

ESG Performance and Firm Value of Mining Companies: The Moderating Role of Auditor Reputation

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ABSTRACT

Purpose – This study examines the effect of Environmental, Social, and Governance (ESG) performance on the firm value of mining companies listed on the Indonesia Stock Exchange (IDX) during 2023–2024, and tests whether auditor reputation moderates this relationship.

Methodology/approach – Using a quantitative causal design, 39 mining and energy firms over two years (78 firm-year observations) were analysed via purposive sampling. Firm value is proxied by Tobin's Q and ESG by the IDX/Katadata ESG score, with auditor reputation as a Big Four dummy. Panel data regression (Fixed Effect Model with White robust standard errors) was estimated in EViews.

Findings – It ESG performance has no significant effect on firm value; auditor reputation has no significant effect; and auditor reputation does not moderate the ESG–firm-value relationship. Among controls, firm size is negative and significant, while ROA and leverage are insignificant.

Novelty/value – The study offers emerging-market evidence from Indonesia's extractive sector and shows that conventional financial-statement audit reputation does not substitute for dedicated ESG assurance, underscoring the need for independent sustainability assurance.

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INTRODUCTION

Firm value is a vital indicator that reflects investors' perception of how successfully management has utilised the company's resources (Kartana et al., 2023). It captures not only current financial performance but also long-term growth prospects that underpin investment decisions (Shrestha et al., 2024). Firms with high value enjoy a competitive advantage in attracting external capital, which is essential to support business expansion and operational continuity (Gonçalves et al., 2023; Putra & Kawisana, 2019). The paradigm of value creation has shifted fundamentally from mere profit maximisation (single bottom line) toward the Triple Bottom Line (TBL) concept, which asserts that sustainable firms must balance profit, people, and planet. This philosophy is operationalised in practice through the integration of Environmental, Social, and Governance (ESG) aspects into business management. Theoretically, sound ESG performance should be rewarded by the market because it is

believed to mitigate risk and enhance corporate legitimacy (Shrestha et al., 2024; Wiagustini et al., 2023). However, empirical evidence in Indonesia is inconsistent: sustainability reporting is often found to be insignificant, and environmental

; activity may even relate negatively to firm value (Kartana et al., 2023; Sejati & Prastiwi, 2015).

This gap between theoretical expectation and empirical reality suggests that investors may doubt the credibility of sustainability information disclosed by management when it lacks external validation. Market scepticism has grown alongside the rising trend of sustainability reporting, where investors question environmental claims made without concrete evidence (greenwashing). Ceccacci (2024) emphasises that the reputation of a credible third party is required to offset distrust of ESG claims. Without high-quality assurance, ESG disclosure risks being ignored by the market because it is regarded as biased or subjective (Simnett et al., 2009; Thompson et al., 2022). In this respect, auditor reputation plays a crucial role. Big Four audit firms (Deloitte, EY, KPMG, PwC) are widely recognised as having higher reputation, independence, and audit quality than non-Big Four firms (Putra & Kawisana, 2020). Their involvement can enhance the reliability of non-financial information and mitigate the risk of misleading disclosure, thereby strengthening the credibility of corporate ESG reporting (Handayati et al., 2025). A Mandiri Institute survey illustrates the local context: of 162 listed companies surveyed, 95% had implemented ESG as part of their corporate value, yet 64% reported difficulty in meeting ESG performance indicators, citing cost (60%), limited understanding of ESG (57%), and insufficient support from government or regulators (55%). This confirms that although ESG is increasingly considered important in Indonesia, its optimal implementation remains challenging, particularly in high-impact sectors.

The focus of this study on the Indonesian mining sector is therefore highly relevant. Extractive industries such as mining and energy carry significant environmental and social impacts and face tight scrutiny over their ESG practices (Darsono et al., 2024). Prior studies remain inconclusive and rarely examine whether the reputation of the financial-statement auditor can validate ESG information in this setting. Few researchers have investigated the moderating role of auditor reputation on the ESG–firm-value relationship in an emerging-market extractive sector. This research gap is important because mining companies face increasing pressure to demonstrate credible sustainability practices due to their significant environmental and social impacts. Although ESG disclosure is expected to enhance corporate legitimacy and investor confidence, the market response to ESG performance remains inconsistent, partly because investors may question the reliability and credibility of sustainability information. In this context, auditor reputation represents a potential credibility mechanism that may reduce information asymmetry and strengthen the value relevance of ESG disclosure. However, conventional auditor reputation, particularly Big Four affiliation, may not necessarily provide assurance regarding environmental and social performance, creating an important empirical question that remains underexplored.

Therefore, this study contributes to the literature by investigating whether auditor reputation strengthens the relationship between ESG performance and firm value in an emerging-market extractive context. Unlike previous studies that mainly focus on the direct effect of ESG performance on firm value, this study examines the role of auditor reputation as a moderating mechanism that may influence how investors interpret ESG information. Accordingly, this study aims to: (1) analyse the effect of ESG performance on the firm value of mining companies listed on the Indonesia Stock Exchange (IDX) during 2023–2024; (2) analyse the effect of auditor reputation on firm value; and (3) analyse the moderating role of auditor reputation in the relationship between ESG performance and firm value.

LITERATURE REVIEW

Stakeholder Theory, Legitimacy Theory, and the Triple Bottom Line

Stakeholder theory posits that a firm's success is intrinsically linked to the welfare of all interested parties—not only shareholders but also employees, customers, communities, governments, and ESG rating agencies (Kogi et al., 2025; Suhardjo et al., 2024). From this perspective, firms are expected to create value by considering the interests of multiple stakeholders rather than focusing solely on short-term shareholder returns. Therefore, corporate sustainability practices become an important strategic approach to maintain stakeholder relationships, reduce potential conflicts of interest, and support long-term organizational performance. Firms engage in ESG practices not merely to maximise shareholder value but to achieve broader social goals, reduce managerial opportunism, and enhance reputation (Gonçalves et al., 2023).

Environmental, Social, and Governance (ESG) performance represents the extent to which firms integrate sustainability principles into their operational and governance practices. The environmental dimension reflects corporate efforts in managing ecological impacts, resource efficiency, and environmental risks. The social dimension captures the firm's responsibility toward employees, communities, and broader societal interests, while the governance dimension reflects transparency, accountability, ethical decision-making, and effective monitoring mechanisms. Through these dimensions, ESG performance provides stakeholders with non-financial information regarding the firm's ability to manage sustainability risks and create long-term value (Darsono et al., 2024; Laskar, 2024).

Legitimacy theory complements this view by arguing that firms operate under a social contract; disclosing transparent ESG performance signals conformity with prevailing norms and helps secure public legitimacy, lowering investment risk (Shrestha et al., 2024; Wiagustini et al., 2023). In this context, ESG disclosure functions as a legitimacy-building mechanism because it communicates corporate commitment to responsible business practices and demonstrates alignment with increasing societal expectations regarding sustainability. However, the market response to ESG information depends on whether stakeholders perceive such disclosure as credible and reflecting substantive improvements rather than symbolic compliance.

Both perspectives rest on the Triple Bottom Line, which requires firms to balance profit, people, and planet rather than pursue profit alone. The Triple Bottom Line framework provides the conceptual foundation for understanding ESG performance as a multidimensional construct that integrates economic objectives with environmental responsibility and social accountability. Recent empirical studies suggest that stronger ESG performance may enhance corporate reputation, reduce operational and regulatory risks, improve stakeholder trust, and ultimately contribute to firm value (Tahmid et al., 2022; Matuszewska-Pierzynka et al., 2023). Nevertheless, previous findings remain inconsistent, particularly in emerging markets, indicating that additional factors may influence whether ESG performance is recognised by investors.

ESG Performance, Auditor Reputation, and Firm Value

Evidence on the ESG–firm-value relationship is mixed. Several studies report a positive association (Kusumaningrum & Liemanto, 2022; Yiqyn et al., 2023; Handoko, 2024), attributing it to resource efficiency, reputation, and lower risk. Others find neutral or negative effects, especially in Indonesia (Kartana et al., 2023; Jeanice, 2024; Yoon et al., 2018). ESG performance influences firm value through several theoretical mechanisms. First, strong ESG practices can enhance corporate reputation and stakeholder trust by demonstrating commitment to environmental responsibility, social welfare, and effective governance. Second, ESG implementation may reduce long-term business risks related to regulation, environmental liabilities, and stakeholder conflicts, thereby improving investors' perceptions of future firm prospects. Consequently, firms with superior ESG performance are expected to achieve higher market valuation because investors perceive them as better positioned to create sustainable long-term value (Tahmid et al., 2022; Gonçalves et al., 2023; Matuszewska-Pierzynka et al., 2023).

However, the extent to which ESG performance is reflected in firm value depends on the credibility and reliability of sustainability information. In emerging markets, ESG disclosure practices

are still developing, and investors may face difficulties distinguishing between substantive sustainability improvements and symbolic disclosure. Therefore, ESG performance alone may not be sufficient to influence market valuation unless supported by credible assurance mechanisms (Shrestha et al., 2024; Suhardjo et al., 2024).

This inconsistency has motivated the introduction of assurance-related moderators. Auditor reputation—commonly proxied by Big Four affiliation—is argued to reduce information asymmetry and lend credibility to both financial and non-financial disclosures (Handayati et al., 2025; Ikhsan et al., 2024). Auditor reputation represents the perceived quality, independence, and credibility of external auditors in verifying corporate information. Reputable audit firms are expected to provide stronger monitoring and assurance because they possess greater professional expertise, established audit methodologies, and reputational incentives to maintain audit quality. From an information asymmetry perspective, auditor reputation may increase investor confidence by reducing uncertainty regarding the reliability of corporate disclosures (Bakri, 2021; Handayati et al., 2025).

In the context of ESG reporting, auditor reputation may serve as a credibility-enhancing mechanism that strengthens the relationship between sustainability performance and firm value. Since ESG information involves greater managerial judgement and measurement complexity compared with financial information, the involvement of reputable auditors may improve stakeholders' confidence in the quality of disclosed information. Nevertheless, conventional financial statement audits may not fully evaluate environmental and social performance, suggesting that the effectiveness of auditor reputation as an ESG credibility mechanism remains an empirical question, particularly in emerging-market extractive industries (Handayati et al., 2025). Accordingly, high-quality assurance is expected to strengthen the conversion of ESG

Hypotheses

Grounded in the Triple Bottom Line and stakeholder and legitimacy theories, and supported by predominantly positive empirical evidence, the study proposes:

ESG Performance and Firm Value

According to stakeholder theory and legitimacy theory, firms with superior ESG performance are expected to receive stronger market recognition because they demonstrate commitment to sustainable business practices, responsible resource management, and stakeholder interests. ESG activities provide investors with additional information regarding a firm's ability to manage environmental, social, and governance risks, which may reduce information asymmetry and strengthen perceptions of long-term value creation.

Empirical evidence generally supports the argument that ESG performance can enhance firm value. Yiqyn et al. (2023) found that stronger ESG performance positively influences firm value because sustainability practices improve corporate reputation and reduce perceived risks. Similarly, Handoko (2024) reported that ESG performance contributes to firm value by strengthening corporate competitiveness through sustainability-oriented strategies. Tahmid et al. (2022) also demonstrated that ESG initiatives may generate economic benefits by improving stakeholder confidence and supporting long-term financial performance.

However, previous findings remain inconclusive, particularly in emerging markets. Kartana et al. (2023) and Jeanice (2024) found that ESG disclosure does not always translate into higher firm value

in Indonesia, suggesting that investors may still question the credibility, consistency, and substantive impact of sustainability information. This inconsistency indicates that the market value relevance of ESG performance may depend on how investors interpret sustainability disclosure and whether they perceive ESG practices as genuine value-creating activities rather than symbolic compliance.

Given the increasing importance of sustainability considerations in investment decisions, particularly in environmentally sensitive industries such as mining, examining the relationship between ESG performance and firm value remains relevant. Therefore, this study proposes the following hypothesis:

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

Auditor Reputation and Firm Value

Auditor reputation reflects the perceived credibility, independence, and audit quality of external auditors. From the perspective of information asymmetry and signalling theory, reputable auditors provide an external credibility signal that reduces uncertainty between managers and investors regarding the reliability of corporate information. Firms audited by highly reputable audit firms, particularly Big Four auditors, are generally perceived to have stronger monitoring mechanisms, higher audit quality, and greater reporting transparency (Bakri, 2021; Handayati et al., 2025).

Theoretically, auditor reputation may enhance firm value because high-quality auditors reduce agency problems by limiting managerial opportunistic behaviour and increasing confidence in disclosed financial information. Reliable audit assurance can improve investor perceptions regarding the accuracy of reported performance, reduce information risk, and ultimately strengthen market valuation. Therefore, firms associated with reputable auditors may receive higher market recognition compared with firms audited by less reputable auditors.

Empirical evidence provides support for this relationship. Handayati et al. (2025) demonstrated that Big Four auditors play an important role in strengthening the credibility of corporate information and governance mechanisms. Similarly, Ikhsan et al. (2024) found that audit quality and internal monitoring mechanisms influence firm value by improving reporting reliability and reducing information asymmetry. Bakri (2021) also showed that audit quality has a moderating role in corporate valuation by enhancing investor confidence.

However, previous findings are not entirely consistent. Some studies indicate that auditor reputation does not always create additional market value because investors may consider other firm-specific factors, such as profitability, growth opportunities, industry characteristics, and operational performance, as more dominant determinants of valuation (Ammer & Pantamee, 2024; Purmalita & Fauzan, 2024). This suggests that the value relevance of auditor reputation may depend on the institutional environment and characteristics of the industry being examined.

Given that mining companies operate in a high-risk environment with substantial information asymmetry due to complex operational activities and sustainability-related risks, auditor reputation may serve as an important credibility mechanism for investors when evaluating corporate value. Therefore, this study proposes the following hypothesis:

H2: Auditor reputation has a positive effect on firm value.

Moderating Role of Auditor Reputation

Although ESG performance may provide sustainability-related value, the extent to which ESG information is incorporated into firm valuation depends on its perceived credibility and reliability. From the perspective of legitimacy theory and information asymmetry theory, ESG disclosure can only enhance market value when investors perceive sustainability information as trustworthy and reflective of substantive corporate commitment. Therefore, external assurance mechanisms may play an important role in strengthening the value relevance of ESG performance.

Auditor reputation may function as a credibility-enhancing mechanism that strengthens the relationship between ESG performance and firm value. Reputable auditors, particularly Big Four audit firms, possess stronger professional expertise, established audit methodologies, and greater reputational incentives to maintain reporting quality. Their involvement may reduce information asymmetry by increasing stakeholders' confidence in corporate disclosures and signalling that reported information has undergone a higher level of scrutiny (Bakri, 2021; Handayati et al., 2025).

In the context of ESG reporting, auditor reputation may strengthen the effect of ESG performance on firm value because sustainability information often involves greater managerial judgement and uncertainty compared with financial reporting. When ESG practices are accompanied by credible assurance signals, investors may be more likely to interpret ESG performance as a genuine indicator of long-term value creation rather than symbolic disclosure. Consequently, reputable auditors may enhance the translation of ESG performance into market valuation.

Empirical evidence supports the importance of assurance mechanisms in enhancing the credibility of sustainability information. Handayati et al. (2025) found that Big Four auditors play an important role in strengthening the relationship between ESG performance and corporate governance outcomes. Similarly, Ikhsan et al. (2024) highlighted that audit quality and monitoring mechanisms contribute to improved firm value by reducing information asymmetry and increasing reporting reliability. However, previous studies also suggest that conventional financial audit reputation may not always provide sufficient assurance for sustainability-related information because financial audits primarily focus on historical financial statements rather than environmental and social performance.

This issue is particularly relevant in mining companies, where ESG concerns are highly significant due to substantial environmental impacts and social responsibilities. Therefore, examining whether auditor reputation strengthens the relationship between ESG performance and firm value provides important insights into whether traditional audit credibility mechanisms are sufficient to enhance the market relevance of sustainability information. Therefore, the following hypothesis is proposed:

H3: Auditor reputation strengthens the positive relationship between ESG performance and firm value.

Conceptual Framework

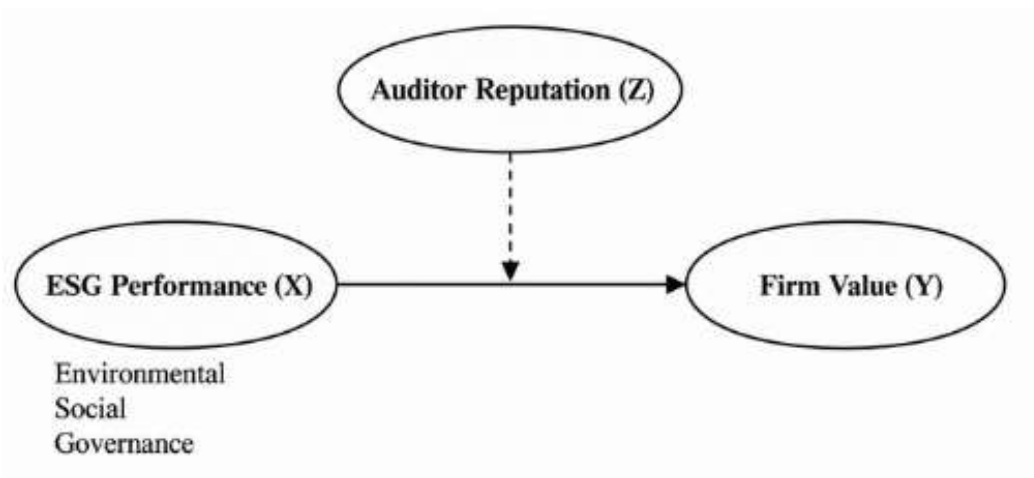


Figure 1. Conceptual Framework of ESG Performance, Auditor Reputation, and Firm Value

METHOD

Research Design and Sample Selection

This study adopts a quantitative causal research design to examine the relationship between ESG performance and firm value, with auditor reputation as a moderating variable. A causal approach is employed because the study aims to investigate whether variations in ESG performance and auditor reputation are associated with differences in market valuation among mining and energy companies. The population consists of all mining-sector companies listed on the Indonesia Stock Exchange (IDX) during the 2023–2024 observation period. The mining sector was selected because it represents an environmentally sensitive industry with significant sustainability challenges, making ESG practices increasingly relevant for investors and stakeholders. The sample was selected using a non-probability purposive sampling technique. Firms were included if they met the following criteria: (1) listed continuously on the IDX during 2023–2024; (2) published annual reports and sustainability reports during the observation period; (3) had available ESG scores; and (4) provided complete financial information required for calculating firm value and control variables. The sample selection process is presented in Table 1. The initial population consisted of 48 mining-sector firms with available ESG scores. After excluding nine firms that did not provide consecutive ESG scores during 2023–2024, the final sample consisted of 39 firms, resulting in 78 firm-year observations.

Table 1. Sample Selection Process

<i>No</i>	<i>Sample Criteria</i>	<i>Number of Firms</i>
1	Mining-sector firms with available ESG scores	48
2	Firms without consecutive ESG scores in 2023–2024	(9)
3	Final sample (firms meeting all criteria)	39
	Observations (39 × 2 years)	78

Source: *www.idx.co.id, processed (2026).*

Variable Measurement

The dependent variable in this study is firm value (Y), measured using Tobin's Q. Tobin's Q is widely used to capture market-based firm valuation because it reflects investors' expectations regarding future corporate performance. The formula is calculated as follows:

$$Q = \frac{MVS + D}{TA}$$

where MVS represents the market value of equity, D represents total debt, and TA represents total assets (Kartana et al., 2023).

The independent variable is ESG performance (X), measured using the ESG score provided by the IDX/Katadata ESG Index. ESG scores represent corporate sustainability performance based on three main dimensions: environmental responsibility, social responsibility, and governance quality. Higher ESG scores indicate stronger sustainability practices and greater transparency in addressing stakeholder expectations.

The moderating variable is auditor reputation (Z), measured using a dummy variable based on auditor affiliation. The variable is coded as **1** if the company is audited by a Big Four audit firm and **0** otherwise (Handayati et al., 2025). Auditor reputation is considered a proxy for audit credibility because reputable auditors are expected to provide stronger monitoring mechanisms and enhance confidence in corporate disclosures.

This study also incorporates three control variables that may influence firm value:

1. Firm size, measured as the natural logarithm of total assets.
2. Profitability, measured using return on assets (ROA), calculated as net income divided by total assets.
3. Leverage, measured using debt-to-equity ratio (DER), calculated as total debt divided by total equity.

Empirical Model

To test the proposed hypotheses, this study estimates the following regression model:

$$FV_{it} = \beta_0 + \beta_1 ESG_{it} + \beta_2 AR_{it} + \beta_3 (ESG \times AR)_{it} + \beta_4 SIZE_{it} + \beta_5 ROA_{it} +$$

where:

FV = Firm Value measured by Tobin's Q

ESG = ESG Performance

AR = Auditor Reputation

ESG × AR = Interaction term representing the moderating effect of auditor reputation

SIZE = Firm Size

ROA = Profitability

DER = Leverage

ε = Error term

Moderation Testing Procedure

To examine whether auditor reputation moderates the relationship between ESG performance and firm value, this study applies Moderated Regression Analysis (MRA) using an interaction-term approach within the panel regression framework.

MRA was selected because the purpose of this study is not only to examine the direct effect of auditor reputation on firm value but also to determine whether auditor reputation changes the strength of the relationship between ESG performance and firm value. In this approach, moderation is assessed by introducing an interaction variable between ESG performance and auditor reputation (ESG × AR).

The moderation effect is determined based on the statistical significance and direction of the interaction coefficient (β_3). A significant β_3 indicates that auditor reputation moderates the ESG–firm value relationship. A positive interaction coefficient indicates that auditor reputation strengthens the relationship, whereas a negative coefficient indicates that auditor reputation weakens the relationship.

This study does not employ Multi-Group Analysis (MGA), PROCESS Macro, or Two-Stage/Product Indicator approaches. MGA and PROCESS Macro are generally applied in structural equation modelling or variance-based moderation analysis, while the Two-Stage/Product Indicator approach is commonly used for latent variable interaction analysis in Partial Least Squares Structural Equation Modelling (PLS-SEM). Since this study uses observed variables and panel regression estimated through EViews, the interaction-term MRA approach is considered the most appropriate method.

The moderation model is specified as follows:

$$FV_{it} = \beta_0 + \beta_1 ESG_{it} + \beta_2 AR_{it} + \beta_3 (ESG \times AR)_{it} + \beta_4 SIZE_{it} + \beta_5 ROA_{it} +$$

where:

FV represents firm value measured by Tobin's Q;

ESG represents ESG performance;

AR represents auditor reputation measured by Big Four affiliation;

ESG × AR represents the moderation interaction term;

SIZE, ROA, and DER represent control variables.

RESULT AND DISCUSSION

Table 2 reports the descriptive statistics for the 78 firm-year observations. Firm value (Tobin's Q) ranges from 0.60 to 42.98 with a mean of 2.19, indicating that most sampled mining firms trade above their asset replacement cost. ESG scores range from 24.01 to 77.50 (mean 52.20), while the auditor-reputation dummy has a mean of 0.41, meaning about 41% of observations were audited by Big Four firms.

Table 2. Descriptive Statistics

<i>Statistic</i>	<i>ESG</i>	<i>Auditor</i>	<i>Ln Asset</i>	<i>ROA</i>	<i>DER</i>	<i>Firm Value</i>
<i>Mean</i>	52.20	0.41	26.05	9.91	1.07	2.19
<i>Median</i>	54.55	0.00	14.01	7.27	0.70	1.09

<i>Maximum</i>	77.50	1.00	161.40	40.20	7.20	42.98
<i>Minimum</i>	24.01	0.00	0.35	-3.50	0.13	0.60
<i>Std. Dev.</i>	12.26	0.50	31.87	10.70	1.24	5.04
<i>Observations</i>	78	78	78	78	78	78

Source: Data processed (2026)

The Panel regression analysis was estimated using the Fixed Effect Model (FEM) with White robust standard errors to address potential heteroscedasticity and non-normal residual issues. The results of the FEM estimation are presented in Table 3. The model explains approximately 68.55% of the variation in firm value, as indicated by the R-squared value of 0.6855. The F-statistic probability of 0.0722 indicates that the model remains statistically acceptable for explaining the relationship among ESG performance, auditor reputation, and firm value.

Table 3. Panel Regression Results

<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
<i>Constant</i>	5.8257	8.2495	0.7062	0.4850
<i>ESG (X)</i>	0.0833	0.1266	0.6579	0.5151
<i>Auditor Reputation (Z)</i>	15.6396	18.5775	0.8419	0.4059
<i>ESG × Auditor (XZ)</i>	-0.2312	0.2734	-0.8455	0.4039
<i>Firm Size</i>	-0.2200	0.2293	-0.9597	0.3442
<i>ROA</i>	-0.0540	0.0750	-0.7201	0.4766
<i>DER</i>	-2.4120	2.4327	-0.9915	0.3287
<i>R-squared</i>	0.6855			
<i>Prob (F-statistic)</i>	0.0722			

Source: Data processed (2026)

The model explains 68.55% of the variation in firm value (R-squared = 0.6855), and the F-statistic probability of 0.0722 indicates that the model is jointly

As presented in Table 3, the Fixed Effect Model (FEM) with White robust standard errors explains 68.55% of the variation in firm value (R-squared = 0.6855). The F-statistic probability of 0.0722 indicates that the model is jointly significant at the 10% level, suggesting that the independent variables and control variables collectively explain variations in firm value.

However, the partial regression results indicate that none of the main explanatory variables has a statistically significant effect on firm value. ESG performance shows a positive but insignificant coefficient ($\beta = 0.0833$; $p = 0.5151$), indicating that ESG performance has not yet generated a significant market valuation effect among mining companies during the observation period. Therefore, H1 is not supported. Auditor reputation also has a positive but insignificant effect on firm value ($\beta = 15.6396$; $p = 0.4059$), suggesting that Big Four affiliation does not significantly influence market valuation. Thus, H2 is not supported. Furthermore, the interaction term between ESG performance and auditor reputation is negative and statistically insignificant ($\beta = -0.2312$; $p = 0.4039$), indicating that auditor reputation does not significantly strengthen the relationship between ESG performance and firm value. Therefore, H3 is not supported.

Regarding the control variables, firm size has a negative but insignificant coefficient, suggesting that larger firms do not necessarily achieve higher market valuation and may

experience complexity-related inefficiencies. Meanwhile, profitability (ROA) and leverage (DER) are statistically insignificant, indicating that these factors do not significantly explain variations in firm value within the observed sample.

ESG Performance and Firm Value

The regression results presented in Table 3 indicate that ESG performance has a positive but statistically insignificant effect on firm value ($\beta = 0.0833$; $p = 0.5151$). Therefore, H1 is not supported. This finding suggests that higher ESG performance among Indonesian mining firms during the 2023–2024 observation period has not significantly influenced market valuation. Although stakeholder theory and legitimacy theory suggest that sustainability practices can enhance corporate reputation, reduce business risks, and strengthen investor confidence, the empirical evidence indicates that ESG information has not yet become a dominant factor considered by investors when assessing the value of mining companies in Indonesia.

This finding is consistent with previous studies showing that ESG performance does not always generate immediate valuation benefits, particularly in emerging markets. Wahyono et al. (2024) found that ESG performance had no significant direct effect on firm value among Indonesian companies, suggesting that investors may still prioritise conventional financial indicators over sustainability information. Similarly, Kartana et al. (2023) reported that sustainability disclosure does not automatically increase firm value because market participants may evaluate ESG information differently depending on its credibility and relevance.

However, the finding differs from studies that demonstrate a significant positive relationship between ESG performance and firm value. Yiqyn et al. (2023) found that ESG performance positively affects firm value among Chinese manufacturing firms because sustainability practices enhance reputation, reduce operational risks, and strengthen stakeholder confidence. Likewise, Tahmid et al. (2022) reported that ESG initiatives contribute to higher firm value by improving corporate legitimacy and long-term financial performance. The difference between these findings may be explained by variations in institutional environments, investor awareness, ESG reporting quality, and industry characteristics.

In the context of Indonesian mining companies, the insignificant relationship may occur because mining firms operate in an environmentally sensitive industry where investors may remain cautious regarding the credibility and substantive impact of ESG disclosures. Although ESG reporting provides additional information regarding sustainability commitments, investors may require stronger evidence that ESG practices generate measurable economic benefits before incorporating such information into valuation decisions. Therefore, the absence of a significant ESG effect does not indicate that sustainability practices are irrelevant, but rather suggests that the market recognition of ESG performance depends on the quality, credibility, and maturity of sustainability practices.

Auditor Reputation and Firm Value

The regression results presented in Table 3 show that Auditor reputation has a positive but statistically insignificant effect on firm value ($\beta = 15.6396$; $p = 0.4059$). Therefore, H2 is not supported. This finding indicates that differences between Big Four and non-Big Four auditors do not significantly influence market valuation among Indonesian mining companies during the observation period. Although reputable auditors are theoretically expected to reduce information asymmetry and improve investor confidence through higher perceived audit

quality, the results suggest that auditor reputation alone is insufficient to become a primary determinant of firm value in the mining sector.

This finding is consistent with Ammer and Pantamee (2024), who found that auditor-related characteristics do not always translate directly into higher firm value because investors may place greater emphasis on firm-specific financial conditions and operational performance. Similarly, Handayati et al. (2025) highlighted that the role of Big Four auditors in enhancing corporate outcomes depends on the institutional context and the type of information being evaluated by stakeholders. However, this result differs from studies that demonstrate a positive relationship between audit quality and firm valuation. Ikhsan et al. (2024) found that audit quality and monitoring mechanisms contribute to higher firm value by improving reporting reliability and reducing information asymmetry. Likewise, Bakri (2021) showed that audit quality strengthens investor confidence because reputable auditors provide stronger assurance regarding corporate reporting credibility.

The difference between these findings may be explained by the characteristics of the mining industry. Mining companies are highly influenced by fundamental factors such as commodity prices, natural resource reserves, production capacity, and regulatory risks. Consequently, investors may consider operational and market-based factors more important than auditor affiliation when assessing firm value. Furthermore, although Big Four auditors are generally associated with stronger audit capabilities and reporting credibility, conventional financial audits may not fully address sustainability-related risks that are increasingly relevant in environmentally sensitive industries. Therefore, the insignificant effect of auditor reputation does not imply that audit quality is irrelevant. Instead, it suggests that the market value relevance of auditor reputation may depend on whether investors perceive audit credibility as directly connected to the information required for investment decisions, particularly sustainability and non-financial disclosures.

The Moderating Role of Auditor Reputation

The moderation effect of auditor reputation was tested using Moderated Regression Analysis (MRA) through the interaction coefficient between ESG performance and auditor reputation ($ESG \times AR$). The results of the interaction test are presented in Table 3. Based on Table 3, the interaction coefficient between ESG performance and auditor reputation is negative and statistically insignificant ($\beta = -0.2312$; $p = 0.4039$). The insignificant probability value indicates that the interaction effect does not meet the statistical criteria for moderation. Therefore, auditor reputation does not significantly moderate the relationship between ESG performance and firm value. The negative coefficient suggests that the presence of a Big Four auditor does not strengthen the positive influence of ESG performance on firm value. Instead, the estimated direction indicates a weakening tendency, although this effect is statistically unsupported. Consequently, H3 stating that auditor reputation strengthens the relationship between ESG performance and firm value is not supported.

CONCLUSION

Using a Fixed Effect panel model with White robust standard errors on 39 Indonesian mining firms over 2023–2024, the study finds that ESG performance does not significantly affect firm value, auditor reputation does not significantly affect firm value, and auditor reputation does not moderate the ESG–firm-value relationship. Read through the lens of legitimacy theory and the Triple Bottom Line,

these results imply that ESG disclosure by extractive-sector issuers is still treated as normative compliance, and that the reputation of the financial-statement auditor does not substitute for dedicated ESG assurance because conventional audits cover the profit pillar rather than the people and planet pillars.

The study is limited by a short two-year window, a single sectoral focus, a Big Four dummy that does not capture separate sustainability-assurance engagements, and reliance on a single ESG data provider. Future research is encouraged to extend the observation period to at least five years, compare sectors, and employ more specific moderators such as the presence of a sustainability committee or ESG assurance under ISAE 3000. For regulators, the findings signal a need to standardise or mandate third-party assurance of sustainability reports for high-risk sectors such as mining, so as to improve the credibility of ESG information and protect investors.

The Moderating Role of Auditor Reputation

The MRA results presented in Table 3 indicate that auditor reputation does not significantly moderate the relationship between ESG performance and firm value ($\beta = -0.2312$; $p = 0.4039$). The insignificant interaction coefficient demonstrates that differences between Big Four and non-Big Four auditors do not change the extent to which ESG performance influences market valuation among Indonesian mining companies.

This finding suggests that auditor reputation, although commonly associated with higher audit credibility and reporting reliability, does not automatically enhance the value relevance of ESG information. In the context of mining companies, investors may require more specific sustainability assurance mechanisms rather than relying solely on conventional financial audit reputation.

The result differs from the theoretical expectation based on signalling theory and information asymmetry theory, which suggest that reputable auditors can reduce uncertainty and increase confidence in corporate disclosures. However, the finding is consistent with the argument that financial audit reputation and sustainability assurance represent different credibility mechanisms. Traditional financial audits primarily focus on historical financial reporting, whereas ESG disclosures involve environmental and social dimensions that require specialised assurance procedures.

Therefore, the insignificant moderation effect indicates that Big Four affiliation alone is insufficient to strengthen the market interpretation of ESG performance. The credibility of ESG information may depend more on sustainability-specific assurance, transparency quality, and stakeholder engagement rather than auditor reputation alone.

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