



Does Audit Quality Strengthen the Impact of ESG Disclosure on Earnings Management? Empirical Evidence

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Abstract. The increasing adoption of Environmental, Social, and Governance (ESG) disclosure has intensified academic and professional interest in its role in enhancing financial reporting quality. Nevertheless, empirical evidence regarding the relationship between ESG disclosure and earnings management remains inconclusive, suggesting that additional governance mechanisms may influence this relationship. This study investigates the effect of ESG disclosure on earnings management and examines whether audit quality strengthens this relationship. The study employs a quantitative explanatory research design using panel data from non-financial companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2025 period. The sample is selected using purposive sampling based on data availability and reporting consistency. Panel data regression with moderated regression analysis is employed to test the direct and moderating effects, while firm size, leverage, profitability, and firm age are included as control variables. The findings indicate that ESG disclosure significantly reduces earnings management, suggesting that firms with more comprehensive sustainability disclosure exhibit higher financial reporting quality. Furthermore, audit quality strengthens the negative relationship between ESG disclosure and earnings management, indicating that high-quality external audits enhance the credibility of sustainability reporting and limit managerial opportunistic behavior. These findings contribute to the literature on corporate governance and sustainability reporting while providing practical implications for regulators, investors, auditors, and corporate managers seeking to improve reporting transparency and accountability.

Keywords: Audit Quality; Corporate Governance; Earnings Management; ESG Disclosure; Financial Reporting Quality.

1. INTRODUCTION

Environmental, Social, and Governance (ESG) disclosure has become an essential component of corporate transparency and sustainable business practices ((Almubarak, Chebbi, & Ammer, 2023); (Maji & Tiwari, 2025); (Alodat & Hao, 2024)). Increasing regulatory requirements and stakeholder expectations have encouraged firms to provide more comprehensive sustainability information alongside financial reporting. ESG disclosure is expected to reduce information asymmetry, strengthen corporate governance, and improve the credibility of financial reporting ((Cesarone, Martino, & Carleo, 2022); (Elgharabawy & Aladwey, 2025)) However, despite its growing importance, empirical evidence regarding the relationship between ESG disclosure and earnings management remains inconclusive. While several studies report that ESG practices improve earnings quality by limiting managerial opportunistic behavior ((Rezaee, Dou, & Zhang, 2020); Gaio et al., 2022), others argue that managers may strategically use ESG disclosure to legitimize firms while simultaneously engaging in earnings manipulation ((Muttakin, Khan, & Azim, 2015); (Shi, Liu, & Wu, 2022)).

Prior studies have documented mixed findings concerning the effectiveness of ESG disclosure in constraining earnings management. Mandatory corporate social responsibility disclosure has been found to improve earnings quality by reducing discretionary reporting

practices ((Fan et al., 2023); (Auer & Schuhmacher, 2022); (Gibson, Krueger, & Schmidt, 2022)). Similarly, Rezaee and Tuo (2019) reported that both the quantity and quality of sustainability disclosure are associated with higher earnings quality. Conversely, Almubarak, Chebbi, & Ammer (2023) found that the relationship between ESG disclosure and earnings management differs across firms depending on their financial condition, while Nguyen, Thi, Thi, Hoang, & Thi, (2025) demonstrated that sustainability disclosure does not necessarily eliminate real earnings management practices. These inconsistent findings suggest that ESG disclosure alone may not be sufficient to discourage opportunistic financial reporting.

Recent literature highlights audit quality as a critical governance mechanism that may influence the effectiveness of ESG disclosure. High-quality auditors strengthen monitoring functions, reduce managerial discretion, and improve the credibility of both financial and non-financial reporting (Dakhli, 2021). Empirical evidence indicates that audit quality moderates relationships involving ESG performance and corporate outcomes, including financial performance and dividend policy ((Maji & Tiwari, 2025); (Zahid, Khan, Anwar, & Maqsood, 2022); (Handajani & Murhadi, 2025)). Moreover, Alharasis, Alshdaifat, Almarayeh, Hasan, & Al-Hamadeen (2025) found that audit quality significantly moderates the relationship between earnings management and ESG reporting, while Hoang, Ha, Tran, & Nguyen (2022) demonstrated that auditor characteristics influence managerial tolerance toward earnings management in socially responsible firms. Nevertheless, limited studies have specifically examined whether audit quality strengthens the effect of ESG disclosure in reducing earnings management, particularly within an integrated empirical framework.

The novelty of this study lies in integrating ESG disclosure, earnings management, and audit quality into a single moderated research model. Unlike previous studies that primarily investigate direct relationships or examine governance mechanisms separately, this research positions audit quality as an external monitoring mechanism capable of enhancing the credibility of ESG disclosure and mitigating earnings management. By employing panel data regression with moderation analysis, this study provides a more comprehensive explanation of how audit quality influences the effectiveness of ESG disclosure in improving financial reporting quality. This approach addresses the research gap identified in previous studies that recommend further investigation into governance mechanisms underlying the ESG–earnings management relationship ((Alharasis et al., 2025); (Shi et al., 2022)).

Accordingly, this study aims to examine the effect of ESG disclosure on earnings management and to determine whether audit quality strengthens this relationship. The findings are expected to contribute to the literature on sustainability reporting, earnings management,

and corporate governance by providing empirical evidence on the role of audit quality in enhancing the credibility of ESG disclosure. Furthermore, the results are expected to offer practical implications for regulators, investors, auditors, and corporate managers in promoting transparent financial reporting and sustainable business practices.

2. LITERATURE REVIEW

Stakeholder Theory and ESG Disclosure

Stakeholder theory posits that companies are accountable not only to shareholders but also to broader stakeholder groups, including investors, regulators, customers, employees, and society. Consequently, ESG disclosure serves as an important communication mechanism that enhances corporate transparency and legitimacy while reducing information asymmetry. High-quality ESG disclosure signals a firm's commitment to sustainable business practices and responsible governance, thereby increasing stakeholder confidence. Prior studies have demonstrated that comprehensive sustainability disclosure contributes to better earnings quality and stronger corporate governance because it encourages managers to act more responsibly and transparently ((Rezaee & Tuo, 2019); (Rezaee et al., 2020)). Therefore, ESG disclosure is increasingly regarded as an integral component of corporate accountability and long-term value creation.

ESG Disclosure and Earnings Management

The relationship between ESG disclosure and earnings management has received considerable attention but remains inconclusive. One stream of literature argues that firms with stronger ESG disclosure are less likely to engage in earnings management because sustainability practices promote ethical behavior and transparent financial reporting (Gaio et al., 2022; (Fan et al., 2023)). Conversely, another perspective suggests that managers may use ESG disclosure strategically to build a positive corporate image while concealing opportunistic earnings manipulation, resulting in lower reporting quality (Muttakin et al., 2015). A meta-analysis conducted by Shi et al., (2022) further confirms that empirical evidence varies across countries, industries, and institutional environments, indicating that additional governance mechanisms may influence this relationship.

Audit Quality as a Corporate Governance Mechanism

Audit quality represents an essential external governance mechanism that enhances the credibility of financial and sustainability reporting. High-quality auditors are expected to detect material misstatements, reduce managerial discretion, and improve the reliability of reported information. Dakhli (2021) found that audit quality strengthens the effectiveness of corporate

social responsibility practices by improving firm transparency and accountability. Similarly, Hoang et al., (2022) showed that auditor characteristics significantly influence managers' ability to engage in earnings management within socially responsible firms. Consequently, audit quality is widely recognized as an important monitoring mechanism that reinforces corporate governance and protects stakeholders from opportunistic financial reporting.

Audit Quality as a Moderating Variable

Recent empirical studies suggest that audit quality may strengthen the effectiveness of ESG disclosure by limiting earnings management through more rigorous external monitoring. Alharasis et al., (2025) found that audit quality significantly moderates the relationship between earnings management and ESG reporting, indicating that firms audited by high-quality auditors exhibit more credible sustainability reporting. Likewise, Zahid et al., (2022), Maji & Tiwari (2025), and Handajani & Murhadi (2025) reported that audit quality enhances the effectiveness of ESG practices in improving corporate outcomes. Building upon these findings, this study proposes that audit quality strengthens the negative relationship between ESG disclosure and earnings management by increasing the credibility of sustainability information and constraining managerial opportunistic behavior.

Conceptual Framework

Based on stakeholder theory and prior empirical evidence, this study develops a conceptual framework in which ESG disclosure influences earnings management, while audit quality moderates this relationship. Although previous studies have examined the direct effects of ESG disclosure or the governance role of audit quality separately, limited research has integrated these variables into a single empirical model. Therefore, this study contributes to the literature by investigating whether audit quality enhances the effectiveness of ESG disclosure in reducing earnings management through a moderated panel data regression model, thereby providing a more comprehensive explanation of corporate reporting quality and governance effectiveness.

3. METHOD

Research Design

This study employs a quantitative explanatory research design to examine the effect of ESG disclosure on earnings management and the moderating role of audit quality. The research uses secondary panel data because it enables the analysis of both cross-sectional and time-series variations, providing more robust empirical evidence than cross-sectional analysis. Panel data regression with moderation analysis is adopted, following previous studies examining

ESG, audit quality, and earnings management ((Alharasis et al., 2025); (Almubarak et al., 2023)).

Population and Sample

The population of this study comprises all non-financial companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2025 period. The observation period is selected because it reflects the increasing adoption of ESG disclosure following the implementation of sustainability reporting regulations and growing stakeholder demand for ESG information. The sample is determined using purposive sampling based on the following criteria: (1) companies continuously listed on the IDX during 2021–2025; (2) companies publishing complete annual reports and sustainability reports for each year of observation; (3) companies with available ESG disclosure information and audited financial statements; and (4) companies with complete financial data required to calculate earnings management, audit quality, and control variables. Financial institutions are excluded because they are subject to different regulatory environments and financial reporting standards. The final sample consists of firm-year observations that satisfy these criteria.

Data Collection and Variable Measurement

This study uses secondary data obtained from annual reports, sustainability reports, audited financial statements, and ESG databases. ESG disclosure serves as the independent variable and is measured using an ESG disclosure index based on the extent of environmental, social, and governance information disclosed by each company (Rezaee et al., 2020). Earnings management is the dependent variable and is measured using discretionary accruals based on the Modified Jones Model, which is widely adopted in prior earnings management studies (Rezaee et al., 2020; Gaio et al., 2022). Audit quality is the moderating variable and is proxied by Big Four auditor affiliation, where firms audited by Deloitte, EY, KPMG, or PwC are coded as one, and non-Big Four auditors are coded as zero ((Dakhli, 2021); (Zahid et al., 2022)). To improve model reliability, several control variables are included, namely firm size, leverage, profitability, and firm age, as these variables have been shown to influence earnings management.

Data Analysis Technique

The data are analyzed using descriptive statistics, correlation analysis, and panel data regression. Model selection is conducted through the Chow test, Hausman test, and Lagrange Multiplier test to determine the most appropriate estimation model (common effect, fixed effect, or random effect). The moderating effect of audit quality is examined using Moderated Regression Analysis (MRA) by incorporating an interaction term between ESG disclosure and

audit quality. Hypothesis testing is performed using the t-test for individual parameter significance and the F-test for overall model significance at a 5% significance level. Classical assumption and robustness tests are also conducted to ensure the validity and consistency of the empirical results ((Alharasis et al., 2025); (Maji & Tiwari, 2025)).

Research Model

The empirical model used in this study is formulated as follows:

$$EM_{it} = \beta_0 + \beta_1 ESG_{it} + \beta_2 AQ_{it} + \beta_3 (ESG_{it} \times AQ_{it}) + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + \beta_6 ROA_{it} + \beta_7 AGE_{it} + \varepsilon_{it}$$

where EM represents earnings management, ESG denotes the ESG disclosure score, AQ represents audit quality measured by Big Four auditor affiliation, $ESG \times AQ$ is the interaction term measuring the moderating effect of audit quality, SIZE is firm size measured by the natural logarithm of total assets, LEV is financial leverage, ROA is return on assets representing firm profitability, AGE is firm age, β_0 is the intercept, β_1 – β_7 are regression coefficients, i denotes the company, t denotes the observation year (2021–2025), and ε is the error term. A statistically significant coefficient of the interaction term (β_3) indicates that audit quality moderates the relationship between ESG disclosure and earnings management. This model is consistent with previous moderation studies investigating ESG disclosure and audit quality (Alharasis et al., 2025; Zahid et al., 2022).

4. RESULTS AND DISCUSSION

Data Collection and Research Profile

This study employed secondary data collected from annual reports, sustainability reports, and audited financial statements of non-financial companies listed on the Indonesia Stock Exchange (IDX). The observation period covered 2021–2025, representing the period in which ESG disclosure practices became increasingly important following enhanced sustainability reporting initiatives. The data collection process was conducted between January and March 2026 using publicly available reports obtained from the IDX website, company websites, and ESG databases.

Initially, 720 firm-year observations were identified. After excluding companies with incomplete ESG disclosure, missing financial information, and inconsistent reporting periods, the final sample consisted of 480 firm-year observations, representing 96 companies observed over five years. These observations satisfied all sampling criteria and were considered adequate for panel data analysis.

Descriptive Statistics

Table 1 presents the descriptive statistics of the research variables. The average ESG disclosure score was 58.42%, indicating that Indonesian listed companies have begun to improve sustainability disclosure, although the level of disclosure remains heterogeneous. The mean discretionary accruals (earnings management) was 0.084, suggesting relatively low earnings manipulation on average. Approximately 43% of the sampled companies were audited by Big Four audit firms, indicating moderate audit quality among Indonesian listed companies.

Table 1. Descriptive Statistics.

Variable	Mean	Std. Dev.	Minimum	Maximum
Earnings Management (EM)	0.084	0.067	-0.112	0.295
ESG Disclosure	58.42	18.36	21.30	94.80
Audit Quality (AQ)	0.43	0.49	0.00	1.00
Firm Size	29.86	1.57	25.74	34.62
Leverage	0.46	0.21	0.08	0.91
ROA	0.073	0.064	-0.082	0.281

Source: Processed research data (2026).

The descriptive statistics indicate sufficient variation among firms, suggesting that the sample adequately represents differences in ESG disclosure, financial performance, and audit quality.

Regression Results

The panel data estimation indicated that the Fixed Effect Model was the most appropriate model based on the Chow and Hausman tests. Table 2 presents the regression results.

Table 2. Panel Regression Results.

Variable	Coefficient	t-value	p-value
ESG Disclosure	-0.182	-3.41	0.001
Audit Quality	-0.091	-2.28	0.023
ESG × Audit Quality	-0.117	-2.97	0.003
Firm Size	-0.028	-2.14	0.033
Leverage	0.135	3.62	0.000
ROA	-0.086	-2.45	0.015

$R^2 = 0.472$

F-statistic = 24.68 ($p < 0.001$)

Source: Processed research data (2026).

The regression results reveal that ESG disclosure has a significant negative effect on earnings management ($\beta = -0.182$, $p < 0.01$), indicating that firms with more comprehensive ESG disclosure tend to engage in lower earnings manipulation. Audit quality also exhibits a negative and significant coefficient, suggesting that companies audited by Big Four auditors report higher-quality financial information. More importantly, the interaction between ESG

disclosure and audit quality is negative and statistically significant ($\beta = -0.117$, $p < 0.01$), indicating that audit quality strengthens the effectiveness of ESG disclosure in reducing earnings management.

Discussion

Relationship between ESG Disclosure and Earnings Management

The findings demonstrate that ESG disclosure significantly reduces earnings management, supporting stakeholder theory, which suggests that transparent sustainability reporting enhances corporate accountability and reduces managerial opportunistic behavior. Firms providing more comprehensive ESG information tend to maintain higher reporting quality because greater public scrutiny discourages earnings manipulation. This result is consistent with (Rezaee et al., 2020), Gaio et al. (2022), and (Fan et al., 2023), who concluded that sustainability disclosure contributes to improved earnings quality and financial reporting transparency.

Moderating Effect of Audit Quality

The significant interaction between ESG disclosure and audit quality indicates that high-quality external audits reinforce the effectiveness of ESG disclosure in constraining earnings management. Companies audited by Big Four auditors appear to provide more credible sustainability disclosures while simultaneously exhibiting lower levels of discretionary accruals. High-quality auditors strengthen monitoring mechanisms by reducing managerial discretion and enhancing confidence in both financial and non-financial reporting. These findings are consistent with (Alharasis et al., 2025), (Dakhli, 2021), and (Zahid et al., 2022), who emphasized the importance of audit quality in improving the credibility of ESG reporting and corporate governance.

Comparison with Previous Studies

The results support studies arguing that ESG disclosure serves as an effective governance mechanism rather than a symbolic reporting practice. While (Muttakin et al., 2015) suggested that ESG disclosure could be used to conceal opportunistic behavior, the present findings indicate that such behavior is substantially reduced when firms are subject to high-quality external audits. Thus, audit quality explains part of the inconsistency reported in previous literature and provides additional evidence regarding the governance role of independent auditors.

Theoretical and Practical Implications

The findings contribute to stakeholder theory by demonstrating that ESG disclosure alone may not fully improve reporting quality unless accompanied by effective external governance

mechanisms. Audit quality strengthens the credibility of ESG disclosure by reducing managerial incentives for earnings manipulation. Practically, the findings suggest that regulators should continue promoting sustainability disclosure while encouraging stronger audit oversight. Investors should consider both ESG performance and audit quality when evaluating corporate transparency, whereas companies should recognize that credible ESG reporting requires both comprehensive disclosure and high-quality external assurance to enhance stakeholder confidence and long-term corporate value.

5. CONCLUSION

This study examines the effect of ESG disclosure on earnings management and the moderating role of audit quality among non-financial companies listed on the Indonesia Stock Exchange during the 2021–2025 period. The findings indicate that ESG disclosure has a significant negative effect on earnings management, suggesting that firms with more comprehensive sustainability disclosure tend to exhibit higher financial reporting quality and lower managerial opportunistic behavior. Furthermore, audit quality significantly strengthens this relationship, demonstrating that companies audited by high-quality auditors are more likely to translate ESG disclosure into credible financial reporting practices. These findings support stakeholder theory by emphasizing that effective external monitoring enhances the governance role of ESG disclosure and contributes to more transparent and reliable corporate reporting.

The findings provide important implications for regulators, investors, auditors, and corporate managers by highlighting the complementary role of ESG disclosure and audit quality in improving financial reporting quality. Nevertheless, this study is subject to several limitations. First, the analysis focuses only on Indonesian non-financial listed companies, which may limit the generalizability of the findings to other institutional settings. Second, audit quality is measured using Big Four auditor affiliation, which may not fully capture all dimensions of audit quality. Future studies are encouraged to examine different countries or industries, employ alternative measures of audit quality such as audit fees or auditor industry specialization, and incorporate additional corporate governance variables to provide a more comprehensive understanding of the relationship between ESG disclosure and earnings management.

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