental disclosure on the performance of listed consumer goods producing companies in Nigeria. *International Journal of Applied Economics, Finance and Accounting*, *11*(1), 35–47. https://doi.org/10.33094/8.2017.2021.111.35.47

Erlangga, C. M., Fauzi, A., & Sumiati, A. (2021). Penerapan green accounting dan corporate social responsibility disclosure terhadap nilai perusahaan melalui profitabilitas [Implementation of green accounting and corporate social responsibility disclosure on firm value through profitability]. *Akuntabilitas*, *14*(1), 61–78. https://doi.org/10.15408/akt.v14i1.20749

Faizah, B. S. Q. (2020). Penerapan green accounting terhadap kinerja keuangan [Implementation of green accounting on financial performance]. *Jurnal Riset Akuntansi Kontemporer*, *12*(2), 94–99. https://doi.org/10.23969/jrak.v12i2.2779

Fama, E. F., & French, K. R. (2002). Testing trade-off and pecking order predictions about dividends and debt. *The Review of Financial Studies*, *15*(1), 1–33. https://www.jstor.org/stable/2696797

Farooq, M. B., Ahmed, A., & Nadeem, M. (2018). Sustainability reporter classification matrix: Explaining variations in disclosure quality. *Meditari Accountancy Research*, *26*(2), 334–352. https://doi.org/10.1108/MEDAR-09-2017-0218

Filatotchev, I., & Nakajima, C. (2014). Corporate governance, responsible managerial behavior, and corporate social responsibility: Organizational efficiency versus organizational legitimacy? *Academy of Management Perspectives*, *28*(3), 289–306. https://doi.org/10.5465/amp.2014.0014

Firmasari, P., Setiawati, R., & Fitriati, F. (2021). Company value analysis based on intellectual capital mediated by financial performance study on LQ 45 companies in Indonesia Stock Exchange 2015-2019 period. *Journal of Business Studies and Mangement Review*, *5*(1), 70–73. https://doi.org/10.22437/jbsmr.v5i1.16553

Gezgin, T., Özer, G., Merter, A. K., & Balcıoğlu, Y. S. (2024). The mediating role of corporate governance in the relationship between net profit and equity and voluntary disclosure in the context of legitimacy theory. *Sustainability*, *16*(10), 4097. https://doi.org/10.3390/su16104097

Ghardallou, W. (2023). The heterogeneous effect of leverage on firm performance: A quantile regression analysis. *International Journal of Islamic and Middle Eastern Finance and Management*, *16*(1), 210–225. https://doi.org/10.1108/IMEFM-12-2021-0490

Gharsalli, M. (2019). High leverage and variance of SMEs performance. *The Journal of Risk Finance*, *20*(2), 155–175. https://doi.org/10.1108/JRF-02-2018-0011

Girón, A., Kazemikhasragh, A., Cicchiello, A. F., & Panetti, E. (2021). Sustainability reporting and firms' economic performance: Evidence from Asia and Africa. *Journal of the Knowledge Economy*, *12*(4), 1741–1759. https://doi.org/10.1007/s13132-020-00693-7

Gustinya, D. (2022). Pengaruh penerapan green accounting terhadap nilai perusahaan manufaktur peserta proper yang listing di Bursa Efek Indonesia tahun 2017—2019 [The effect of green accounting implementation on the value of manufacturing companies participating in proper listed on the Indonesia Stock Exchange in 2017—2019]. *Jurnal Akuntansi Dan Bisnis Krisnadwipayana*, *9*(2), 759–770. https://doi.org/10.35137/jabk.v9i2.688

Hackbarth, D., Hennessy, C. A., & Leland, H. E. (2007). Can the trade-off theory explain debt structure? *The Review of Financial Studies*, *20*(5), 1389–1428. https://doi.org/10.1093/revfin/hhl047

Hardiningsih, P., Jannah, A., Taswan, & Kartika, A. (2023). How does non-financial performance affect firm value? An empirical study in Indonesia. *Hong Kong Journal of Social Sciences*, *60*(Autumn/Winter), 704–713. https://doi.org/10.55463/hkjss.issn.1021-3619.60.68

Hassan, O. A. G. (2018). The impact of voluntary environmental disclosure on firm value: Does organizational visibility play a mediation role? *Business Strategy and the Environment*, *27*(8), 1569–1582. https://doi.org/10.1002/bse.2217

Helmina, M. R. A., Sutomo, I., & Respati, N. W. (2022). Empirical examination of green industry strategy through ISO-14001 on firm value: Mediating roles of profitability and leverage. *International Journal of Sustainable Development and Planning*, *17*(5), 1417–1424. https://doi.org/10.18280/ijsdp.170505

Hoai, T. T., Minh, N. N., Van, H. V., & Nguyen, N. P. (2023). Accounting going green: The move toward environmental sustainability in Vietnamese manufacturing firms. *Corporate Social Responsibility and Environmental Management*, *30*(4), 1928–1941. https://doi.org/10.1002/csr.2464

Hussain, F., Jianfu, S., & Kamran, M. (2023). Examining macroeconomic factors & capital structure choices in Pakistan's manufacturing industry: An empirical analysis. *Journal of Social Research Development*, *4*(2), 252–261. https://doi.org/10.53664/JSRD/04-02-2023-02-252-261

Ima, U. M., Rabeta, M., Nahar, N., & Sumi, Mst. S. S. (2024). Leverage-induced profitability in Bangladeshi firms: An empirical analysis. *Investment Management and Financial Innovations*, *21*(1), 356–372. https://doi.org/10.21511/imfi.21(1).2024.27

Ja'afar, N. F. M., Mohd Khir, F. N., Jusoh, F., & Mohamad, M. (2024). Sustainability-linked loans for EV manufacturers: An emerging trend in banking. *International Journal of Research and Innovation in Social Science*, *8*(11), 1549–1556. https://doi.org/10.47772/IJRISS.2024.8110125

Jasmine, J., & Rohim, A. N. (2024). Sharia green crowdfunding as a sustainable financing solution for halal MSMEs empowerment. *SERAMBI: Jurnal Ekonomi Manajemen Dan Bisnis Islam*, *6*(3), 271–288. https://doi.org/10.36407/serambi.v6i3.1466

Jiddan, M., & Hapsari, D. W. (2023). Investigating the role of green accounting, firm size, and board size in corporate social responsibility: Towards sustainable transparency disclosure. *Indonesian Journal of Economics and Management*, *3*(3), 592–602. https://doi.org/10.35313/ijem.v3i3.4990

Jin, G., & Xu, J. (2022). Does intellectual capital affect financial leverage of Chinese agricultural companies? Exploring the role of firm profitability. *Sustainability*, *14*(5), 2682. https://doi.org/10.3390/su14052682

Judijanto, L., Rahman, W., Darmawan, J., & Sagira, S. (2025). The role of Islamic capital markets in promoting sustainable investment. *Journal of Islamic Economy*, *2*(1), 33–42. https://doi.org/10.62872/z785w972

Kazemian, S., Djajadikerta, H. G., Trireksani, T., Sohag, K., Mohd Sanusi, Z., & Said, J. (2022). Carbon management accounting (CMA) practices in Australia's high carbon-emission industries. *Sustainability Accounting, Management and Policy Journal*, *13*(5), 1132–1168. https://doi.org/10.1108/SAMPJ-05-2021-0174

Khaddafi, M., Larasati, N. M., Yuwanda, M., & Sari, T. Y. (2025). Analisis kinerja dan strategi pengelolaan portofolio saham syariah di Indonesia: Kajian literatur 2019–2024 [Performance analysis and management strategies of Islamic stock portfolios in Indonesia: Literature review 2019-2024]. *Jurnal Manajemen Bisnis Digital Terkini*, *2*(3), 299–305. https://doi.org/10.61132/jumbidter.v2i3.688

Khamisu, M. S., Yero, J. I., & Paluri, R. A. (2025). Modeling environmental, social, and governance (ESG) adoption enablers: The case of Islamic financial institutions. *Journal of Financial Reporting and Accounting*. https://doi.org/10.1108/JFRA-07-2024-0499

Khan, B. A. (2024). Examining the relationship between financial leverage and shareholder payoffs: Insights from the pharmaceutical sector in India. *Global Journal of Management and Business Research*, *23*(C4), 15–31. https://doi.org/10.34257/GJMBRCVOL23IS4PG15

Khan, H. Z., Bose, S., Sheehy, B., & Quazi, A. (2021). Green banking disclosure, firm value and the moderating role of a contextual factor: Evidence from a distinctive regulatory setting. *Business Strategy and the Environment*, *30*(8), 3651–3670. https://doi.org/10.1002/bse.2832

Khan, S., & Gupta, S. (2024). The interplay of sustainability, corporate green accounting and firm financial performance: A meta-analytical investigation. *Sustainability Accounting, Management and Policy Journal*, *15*(5), 1038–1066. https://doi.org/10.1108/SAMPJ-01-2022-0016

Kholmi, M., & Nafiza, S. A. (2022). Pengaruh penerapan green accounting dan corporate social responsibility terhadap profitabilitas (Studi pada perusahaan manufaktur yang terdaftar di BEI tahun 2018-2019) [The effect of implementing green accounting and corporate social responsibility on profitability (Study on manufacturing companies listed on the IDX in 2018-2019)]. *Reviu Akuntansi Dan Bisnis Indonesia*, *6*(1), 143–155. https://doi.org/10.18196/rabin.v6i1.12998

Kim, H., & Peng, Z. (2024). A study of theoretical justifications for mandatory ESG disclosure in Korea. *The Legal Studies Institute of Chosun University*, *31*(2), 197–234. https://doi.org/10.18189/isicu.2024.31.2.197

Kristari, D. M., & Teruna, A. Y. (2022). The effect of carbon emission disclosure and corporate social responsibility on the financial performance of manufacturing companies in Indonesia. *Asian Journal of Social and Humanities*, *1*(3), 132–139. https://doi.org/10.59888/ajosh.v1i03.17

Kumala, N., & Priantilianingtiasari, R. (2023). Pegaruh green accounting, CSR dan kinerja keuangan terhadap nilai perusahaan pertambangan yang terdaftar di BEI tahun 2016-2022 [The effect of green accounting, CSR and financial performance on the value of mining companies listed on the IDX in 2016-2022]. *El-Mal: Jurnal Kajian Ekonomi & Bisnis Islam*, *5*(2), 776–795. https://doi.org/10.47467/elmal.v5i2.4634

Kurnia, P., Darlis, E., & Putra, A. A. (2020). Carbon emission disclosure, good corporate governance, financial performance, and firm value. *The Journal of Asian Finance, Economics and Business*, *7*(12), 223–231. https://doi.org/10.13106/JAFEB.2020.VOL7.NO12.223

Kurniawan, R. N., & Susanti, M. (2023). Factors that affect firm value in manufacturing firms. *International Journal of Application on Economics and Business*, *1*(2), 871–879. https://doi.org/10.24912/ijaeb.v1i2.871-879

Li, D., Zheng, M., Cao, C., Chen, X., Ren, S., & Huang, M. (2017). The impact of legitimacy pressure and corporate profitability on green innovation: Evidence from China top 100. *Journal of Cleaner Production*, *141*, 41–49. https://doi.org/10.1016/j.jclepro.2016.08.123

Liu, N., Zhou, L., Xu, L., & Xiang, S. (2024). Symbolic or substantive CSR: Effect of green mergers and acquisitions premium on firm value in China. *Chinese Management Studies*, *18*(3), 628–655. https://doi.org/10.1108/CMS-10-2022-0352

Lubis, A., & Nugroho, R. A. (2023). Pengaruh leverage dan profitabilitas terhadap nilai perusahaan pada perusahaan sektor manufaktur yang terdaftar di Bursa Efek Indonesia [The effect of leverage and profitability on firm value in manufacturing sector companies listed on the Indonesia Stock Exchange]. *Jurnal Akuntansi Dan Keuangan Entitas*, *3*(1), 90–112. https://ejournal-jayabaya.id/Entitas/article/view/97

Maria, E., & Elisabeth, Y. (2022). Analisis Penerapan Green Accounting dan Kinerja Lingkungan Terhadap Harga Saham Melalui Profitabilitas Perusahaan. *Dinamika Ekonomi: Jurnal Ekonomi Dan Bisnis*, *15*(2), 375–392. https://doi.org/10.53651/jdeb.v15i2.381

Meng, S., Yan, H., & Yu, J. (2022). Global value chain participation and green innovation: Evidence from Chinese listed firms. *International Journal of Environmental Research and Public Health*, *19*(14), 8403. https://doi.org/10.3390/ijerph19148403

Mgilane, N., Maama, H., & Marimuthu, F. (2023). A longitudinal analysis of environmental reporting practices of listed manufacturing firms in South Africa. *Journal of Accounting and Finance in Emerging Economies*, *9*(1), 39–50. https://doi.org/10.26710/jafee.v9i1.2591

Mishra, P. S., Kumar, A., & Das, N. (2020). Corporate sustainability practices in polluting industries: Evidence from India, China and USA. *Problemy Ekorozwoju*, *15*(1), 161–168. https://doi.org/10.35784/pe.2020.1.17

Muflihah, W., & Pamungkas, L. D. (2024). Pengaruh implementasi green accounting dan profitabilitas terhadap nilai perusahaan (Studi empiris pada perusahaan sektor basic material yang terdaftar di BEI periode 2021-2023) [The effect of green accounting implementation and profitability on firm value (Empirical study of basic material sector companies listed on the IDX for the 2021-2023)]. *Jurnal Akuntansi, Keuangan, Perpajakan Dan Tata Kelola Perusahaan*, *2*(1), 239–249. https://doi.org/10.70248/jakpt.v2i1.1126

Muneer, S., Singh, A., Choudhary, M. H., Alshammari, A. S., & Butt, N. A. (2025). Does environmental disclosure and corporate governance ensure the financial sustainability of Islamic banks? *Administrative Sciences*, *15*(2), 54. https://doi.org/10.3390/admsci15020054

Najid, N. A., Muhamat, A. A., & Jaafar, M. N. (2024). Integration of islamic finance with ESG sustainability efforts evidence in Malaysia. *International Journal of Research and Innovation in Social Science*, *8*(12), 204–215. https://doi.org/10.47772/IJRISS.2024.8120016

Neacșu, M., & Georgescu, I. E. (2024). Analysing the impact of crises on financial performance: Empirical insights from tourism and transport companies listed on the Bucharest Stock Exchange (during 2005–2022). *Journal of Risk and Financial Management*, *17*(2), 80. https://doi.org/10.3390/jrfm17020080

Nianty, D. A., Rachma, N., Susanti, A., & Nurfaulia, N. (2023). Green accounting terhadap kinerja keuangan dengan environmental performance sebagai variabel intervening [Green

accounting on financial performance with environmental performance as an intervening variable]. *Jurnal Manajemen STIE Muhammadiyah Palopo*, *9*(2), 205–219. https://doi.org/10.35906/jurman.v9i2.1696

Ningsih, W. F., & Rachmawati, R. (2017). Implementasi green accounting dalam meningkatkan kinerja perusahaan [Implementation of green accounting in improving company performance]. *JABE (Journal of Applied Business and Economic)*, *4*(2), 149–158. https://doi.org/10.30998/jabe.v4i2.2142

Nur, A. S. M., Mai, M. U., & Burhany, D. I. (2023). The effect of corporate governance on environmental disclosure and its impact on the financial performance of Sharia mining companies in Indonesia. *Indonesian Journal of Economics and Management*, *3*(2), 450–462. https://doi.org/10.35313/ijem.v3i2.5295

Nurhayati, N., Rivandi, M., Aditya, F. A., & Judijanto, L. (2025). Sustainability reporting, corporate governance, and financial performance: Analyzing the role of ESG factors in investment decisions. *Journal of Hunan University Natural Sciences*, *52*(3), 89–100. https://doi.org/10.55463/issn.1674-2974.52.3.8

Nurim, Y., & Asmara, E. N. (2019). Industry characteristics and patterns of sustainability reports. *Indonesian Journal of Sustainability Accounting and Management*, *3*(2), 174–186. https://doi.org/10.28992/ijsam.v3i2.87

Ogunode, O. A. (2022). Legitimacy theory and environmental accounting reporting and practice: A review. *South Asian Journal of Social Studies and Economics*, *13*(1), 17–28. https://doi.org/10.9734/sajsse/2022/v13i130345

Pambudi, J. E., Febrianto, H. G., Annisa, S., & Selvitriana, S. (2024). Agresivitas pajak, environmental performance, leverage dan likuiditas, terhadap corporate social responsibility disclosure dengan profitabilitas sebagai pemoderasi [Agresivitas pajak, kinerja lingkungan, leverage dan likuiditas, terhadap pengungkapan tanggung jawab sosial perusahaan dengan profitabilitas sebagai pemoderasi]. *Jurnal Ekonomi Akuntansi Dan Manajemen*, *23*(1), 1–17. https://doi.org/10.19184/jeam.v23i1.43715

Pham, H. S. T., & Nguyen, D. T. (2019). The effects of corporate governance mechanisms on the financial leverage–profitability relation: Evidence from Vietnam. *Management Research Review*, *43*(4), 387–409. https://doi.org/10.1108/MRR-03-2019-0136

Pratiwi, A., Basyith, A., & Safitri, E. (2023). Disclosure of green banking, profitability and company size on company value in banking in Indonesia. *International Journal of Finance Research*, *4*(2), 115–127. https://doi.org/10.47747/ijfr.v4i2.1211

Priyadarshanie, W. A. N., Yusoff, S. K. M., & Azam, S. M. F. (2023). Determinants of corporate disclosures: An empirical test of political economy theory. *International Journal of Applied Economics, Finance and Accounting*, *17*(2), 483–496. https://doi.org/10.33094/ijaefa.v17i2.1210

Purnanandam, A. (2008). Financial distress and corporate risk management: Theory and evidence. *Journal of Financial Economics*, *87*(3), 706–739. https://doi.org/10.1016/j.jfineco.2007.04.003

Purwanti, A. (2024). Green finance and CSR: Effects on firm value. *West Science Accounting and Finance*, *2*(02), 393–407. https://doi.org/10.58812/wsaf.v2i02.1219

Purwohawati, Y., Robiani, B., & Meutia, I. (2020). Green accounting practice on corporate performances. *Modern Economics*, *22*(1), 84–89. https://doi.org/10.31521/modecon.V22(2020)-13

QSR International. (2017). *NVivo* (Version 12) [Computer software]. QSR International. https://lumivero.com/

Radhouane, I., Nekhili, M., Nagati, H., & Paché, G. (2020). Is voluntary external assurance relevant for the valuation of environmental reporting by firms in environmentally sensitive industries? *Sustainability Accounting, Management and Policy Journal*, *11*(1), 65–98. https://doi.org/10.1108/SAMPJ-06-2018-0158

Rahman, S., Sinnewe, E., Chapple, L., & Osborne, S. (2024). Environment-specific political risk mitigation: Political lobbying versus green innovation. *Journal of Business Finance & Accounting*, *51*(5–6), 911–942. https://doi.org/10.1111/jbfa.12740

Ramachandra, S., & Rahman, A. (2023). Social distinctions of directors and firm performance. *Pacific Accounting Review*, *35*(3), 477–503. https://doi.org/10.1108/PAR-02-2022-0026

Ramadhan, S., Nugroho, A., & Darmasyah, D. (2025). Financial drivers of CSR disclosure: Evidence from Indonesian coal mining companies. *International Journal of Digital Entrepreneurship and Business*, *5*(2), 1–19. https://doi.org/10.52238/ideb.v5i2.172

Ramdhani, B. A., & Prijanto, B. (2024). Pengaruh penerapan green accounting terhadap nilai perusahaan dengan profitabilitas sebagai variabel moderating: (Studi kasus sub sektor kesehatan yang terdaftar di Bursa Efek Indonesia pada periode 2016-2022) [The effect of green accounting implementation on firm value with profitability as a moderating variable: (Case study of the health sub-sector listed on the Indonesia Stock Exchange in the period 2016-2022)]. *Sanskara Akuntansi Dan Keuangan*, *3*(1), 33–43. https://doi.org/10.58812/sak.v3i01.262

Ramli, N. A., Nartea, G., Rasedee, A. F. N., & Baharum, A. (2022). The mediation effects of capital structure: Evidence from Malaysian and Indonesian economic sectors. *Mathematical Statistician and Engineering Applications*, *71*(2), 234–256. https://doi.org/10.17762/msea.v71i2.82

Ratmono, D., Mail, R., Cahyonowati, N., & Janie, D. N. A. (2024). The role of environmental performance in mediating the relationship between green accounting and corporate social responsibility. *Environmental Economics*, *15*(1), 46–55. https://doi.org/10.21511/ee.15(1).2024.04

Riahi, R., Chibani, F., & Omri, A. (2024). How important is CSR commitment in shaping corporate reputation? *International Journal of Professional Business Review*, *9*(4), e04672. https://doi.org/10.26668/businessreview/2024.v9i4.4672

Rinsman, T. C. S., & Prasetyo, A. B. (2020). The effects of financial and environmental performances on firm value with environmental disclosure as an intervening variable. *Jurnal Dinamika Akuntansi*, *12*(2), 90–99. https://doi.org/10.15294/jda.v12i2.24003

Sapulette, S. G., & Limba, F. B. (2021). Pengaruh penerapan green accounting dan kinerja lingkungan terhadap nilai perusahaan manufaktur yang terdaftar di BEI tahun 2018-2020 [The effect of implementing green accounting and environmental performance on the value of manufacturing companies listed on the IDX in 2018-2020]. *Kupna Akuntansi: Kumpulan Artikel Akuntansi*, *2*(1), 31–43. https://doi.org/10.30598/kupna.v2.i1.p31-43

Selvia, S. M., & Sulfitri, V. (2023). Pengaruh green accounting, corporate social responsibility dan financial distress terhadap nilai perusahaan pada perusahaan manufaktur sektor consumer goods yang terdaftar di BEI 2019-2021 [The effect of green accounting, corporate social responsibility and financial distress on firm value in manufacturing companies in the consumer goods sector listed on the IDX 2019-2021]. *Jurnal Ekonomi Trisakti*, *3*(2), 3035–3048. https://doi.org/10.25105/jet.v3i2.17999

Shaharuddin, N., Wahab, M. H., Osman, A. A., Shakrien, S. S., & Hilmiyah, N. (2025). Appraising the determinants of ESG towards maqasid Shariah in enhancing financial inclusion. *Information Management and Business Review*, *17*(3(I)), 274–281. https://doi.org/10.22610/imbr.v17i3(I).4663

Shalhoob, H. (2025). ESG disclosure and financial performance: Survey evidence from accounting and Islamic finance. *Sustainability*, *17*(4), 1582. https://doi.org/10.3390/su17041582

Simion, L. K., & Ouma, D. O. (2023). Effects of capital structure on financial performance of firms in the commercial and services sector listed at Nairobi Securities Exchange in Kenya. *Research Journal of Finance and Accounting*, *14*(13), 1–8. https://iiste.org/Journals/index.php/RJFA/article/view/61270

Siregar, R. (2025). ESG and Islamic accounting for sustainable Islamic finance: A qualitative study. *Jurnal Ilmiah Akuntansi Kesatuan*, *13*(3), 555–566. https://doi.org/10.37641/jiakes.v13i3.3410

Smith, A. D. (2013). Successful green-based initiatives among large corporate entities: A case study from a stakeholder perspective. *International Journal of Services and Operations Management*, *14*(1), 95–114. https://doi.org/10.1504/IJSOM.2013.050564

Soriya, S., & Rastogi, P. (2023). The impact of integrated reporting on financial performance in India: A panel data analysis. *Journal of Applied Accounting Research*, *24*(1), 199–216. https://doi.org/10.1108/JAAR-10-2021-0271

Sreepriya J., Suprabha K.R., & Prasad, K. (2023). Does GRI compliance moderate the impact of sustainability disclosure on firm value? *Society and Business Review*, *18*(1), 152–174. https://doi.org/10.1108/SBR-06-2022-0172

Sun, Y., Davey, H., Arunachalam, M., & Cao, Y. (2022). Towards a theoretical framework for the innovation in sustainability reporting: An integrated reporting perspective. *Frontiers in Environmental Science*, *10*, 935899. https://doi.org/10.3389/fenvs.2022.935899

Tamasiga, P., Onyeaka, H., Bakwena, M., & Ouassou, E. H. (2024). Beyond compliance: Evaluating the role of environmental, social and governance disclosures in enhancing firm value and performance. *SN Business & Economics*, *4*(10), 118. https://doi.org/10.1007/s43546-024-00714-6

Tao, Y. (2024). A study on the impact of capital structure on the performance of listed companies. *Advances in Economics, Management and Political Sciences*, *102*(1), 57–64. https://doi.org/10.54254/2754-1169/102/2024ED0085

Triana, L., & Puspa, Y. R. (2021). The financial performance and firm value of companies analysis of Indonesia metal industry sector. *International Journal of Research and Scientific Innovation*, *8*(6), 119–124. https://doi.org/10.51244/IJRSI.2021.8609

Upadhyay, S. (2024). Impact of environmental, social, and governance (ESG) factors on individual investor performance. *Interantional Journal of Scientific Research in Engineering and Management*, *8*(4), 1–5. https://doi.org/10.55041/IJSREM32745

Wahyudi, S. K. (2023). Determinants of financial performance with company size as a moderation variable. *Journal of Social Science*, *4*(2), 580–592. https://doi.org/10.46799/jss.v4i2.571

Xu, J., Ye, F., & Li, X. (2024). Carbon intensity constraint policy and firm green innovation in China: A quasi-DID analysis. *Sustainability Accounting, Management and Policy Journal*, *15*(3), 704–730. https://doi.org/10.1108/SAMPJ-08-2023-0572

Yaghi, A. Z.-A., & Tomaszewski, T. (2024). The interdependence of R&D, innovations, and productivity: Case of Polish manufacturing companies. *Ekonomia i Prawo*, *23*(1), 195–212. https://doi.org/10.12775/EiP.2024.0010

Yang, Y., Wen, J., & Li, Y. (2020). The impact of environmental information disclosure on the firm value of listed manufacturing firms: Evidence from China. *International Journal of Environmental Research and Public Health*, *17*(3), 916. https://doi.org/10.3390/ijerph17030916

Yinusa, O. G. (2017). Trade-off theory of optimal capital structure and adjustment towards long run target: A dynamic panel approach. *The Journal of Accounting and Management*, *7*(2), 174–181. https://journals.univ-danubius.ro/index.php/jam/article/view/3722

Younis, N. M. M. (2023). Sustainability reports and their impact on firm value: Evidence from Saudi Arabia. *International Journal of Management and Sustainability*, *12*(2), 70–83. https://doi.org/10.18488/11.v12i2.3275

Yuliani, E., & Prijanto, B. (2022). Pengaruh penerapan green accounting terhadap nilai perusahaan dengan profitabilitas sebagai variabel moderating pada perusahaan sub sektor tambang batubara yang terdaftar di Bursa Efek Indonesia periode 2019-2021 [The effect of implementing green accounting on firm value with profitability as a moderating variable in coal mining sub-sector companies listed on the Indonesia Stock Exchange for the 2019-2021 period]. *Fair Value*: *Jurnal Ilmiah Akuntansi Dan Keuangan*, *5*(5), 2275–2284. https://doi.org/10.32670/fairvalue.v5i5.2347

Zavala, M. D. R. V., & Salgado, R. J. S. (2018). Empirical evidence on the relationship of capital structure and the value of the firm among Mexican public firms. *Contaduría y Administración*, *64*(1), 83. https://doi.org/10.22201/fca.24488410e.2018.1377

Zhou, D., Saeed, U. F., & Agyemang, A. O. (2024). Assessing the role of sustainability disclosure on firms' financial performance: Evidence from the energy sector of Belt and Road Initiative countries. *Sustainability*, *16*(2), 930. https://doi.org/10.3390/su16020930

Zirman, Z., Oktari, V., & Khoiriyah, M. (2021). Mediation role of environmental disclosure in the relationship of firm performance and value. *European Journal of Accounting, Finance & Business*, *17*(27). https://doi.org/10.4316/EJAFB.2021.937

Zulkifli, M. F. F., & Agustina, P. A. A. (2024). Analysis of factors affecting food and beverage company finances in the period 2019-2023. *Proceeding of The International Seminar on Business, Economics, Social Science and Technology (ISBEST)*, *4*. https://doi.org/10.33830/isbest.v4i1.3293