

SUSTAINABILITY PERFORMANCE AND EARNINGS MANAGEMENT: THE ROLE OF BOARD MEETINGS

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ABSTRACT

Increasing attention toward sustainability disclosure has raised questions about whether Environmental, Social, and Governance (ESG) initiatives genuinely reflect corporate responsibility or are strategically utilized to obscure earnings management practices. This study employs a quantitative approach to examine the influence of ESG performance and intellectual capital on earnings management, while accounting for the frequency of board meetings as a moderating factor. The sample consists of 31 healthcare firms listed on the Indonesia Stock Exchange over the 2020-2024 period, yielding 109 firm-year observations selected using purposive sampling. The analysis relies on secondary data derived from audited annual reports and sustainability reports. To test the proposed relationships, the study uses unbalanced panel-data regression. The findings indicate that higher ESG disclosure is positively associated with earnings management, suggesting that sustainability reporting may be used as a strategic instrument for opportunistic financial reporting. In contrast, intellectual capital efficiency does not show a statistically significant relationship with earnings management. Furthermore, the frequency of board meetings enhances monitoring in the relationship between ESG performance and earnings management, but it does not influence the association between intellectual capital and earnings management.

Keywords: Board Meetings, Earnings Management, ESG, Intellectual Capital.

INTRODUCTION

Increasing global business competition requires companies to continuously maintain strong financial performance and credibility in order to attract investors and sustain stakeholder confidence (Ruzami & Tanzil, 2025). Financial statements constitute a key source of information for investors, creditors, regulators, and other stakeholders when assessing a firm's financial position and future performance prospects (Atiqah & Saputro, 2024). However, the reliability of financial reporting may be compromised by earnings management, defined as managerial actions that influence reported earnings

through accounting discretion or operational decisions (Hatane et al., 2019; Tran et al., 2022). From an agency perspective, conflicts of interest and information asymmetry between principals and agents create incentives for opportunistic behavior, including the manipulation of accounting figures to achieve personal or contractual objectives (Shang & Chi, 2023). Although such practices may remain within accounting standards, excessive discretion can distort financial information and weaken stakeholder trust (Gerged et al., 2021).

The relevance of earnings management is particularly evident in the healthcare sector, which operates under strict regulatory oversight and high public scrutiny. Healthcare companies manage significant public interests, government-related funding, and sensitive procurement activities, making transparency and accountability essential. Recent financial irregularities identified in Indonesian healthcare-related firms, including PT Indofarma Tbk, highlight the sector's vulnerability to governance weaknesses and financial reporting manipulation (Putri, 2024; Sumitro, 2024). In this case, the company was found to have misstated its financial statements due to improper revenue recognition and inventory reporting, leading to a significant restatement of its financial performance. This incident raised concerns about the reliability of financial reporting practices in the healthcare sector and illustrated the potential for earnings management.

This earnings management practice gives rise to biased information because the reported results do not fully reflect the company's financial condition. Companies that engage in earnings management are generally motivated by the desire to meet specific targets, maintain financial stability, or attract investors' attention (Adyastuti & Khafid, 2022). Biased financial statements can interfere with stakeholders in decision-making (Tannaya & Lasdi, 2021). When earnings management is excessive, the quality of financial statements can decrease, stakeholder trust is disturbed, and it can ultimately threaten the company's sustainability (Wijaya & Firmansyah, 2021). This condition shows that although earnings management is technically legitimate, it contributes to a decline in the quality of financial statements. Thus, further investigation is needed to discuss earnings management.

Some previous studies that have tested earnings management, such as Environmental, Social, and Governance/ESG (Atiqah & Saputro, 2024; Tanujaya & Dharmawan, 2025; Vatis et al., 2025; Yuniawati et al., 2025), environmental disclosure (Gerged et al., 2021; Shang & Chi, 2023), CSR (Tran et al., 2022), intellectual capital (Ardiansyah & Sadikin, 2023; Jaya et al., 2021; Rantung & Salim, 2024; Ruzami & Tanzil, 2025), board of directors meeting (Hashed & Almaqtari, 2021; Suryandari et al., 2024; Tanujaya & Verent, 2020), joint board management meeting (Agustia et al., 2022), audit quality (Agustin & Widiatmoko, 2022; Alqudah, 2024; Challen & Noermansyah, 2023), financial distress (Aljughaiman et al., 2023; Kazmi et al., 2024; Mulyati & Kurnia, 2023; Tannaya & Lasdi, 2021), company size (Adityaningsih & Hidayat, 2024; Adyastuti & Khafid, 2022), institutional ownership (Githaiga, 2024; Immanuel & Hasnawati, 2022), leverage (Alsaadi, 2025; Atmamiki & Priantinah, 2023; Awad et al., 2024), profitability (Steven & Thio, 2022; Sugondo et al., 2025), and tax avoidance (Budiantoro et al., 2022; Delgado et al., 2023; Machdar, 2022).

This study proposes a framework in which earnings management serves as the dependent variable, ESG performance and intellectual capital function as independent variables, and board of directors meetings act as a moderating variable. Firm size and leverage are included as control variables. Companies with substantial intellectual capital tend to focus on long-term value creation, as their knowledge can support better ESG implementation than earnings management. Thus, the ESG variables and intellectual

capital are of interest for testing their association with earnings management. Globally and nationally, companies are increasingly seeking sustainability solutions to enhance their value. Therefore, strong regulations are needed to govern sustainability disclosure in line with ESG principles (Vatis et al., 2025). Companies committed to ESG are required to be more transparent, thereby limiting the scope for earnings management (Tanujaya & Dharmawan, 2025). Although extensive ESG disclosure can enhance stakeholder confidence, firms may also use it strategically to capture investor interest (Yuniawati et al., 2025). Consequently, such disclosure has the potential to obscure earnings management practices and mislead investors if financial statements fail to represent the company's true condition. In a knowledge-driven economy, intellectual capital is a key determinant of competitive advantage (Jaya et al., 2021). It is viewed as an intangible resource that transforms knowledge into value-added products or services (Hatane et al., 2019). Despite the growing body of literature examining ESG disclosure and earnings management, prior studies still provide mixed empirical evidence regarding the direction and magnitude of this relationship. Moreover, limited research has examined the roles of ESG performance and intellectual capital in explaining earnings management behavior, particularly in the healthcare sector of emerging economies such as Indonesia. Therefore, further investigation is needed to examine how ESG and intellectual capital interact with corporate governance mechanisms in influencing earnings management practices.

This study differs from prior research by incorporating board of directors meetings as a moderating variable, which has rarely been examined in studies investigating the relationship between ESG disclosure, intellectual capital, and earnings management. Conceptually, the board of directors meeting is one of the mechanisms of corporate governance, serving as the main forum for the board in supervision, control, and strategic decision-making (Suryandari et al., 2024). The corporate governance mechanism in the form of a board of directors meeting can be one of the indicators of how actively the board is involved in monitoring managerial activities, thereby helping suppress potential agency conflicts arising from information asymmetry (Tanujaya & Verent, 2020). Thus, board meetings not only play a direct role in reducing earnings management practices but also strengthen the overall corporate governance mechanism (Challen & Noermansyah, 2023; Wijaya & Firmansyah, 2021).

Agency theory explains that conflicts of interest and information asymmetry may arise between shareholders (principals) and managers (agents) (Kasbar et al., 2023). Managers often possess superior information regarding the firm's financial condition, which may encourage opportunistic behavior, including earnings management. When remuneration and career advancement are tied to reported results, managers may adjust accounting figures to enhance their personal gains (Liao et al., 2023), thereby reducing the reliability of financial statements. Within this framework, ESG implementation can function as a governance mechanism that enhances transparency, accountability, and long-term orientation. Firms committed to sustainability principles are expected to strengthen reporting discipline and internal controls, potentially limiting managerial discretion in financial reporting (Gerged et al., 2021).

Empirical evidence generally supports this view. Atiqah & Saputro (2024), Vatis et al. (2025), and (Yuniawati et al., 2025) report that higher ESG engagement tends to be linked with stronger governance practices and greater transparency in financial reporting. Similarly, environmental disclosure and CSR practices have been found to reduce earnings manipulation by encouraging long-term performance orientation and stakeholder accountability (Gerged et al., 2021; Shang & Chi, 2023; Tran et al., 2022).

Thus, ESG may help mitigate agency conflicts by aligning managerial actions with sustainable value creation and reducing opportunistic earnings management.

H₁ : ESG Performance Harms Earnings Management

Resources can be understood as valuable, tangible, and intangible assets that enable firms to develop unique capabilities and sustain competitive advantages (Bagna et al., 2024). In this context, intellectual capital reflects a firm's accumulated knowledge, skills, and organizational capabilities that support long-term value creation and operational effectiveness (Asare et al., 2026). When managed properly, knowledge-based resources enhance innovation, improve decision-making quality, and strengthen organizational performance, thereby reducing incentives for short-term financial manipulation. From an agency theory perspective, earnings management arises due to conflicts of interest and information asymmetry between principals and agents. However, firms with strong intellectual capital tend to rely on professional expertise, structured knowledge management, and more transparent organizational processes. These characteristics encourage managers to prioritize sustainable performance and long-term value creation rather than engaging in opportunistic financial reporting. Empirical studies also indicate that higher levels of intellectual capital are associated with lower earnings management practices (Jaya et al., 2021; Ruzami & Tanzil, 2025). Managers who possess stronger knowledge, competencies, and organizational capabilities are more likely to focus on maintaining the firm's reputation and long-term shareholder value. Accordingly, intellectual capital can serve as an internal strategic asset that helps mitigate agency conflicts and reduce the likelihood of opportunistic earnings management.

H₂ : Intellectual Capital Harms Earnings Management

Agency theory suggests that the contractual arrangement between shareholders (principals) and managers (agents) can create conflicts of interest and information asymmetry, since managers typically have greater access to and control over information about the firm's true condition (Kasbar et al., 2023). This imbalance can encourage opportunistic behavior, including earnings management, particularly when managers seek to maximize personal incentives through improved reported performance (Wijaya & Firmansyah, 2021). To mitigate such agency conflicts, effective corporate governance mechanisms are required. The board of directors serves as a key internal monitoring body responsible for supervising managerial performance and ensuring accountability (Suryandari et al., 2024). Through regular meetings, the board discusses strategic planning, operational performance, and financial oversight, thereby strengthening monitoring intensity (Chemmaa et al., 2025). Empirical evidence suggests that more active board engagement, particularly through joint meetings with management, enhances the quality of information received and improves oversight effectiveness, ultimately reducing earnings management practices (Agustia et al., 2022). In addition, companies demonstrating strong ESG performance are typically associated with more robust governance mechanisms, greater transparency, and stronger internal control systems (Atiqah & Saputro, 2024; Yuniawati et al., 2025). When board meetings are held more frequently, oversight of ESG implementation becomes more substantive, ensuring that sustainability initiatives are not merely symbolic but are aligned with transparent reporting practices. Consequently, active board meetings are expected to strengthen the negative relationship between ESG and earnings management.

H₃ : Board of Directors Meeting Reinforces The Negative Effect of ESG Performance on Earnings Management

Agency theory explains that conflicts of interest and information asymmetry between shareholders and managers may lead to opportunistic behavior, including earnings management (Kasbar et al., 2023). Such agency conflicts can be mitigated through effective corporate governance mechanisms, particularly the board of directors, which is responsible for supervising management and safeguarding shareholders' interests (Hashed & Almaqtari, 2021). Through regular meetings, the board evaluates company performance, discusses strategic issues, and oversees financial reporting processes (Suryandari et al., 2024; Tanujaya & Verent, 2020). Prior evidence suggests that more intensive board engagement, especially through meetings with management, can reduce earnings management by strengthening monitoring quality and improving directors' understanding of accounting decisions (Agustia et al., 2022). In addition, intellectual capital represents the firm's knowledge-based resources that contribute to value creation and support more informed operational and financial decision-making (Hatane et al., 2019). Firms with stronger intellectual capital rely on professional expertise, knowledge management, and structured organizational capabilities in managing business activities. When board meetings are conducted actively, the supervision of how intellectual capital is utilized becomes more effective, ensuring that these knowledge resources are directed toward improving organizational performance and financial reporting quality rather than facilitating opportunistic managerial behavior. Therefore, the board's active involvement through frequent meetings is expected to strengthen monitoring and reinforce the negative relationship between intellectual capital and earnings management.

H4 : Board of Directors Meetings Strengthen The Negative Effect of Intellectual Capital on Earnings Management

RESEARCH METHODS

This study analyzes the effect of ESG performance and intellectual capital on earnings management, with board of directors meetings acting as a moderating variable. At the same time, firm size and leverage are treated as control variables. The research context covers healthcare companies listed on the Indonesia Stock Exchange during the 2020-2024 period. The analysis is based on secondary data obtained from audited financial statements, annual reports, and sustainability reports available on the official IDX website and the respective companies' websites. Before performing the final estimation, the dataset was screened to ensure data completeness and validity. Observations were excluded if firms reported negative leverage values or did not disclose the number of board meetings, including cases in which the meeting frequency was reported as zero. These criteria were applied to ensure the reliability of the governance variable measurement and to avoid biased estimation due to incomplete or inconsistent data—the final sample of firm-year observations after the screening process is presented in the following table.

Table 1.1. Sampling Criteria

No	Criteria	2020	2021	2022	2023	2024	Total
1	Healthcare companies listed on the IDX are annually	20	23	28	33	34	138
2	Healthcare companies that are newly listed on the IDX after January 1 of the current period	(2)	(3)	(5)	(5)	(1)	(16)

Table 1.2. Sampling Criteria (Continuation)

No	Criteria	2020	2021	2022	2023	2024	Total
3	Healthcare companies with negative leverage or missing board meeting disclosure	(3)	(2)	(2)	(3)	(3)	(13)
4	Number of observations of healthcare companies per year	15	18	21	25	30	109

Source: Data Processed

Based on Table 1. Regarding the sample selection criteria, there are 109 research observations. Furthermore, before conducting hypothesis testing, the classical assumptions of normality, multicollinearity, heteroscedasticity, and autocorrelation were assessed for a research model using STATA 17.

This study employs earnings management as the dependent variable, ESG and intellectual capital as independent variables, and board of directors meetings as the moderating variable. The control variables are firm size and leverage. The measurement of earnings management in this study follows the model employed by Firmansyah et al. (2025). In this approach, total accruals are scaled by total assets from the previous year and regressed on several components, including the inverse of lagged total assets, changes in revenue adjusted for changes in accounts receivable, the proportion of property, plant, and equipment to total assets, and return on assets in the current or prior period. In this context, total accruals represent the accrual-based component of earnings for firm *i* in year *t*, while lagged total assets serve as a scaling factor. The change in revenue and the change in receivables capture operational adjustments; property, plant, and equipment reflect fixed asset intensity; and return on assets represents profitability. The residual obtained from this regression model is interpreted as discretionary accruals, which proxy for earnings management. Discretionary accruals are obtained by taking residual values from regression testing, cross-sectionally per year, then converting them to an absolute form (Gerged et al., 2021; Tran et al., 2022).

The measurement of ESG performance in this study employs a disclosure index approach using a dummy scoring method. Each ESG item disclosed by the company is assigned a value of 1, while undisclosed items are assigned a value of 0. The total ESG score is then calculated by dividing the number of disclosed items by the maximum possible number of disclosure items, yielding a disclosure index. This measurement approach is consistent with prior studies conducted by Atiqah & Saputro (2024), Gerged et al. (2021), and Shang & Chi (2023). The assessment of disclosure items in this research is based on the Global Reporting Initiative (GRI) Standards issued in 2021.

$$ESG = \frac{\text{Number of ESG Disclosures}}{\text{Maximum Total Disclosure}}$$

This study measures intellectual capital using the Modified Value-Added Intellectual Coefficient (MVAIC) model as developed by Ruzami & Tanzil (2025). The MVAIC model extends the earlier VAIC™ framework and is designed to provide a broader assessment of intellectual capital, including the company's relationships with external stakeholders. MVAIC is calculated as the sum of four efficiency components: Human Capital Efficiency (HCE), Structural Capital Efficiency (SCE), Relational Capital Efficiency (RCE), and Capital Employed Efficiency (CEE). Through these components, the model captures the firm's ability to generate value from its human resources, organizational systems, external relationships, and physical and financial capital.

$$MVAIC = HCE + SCE + RCE + CEE$$

This study measures board meetings as the total number of meetings held within a year, consistent with prior studies by Agustia et al. (2022), Chemmaa et al. (2025), Iqbal et al. (2022), Suryandari et al. (2024), and Tanujaya & Verent (2020). The proxy for the number of meetings is considered more methodologically appropriate than the attendance ratio, because the board of directors' attendance data tends to be uniform and has a maximum value. The lack of data diversity can lead to statistical bias and reduce the ability of variables to explain their influence on dependent variables, so that the frequency of meetings is considered a more representative indicator of the intensity of supervision and the dynamics of coordination within the board of directors in real terms. The following is the calculation of the board of directors meeting:

$$\text{Board Activities} = \text{Number of Board of Directors Meetings in a Year}$$

In this study, the proxy for the company size variable (firm size) is the natural logarithm of the company's total assets. such as the research previously conducted by Adityaningsih & Hidayat (2024), Kalbuana et al. (2021), and Adyastuti & Khafid (2022).

$$\text{Firm Size} = \text{Ln Total Assets}$$

The proxies selected to measure leverage are the total debt-to-total equity (DER) ratio, as previously used by Steven & Thio (2022), Atmamiki & Priantinah (2023), and Adyastuti & Khafid (2022).

$$\text{DER} = \frac{\text{Total Liabilities}}{\text{Total Equity}}$$

Multiple linear regression for unbalanced panel data was used to examine the simultaneous effects of several independent variables on the dependent variable. This approach is appropriate because the dataset consists of firm-year observations of healthcare companies over the 2020-2024 period with varying data availability across firms, allowing the study to retain the maximum number of observations for analysis. The mathematical specification of the model used for hypothesis testing is presented as follows:

$$\begin{aligned} \text{EM}_{it} = & \alpha + \beta_1 \text{ESG}_{it} + \beta_2 \text{IC}_{it} + \beta_3 \text{BM}_{it} + \beta_4 (\text{ESG}_{it} * \text{BM}_{it}) + \beta_5 (\text{IC}_{it} * \text{BM}_{it}) \\ & + \beta_6 \text{SIZE}_{it} + \beta_7 \text{LEV}_{it} + \varepsilon_{it} \end{aligned}$$

Where EM_{it} represents earnings management, α denotes the constant, β_1 – β_7 represent the regression coefficients, ESG_{it} refers to Environmental, Social, and Governance performance, IC_{it} denotes intellectual capital, BM_{it} represents board of directors meetings, SIZE_{it} refers to firm size, LEV_{it} denotes leverage, and ε_{it} represents the error term.

RESULTS AND DISCUSSION

Table 2 presents an overview of the descriptive statistics for all variables examined in this study.

Table 2.1. Descriptive Statistics

Variabel	obs	Mean	Std. Dev	Min	Max
EM	109	0.0703	0.0626	0.0027	0.4042
ESG	109	0.5384	0.1726	0.1250	0.9875
IC	109	2.7303	1.5764	-4.7621	7.3293

Table 2.2. Descriptive Statistics (Continuation)

Variabel	obs	Mean	Std. Dev	Min	Max
BM	109	16.3486	11.7105	1.0000	99.0000
SIZE	109	28.5706	1.2608	24.9024	31.0130
LEV	109	0.9398	1.7767	0.0506	16.7652

Source: STATA 17 Output

management levels are relatively low and show limited variability across the sample. ESG disclosure demonstrates moderate levels with some variation among firms, suggesting differences in sustainability reporting practices. Intellectual capital exhibits considerable dispersion, reflecting varying levels of efficiency in managing intangible resources. The frequency of board meetings varies substantially across companies, indicating differences in monitoring intensity. Firm size appears relatively homogeneous, while leverage shows significant variation, suggesting that debt structures differ considerably among the sampled firms.

Based on the results of the Chow, Hausman, and Lagrange Multiplier tests, the random-effects model is identified as the most appropriate specification for the analysis. The outcomes of the hypothesis testing are summarized in Table 3.

Table 3. Summary of Hypothesis Testing Results

Variable	Coefficient	z	Prob> z	Conclusion	
_cons	0.4487	1.6000	0.0550	*	
ESG	0.1648	2.5200	0.0060	***	Rejected
IC	0.0036	0.4900	0.3130		Rejected
BM	0.0011	0.5600	0.2870		
ESG*BM	-0.0064	-2.2200	0.0140	**	Rejected
IC*BM	0.0006	1.0900	0.1380		Rejected
SIZE	-0.0164	-1.5800	0.0570	*	
LEV	0.0025	0.6700	0.2510		
R ² (Overall)	0.1279				
Wald Chi ² (7)	26.8700				
Prob>Chi ²	0.0004				

Source: Data Processed

The Effect of ESG on Earnings Management

The hypothesis-testing results indicate that ESG has a positive effect on earnings management. This finding implies that firms with higher levels of ESG disclosure are more likely to engage in earnings management practices, leading to the rejection of the first hypothesis. This result indicates that ESG disclosure is ineffective at constraining earnings management in the healthcare sector. This result is consistent with the findings of Tanujaya & Dharmawan (2025) and Almubarak et al. (2023). Ideally, information on ESG activities should reflect a company's moral responsibility and transparency to its shareholders. However, the results of this study show that managers who engage in ESG activities are not in the principal's interests but rather seek to strengthen their position and facilitate opportunistic behavior. This phenomenon aligns with agency theory, which explains a contractual agreement between principals and agents in which the former delegate duties and responsibilities to the latter to perform certain services on their behalf. However, in reality, a manager does not fully work to meet the principal's interests (Kasbar et al., 2023). This causes agency problems due to conflicts of interest and information asymmetry.

These findings suggest a potential masking phenomenon, in which sustainability disclosures may not fully align with actual financial reporting practices. Such disclosures can function as a strategic instrument to divert attention from opportunistic managerial behavior, particularly earnings management (Gerged et al., 2021). Managers use ESG information as a distraction or as an image strategy to mask the company's actual internal conditions. Good ESG information can enhance a company's image and attract the attention of investors concerned about sustainability issues (Almubarak et al., 2023). Therefore, companies leverage ESG to gain stakeholders' trust, even when financial conditions may not align with that positive image (Tanujaya & Dharmawan, 2025). In addition, ESG disclosure remains voluntary, so managers can engage in earnings management to advance their interests. Managers engage in earnings management to pursue bonus targets, avoid taxes, and attract investor attention. They need accurate information to minimize stakeholder suspicion. ESG activity information is a tool to build a good reputation with investors, so that investor supervision of companies becomes weak because they have been exposed to a positive corporate image through ESG. It provides evidence that companies' disclosure of ESG information is not motivated by moral considerations, but rather by managerial strategy. Thus, the empirical findings reinforce the rejection of the first hypothesis and suggest that ESG disclosure may be strategically used by managers rather than serving purely as a transparency mechanism.

Beyond managerial opportunism, the positive association between ESG and earnings management may also stem from the financial pressures arising from the substantial costs of implementing ESG initiatives (Baig et al., 2022). Implementing sustainability strategies requires significant resource investment, ranging from environmentally friendly technologies to community empowerment programs. A more comprehensive GRI guideline prompts companies to fully implement ESG, even though there is no Indonesian regulation requiring the use of GRI as a sustainability framework. It can burden earnings for the current period. However, the company intends to continue showing stable financial performance amid high ESG costs. Thus, it encourages managers to be opportunistic by managing earnings so that the company's performance remains attractive to investors.

In the Indonesian healthcare sector, this condition may become more complex because companies operate in a highly regulated environment and are closely linked to public health policies and government reimbursement systems such as BPJS Kesehatan. Healthcare firms often face pressure related to drug procurement costs, hospital service obligations, and reimbursement delays, which may affect short-term financial performance. In such circumstances, ESG disclosure may serve not only as a signal of corporate responsibility but also as a strategic communication tool to maintain corporate legitimacy and stakeholder trust. Consequently, managers may intensify ESG disclosure to strengthen the company's reputation and sustain investor confidence, even when financial pressures create incentives to engage in earnings management practices.

The Effect of Intellectual Capital on Earnings Management

The hypothesis testing results indicate that intellectual capital is not significantly related to earnings management. It implies that intellectual capital does not serve as a determining factor in earnings management practices in healthcare firms; therefore, the second hypothesis is rejected. This finding indicates that intellectual capital does not significantly influence managerial decisions related to earnings management. This finding is consistent with prior studies by Rantung & Salim (2024) and Alfikih & Widiyati (2025). From an agency theory standpoint, earnings management typically arises from conflicts of interest and information asymmetry between managers and

shareholders. However, in the healthcare sector, stringent oversight by stakeholders may limit managerial discretion and reduce opportunities for opportunistic practices, such as earnings manipulation. Therefore, intellectual capital may function more as a strategic resource for operational development rather than as a factor influencing earnings management behavior. This phenomenon can also be considered a resource, both tangible and intangible, as a strategic asset that may represent either strengths or weaknesses. When these resources are valuable and unique, they enable firms to establish and sustain a competitive advantage (Asare et al., 2026). Thus, the company sector in healthcare focuses more on strengthening intellectual capital to create long-term value rather than engaging in earnings management practices.

In addition, conceptually, the activities of intellectual capital and earnings management are in a different realm. In this study, the measurement used is the MVAIC model (Ruzami & Tanzil, 2025). These components relate to operational efficiency management and can strengthen a company's added value. Consequently, improvements in intellectual capital performance do not necessarily translate into changes in accrual-based earnings management behavior. It is different from earnings management mechanisms that are more closely associated with accrual activities, such as revenue recognition policies, inventory valuation, fixed asset depreciation, and receivables estimation. Thus, the company's high level of intellectual capital management is not directly related to managers' earnings management activities.

The characteristics of the healthcare sector also support the view of it as a knowledge-based industry. Based on surveys conducted across OECD member countries, companies in the healthcare sector have the highest level of research and development among sectors (IFPMA, 2024). Thus, the company's healthcare sector focuses more on research and development to develop long-term health product innovations rather than on short-term earnings management.

The Moderating Role of Board Meetings in The Relationship between ESG Performance and Earnings Management

Based on the result of the hypothesis test, the board of directors meeting weakened the positive effect of ESG on earnings management. It indicates that although ESG is positively associated with earnings management, more frequent board meetings weaken this relationship. It suggests that the high frequency of board meetings and ESG can lower earnings management, leading the study to reject the third hypothesis. Thus, the moderating role of board meetings does not strengthen the hypothesized relationship but instead mitigates the tendency of ESG to be associated with higher earnings management. The frequency of board of directors meetings represents the strength of internal oversight in curbing opportunistic managerial behavior, and prior empirical evidence shows that more intensive supervision can reduce earnings management. This finding is consistent with agency theory, which posits that principals demand transparency from agents in the management of company information. To minimize information asymmetry, internal monitoring mechanisms such as regular board meetings are implemented to enhance accountability (Kasbar et al., 2023).

Within the framework of corporate governance, the number of board meetings should not be viewed merely as a procedural requirement, but rather as a signal of active coordination and monitoring. Regular meetings provide directors with opportunities to deliberate on strategic decisions, assess operational outcomes, and scrutinize financial reports more thoroughly (Chemmaa et al., 2025). Greater meeting intensity can therefore limit managerial discretion and reduce the likelihood of earnings manipulation. The

results of this study reinforce the earlier finding of a positive association between ESG and earnings management, suggesting that managers may use ESG disclosure to obscure opportunistic behavior. However, the board's active involvement mitigates this tendency. In other words, stronger board oversight reduces the opportunistic use of ESG disclosure for earnings management. When meetings are consistently held, oversight becomes more rigorous, thereby discouraging managers from engaging in earnings management, even in firms with high ESG performance.

Consistent with this perspective, governance frameworks in Indonesia emphasize regular board meetings as a mechanism to enhance transparency and protect shareholders' interests. Frequent meetings have been shown to reduce information asymmetry at the managerial level by strengthening oversight and accountability. Through intensive discussions, the board can assess whether expenditures related to ESG initiatives are appropriately allocated or potentially used to mask managerial opportunism. Moreover, board meetings provide a platform for strategic evaluation, particularly during periods of financial pressure. With active engagement, the board can recalibrate ESG targets and prevent excessive disclosure commitments that exceed the company's financial capacity. Such prudence helps mitigate financial strain that might otherwise prompt managers to engage in opportunistic earnings management to offset the costs of ESG implementation. Therefore, while ESG disclosure may still be associated with earnings management, stronger board governance reduces the likelihood that ESG is used opportunistically in financial reporting practices.

The Moderating Role of Board of Directors Meetings in The Relationship between Intellectual Capital and Earnings Management

The empirical finding indicates that directors' board meetings fail to moderate the relationship between intellectual capital and earnings management. In other words, whether board meetings are frequent or infrequent, the influence of intellectual capital on earnings management remains unchanged, thereby rejecting the fourth hypothesis. It indicates that the interaction between intellectual capital and board meeting intensity does not significantly influence earnings management behavior. This finding suggests that a greater number of board meetings does not automatically translate into more effective control, particularly in managing the relationship between intellectual capital and earnings management practices (Suryandari et al., 2024). In the context of agency theory, the supervisory function in board meetings aims to minimize information asymmetry and managers' opportunistic behavior (Kasbar et al., 2023). However, in the second hypothesis test, it was found that intellectual capital does not significantly influence earnings management in the healthcare sector. Consequently, the supervisory mechanism through board of directors' meetings becomes less relevant in moderating the relationship between intellectual capital and earnings management.

In corporate governance, when discussing intellectual capital in board meetings, the Board of Directors tends to focus on creating added value rather than supervising earnings management. MVAIC measurement is a strategic component for the company's operational efficiency (Ruzami & Tanzil, 2025). Therefore, when the board of directors holds a meeting, the discussion is more focused on optimizing resources to create a company's competitive advantage than on detecting earnings management (Asare et al., 2026). Thus, discussions on intellectual capital are generally directed toward improving strategic resources and operational performance rather than monitoring accrual-based financial reporting behavior. In this context, intellectual capital is generally associated with improving operational capabilities, innovation, and efficiency, which are conceptually different from accrual-based earnings management practices.

Furthermore, earnings management is closely related to accounting policies, such as estimates of receivables and inventory valuations, whereas intellectual capital is related to intangible assets and human resource capabilities. At its meeting, the board of directors views intellectual capital as a form of capital that must be developed for business sustainability. Therefore, the interaction between the board of directors and intellectual capital is supportive rather than corrective. As a result, no matter how often board meetings are held, they will not strengthen or weaken the influence of intellectual capital on earnings management, as they operate along different corridors and pursue different goals.

CONCLUSION

This study investigates the empirical relationships among ESG performance, intellectual capital, and earnings management, while incorporating board meetings as a moderating factor. The analysis covers 31 healthcare firms listed on the Indonesia Stock Exchange over the 2020-2024 period, resulting in 109 firm-year observations obtained through purposive sampling and refined by removing outliers. The hypotheses are examined using panel data regression techniques. The results indicate that ESG performance is positively and significantly associated with earnings management, suggesting that broader sustainability disclosure may coincide with, rather than limit, opportunistic financial reporting practices. Conversely, intellectual capital does not significantly affect earnings management, implying that it is more oriented toward long-term value enhancement than short-term earnings manipulation. Additionally, the frequency of board of directors meetings mitigates the positive association between ESG performance and earnings management, indicating that more intensive oversight can reduce the potential misuse of sustainability initiatives. However, board meetings do not moderate the relationship between intellectual capital and earnings management.

From a theoretical perspective, these findings contribute to the ongoing debate on whether ESG performance enhances financial reporting quality, as the positive association between ESG and earnings management indicates that sustainability disclosure may function not only as a transparency mechanism but also as a strategic tool that can coexist with opportunistic reporting, thereby extending agency theory by showing that non-financial disclosure alone does not automatically reduce information asymmetry without effective governance support. From a corporate governance standpoint, the moderating role of board meetings underscores the importance of monitoring intensity: more frequent board engagement appears to reduce the likelihood that sustainability performance is associated with opportunistic reporting, suggesting that governance effectiveness depends not only on structural attributes but also on active oversight. Managerially and regulatorily, these results imply that sustainability disclosure should be substantively integrated into strategic decision-making rather than used symbolically, and regulators such as the Financial Services Authority (OJK) may strengthen sustainability reporting frameworks to enhance comparability, standardization, and reporting quality, thereby reducing opportunistic behavior and improving stakeholder trust.

This study is subject to several limitations. First, data availability and reporting standardization remain constrained, as not all healthcare companies publish standalone sustainability reports. Second, many firms do not fully adopt GRI guidelines, requiring manual adjustments in measuring ESG disclosure, which may introduce subjectivity.

Third, the study focuses solely on the healthcare sector, limiting the generalizability of the findings to other industries. Future research is encouraged to expand the sample to broader non-financial sectors, incorporate additional governance characteristics such as board gender diversity or audit committee effectiveness, and consider alternative measures of earnings management or sustainability performance. Comparative cross-country studies also provide deeper insights into institutions. From a regulatory perspective, the Financial Services Authority (OJK) may consider strengthening sustainability disclosure standards and encouraging clearer reporting guidelines to enhance comparability and reduce subjectivity. In addition, greater emphasis on substantive board oversight of financial reporting and sustainability integration may help ensure that sustainability initiatives are aligned with transparent corporate governance practices.

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