Institutional levers for ESG: evidence from sustainability committees, external assurance, and IDX clusters board in Indonesia

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Abstract. This study examines how institutional governance mechanisms, sustainability committees, external assurance, and IDX listing board classification affect ESG risk among 118 listed companies in Indonesia, with particular relevance to corporate preparedness for climate change and sustainability-related transitions. The sample covers firms across all industries except the financial sector. Using multiple linear regression and ESG Risk Scores from Sustainalytics, the findings show that although most firms are Main Board listed and meet formal financial and governance standards, their average ESG risk remains high, indicating persistent exposure to climate-related and environmental vulnerabilities. Sustainability committees, present in only 19.5% of firms, show no significant impact on ESG risk. In contrast, external assurance, adopted by 18.6% of firms, is significantly associated with lower ESG risk. Main Board firms also tend to exhibit lower risk than those on the Development Board. These results highlight that while sustainability reporting aligned with the SDGs and climate governance agendas is increasingly encouraged, credible climate risk mitigation requires more than formal structures. This study underscores the critical role of external validation in strengthening the credibility of corporate climate mitigation actions, suggesting that independent assurance serves as an important governance mechanism to reduce the risk of greenwashing and enhance accountability in ESG disclosures.

1 Introduction

The Sustainable Development Goals (SDGs) have encouraged companies to operate sustainably and communicate their commitments through sustainability reports. However, reports alone are considered insufficient, as concerns about their credibility and reliability persist among stakeholders [1,2]. To overcome this scepticism, companies are increasingly using external assurance to ensure the integrity and transparency of their sustainability reports. External assurance as a governance tool involves an audit by an independent party that provides a professional opinion on the quality of the information disclosed. This approach has been shown to help reduce information asymetry [3], increase public trust, and

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strengthen a company's reputation [4,5]. Beyond general sustainability reporting, external assurance is also increasingly recognized as a key mechanism for validating corporate claims related to climate mitigation, transition planning, and exposure to climate related risks thereby reducing the likelihood of symbolic disclosure or greenwashing.

This study aims to investigate the role of external sustainability assurance in enhancing corporate credibility, particularly within the frameworks of stakeholder theory [6] and legitimacy theory [7], which emphasize the importance of meeting stakeholder expectations to maintain organizational legitimacy. The involvement of an independent third party is viewed as a means to ensure objective evaluation of corporate sustainability practices. In Indonesia, the relatively low adoption of external assurance suggests a need for deeper awareness among both companies and investors regarding its role in promoting transparency and enhancing ESG value [8]. Accordingly, this study examines the extent to which the presence of external assurance providers contributes to ESG scores. Given that ESG ratings incorporate climate-related environmental indicators including emissions and climate transition preparedness, external assurance can serve as a critical mechanism to validate climate-related disclosures and strengthen corporate responses to climate risk [9,10].

In addition to external assurance, another critical institutional lever that may influence ESG performance is the sustainability committee, entities tasked with overseeing the implementation of sustainability practices and reporting [11]. As companies face increasing pressure to adopt SDG-aligned governance models, these internal governance actors play a crucial role in mobilising limited corporate resources and integrating sustainability into long-term business strategies. Previous studies have highlighted their significance in driving green transformation, reducing carbon emissions, and preparing for shifts toward integrated reporting. However, despite their formal responsibilities, empirical findings suggest that these actors often lack the necessary professional capacity to effect meaningful change. This study, therefore, seeks to evaluate whether the presence of a dedicated sustainability committee is associated with higher ESG scores and to depict how internal governance structures contribute to ESG performance within Indonesian listed companies. Because ESG performance includes climate-related environmental indicators, sustainability committees are also expected to influence corporate preparedness for climate risks by integrating mitigation actions, adaptation planning, and decarbonization strategies into governance processes.

Beyond internal and external governance mechanisms, this study also investigates the significance of IDX clusters as a novel institutional lever influencing ESG performance. The Indonesia Stock Exchange classifies listed companies into development clusters based on their financial and operational characteristics, serving as a market signal of a firm's growth potential and corporate maturity. Despite their intended role in guiding investment decisions, there has been limited academic inquiry into the relationship between these classifications and firms' sustainability performance or ESG ratings. By integrating IDX clusters into the analysis, this research provides a fresh perspective on how institutional signalling from capital markets can reflect or influence corporate sustainability outcomes. Ultimately, this study aims to examine how the interplay between external assurance, sustainability committee structures, and IDX clusters, representing both governance practices and market-based mechanisms, contributes to a company's ESG ratings. The findings are expected to yield actionable insights for stakeholders, including regulators, investors, and corporate leaders and highlighting the strategic relevance of aligning institutional frameworks to drive credible and measurable sustainability performance. Therefore, the objective of this study is to examine whether external sustainability assurance is associated with lower ESG Risk Scores, particularly in reducing climate-related ESG vulnerabilities; to assess whether the presence of a sustainability committee is associated with lower ESG Risk Scores and enhanced climate governance; and to analyse whether IDX listing board classification serves as an institutional signal that explains differences in ESG Risk Scores among listed companies

2 Theoritical Framework and Research Design

2.1 Theoritical Framework

2.1.1 Stakeholder and Legitimacy Theory

The growing pressure from stakeholders regarding corporate responsibility has compelled companies to disclose information about their business activities, prioritising stakeholder interests. Furthermore, the emergence of ESG rating agencies that provide independent assessments of a company's ESG performance through ESG scores has increasingly driven companies to align themselves with the performance indicators set by these rating agencies and sustainability reporting frameworks. The perception that ESG scores influence a company's legitimacy in the eyes of stakeholders, particularly investors, further reinforces the logical connection between stakeholder theory and legitimacy theory.

Legitimacy theory [7] highlights the role of sustainability reporting as a means for companies to demonstrate their commitment to social and environmental responsibilities, thereby maintaining or enhancing their legitimacy. Stakeholder theory, on the other hand, emphasises the importance of transparency and accountability in corporate reporting to meet stakeholder expectations and foster trust.

2.1.2 External assurance, sustainability committee, IDX cluster board, and ESG Score

Sustainability reporting serves as a strategic communication tool that informs both internal stakeholders and external parties about a company's economic, social, and environmental contributions to sustainable development. In recent years, an increasing number of companies, including those in Indonesia, have begun aligning their business processes with sustainability frameworks across these three pillars. However, preparing integrated sustainability reports remains a complex undertaking, demanding significant organizational effort and cross-functional collaboration, and is often shaped by firm-specific attributes such as size, profitability, board diversity, as well as management's intrinsic motivation.

Amid growing concerns over the credibility and reliability of sustainability disclosures, external assurance has emerged as a key governance mechanism to enhance trust and accountability. Prior studies have demonstrated that third-party assurance can enhance the quality of ESG disclosures, mitigate greenwashing risks, and bolster the legitimacy of reported sustainability practices. Within this context, Sustainalytics, a widely used ESG rating agency, considers both proactive ESG practices and exposure to controversies when assessing ESG Risk Scores, where higher scores indicate greater levels of unmanaged ESG risk.

Based on prior research, the study posits that external assurance functions not merely as a symbolic disclosure but as a substantive mechanism to reduce sustainability-related risks. Therefore, the following hypothesis is proposed:

H1: The involvement of external assurance providers is negatively associated with ESG Risk Scores.

Building upon the discussion on external assurance, another internal governance mechanism worth examining is the role of sustainability committees within corporate structures. Research exploring the institutional role of sustainability in driving corporate sustainability remains relatively limited. Prior findings reveal that although CSR managers are expected to act as professional agents for CSR implementation, their influence often appears ambiguous and under-institutionalized. Nevertheless, expectations are rising for sustainability committees to function as key actors in advancing green transformation, carbon reduction, and sustainable development within firms, particularly when supported by relevant professional expertise and organizational legitimacy.

These committees are also increasingly expected to contribute to integrated reporting, as prior studies have shown that CSR managers can facilitate the preparation of reports and cross-departmental coordination. Empirical evidence has demonstrated a correlation between the presence of sustainability committees and enhanced firm performance and sustainability outcomes [12]. Within this study, their presence is examined through ESG Risk Scores provided by Sustainalytics. Since higher ESG scores indicate greater unmanaged risk, the hypothesis proposed is:

H2: The existence of a sustainability committee is negatively associated with ESG Risk Scores.

In addition to internal governance mechanisms, such as sustainability committees and external assurance, firm-level institutional classification may also influence ESG outcomes. The Indonesia Stock Exchange (IDX) classifies listed companies into four main boards: Main Board, Development Board, Acceleration Board, and Watchlist Board, with placement depending on the firm's compliance with specific listing requirements. The Main Board is intended for established firms with strong financial and governance track records. In contrast, the Development Board caters to firms that have yet to meet Main Board criteria or are undergoing restructuring. This classification system implicitly reflects a company's maturity, operational performance, and regulatory readiness, which may also influence the institutionalisation of sustainability practices. Prior studies suggest that firm-level characteristics such as size, governance quality, and listing segment, can affect sustainability disclosures and ESG ratings [13]. Accordingly, this study investigates whether IDX listing board classification is associated with ESG Risk Scores published by Sustainalytics. The proposed hypothesis is as follows:

H3: Listing board classification is associated with ESG Risk Scores

2.2 Research Design

This study is designed by proposing a research model that includes the existence of external assurance (EA), the presence of a sustainability committee (SC), and the company's IDX cluster classification as independent variables, with the ESG score serving as the dependent variable. The proposed research framework is illustrated in Figure 1.

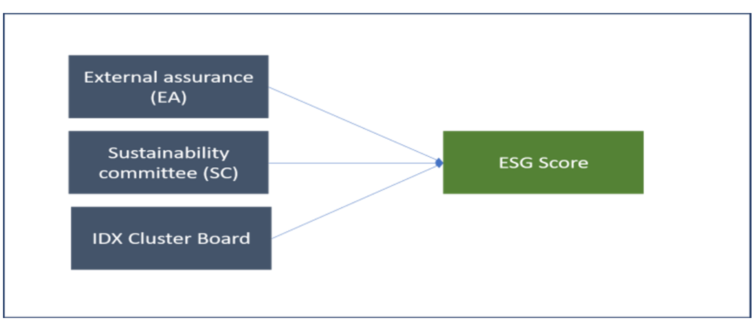

Fig. 1. Research model

2.2.1 Measurement of variables

This study employs one dependent variable and three independent variables to examine the relationship between institutional governance attributes and ESG risk. The dependent variable is the ESG Score, sourced from Sustainalytics, which reflects a risk-based assessment, where higher scores indicate greater levels of unmanaged ESG risk. The independent variables include: (1) the existence of external assurance (EA), measured using a binary score based on whether the sustainability report discloses third-party assurance; (2) the existence of a sustainability committee (SC), also measured using a binary score indicating whether such a committee is reported; and (3) the firm's IDX listing board classification (IDX), coded on a scale of 1 to 4 (1 = Watchlist Board, 2 = Acceleration Board, 3 = Development Board, and 4 = Main Board). All data were collected from official sources on the Indonesia Stock Exchange (IDX) website. The research variables and their measurements are presented in the Table 1.

The relationship between these variables is analyzed using a multiple linear regression model, expressed as follows:

$$ESG\ Score = \beta 0+\beta 1(EA)+\beta 2(SC)+\beta 3(IDX)+\varepsilon \tag{1}$$

Where:

ESG Score is the dependent variable (Sustainalytics risk-based score)
EA is the binary score for external assurance
SC is the binary score for sustainability committee
IDX is the categorical score for listing board classification
β0 is the constant term, β1–β3 are regression coefficients, and ε is the error term.

This model is used to evaluate the contribution of institutional levers to the management of environmental, social, and governance (ESG) risk among Indonesian listed companies.

Table 1. Measurement of dependent and independent variables.

Types of variabels	Variabels	Measurement
Dependent	ESG Score	ESG Score from Sustainalytics (risk based) Data taken from official website IDX
Independent	The existence of external assurance (EA)	Whether the SR contain information about the presence of external assurance statement (1) or not (0)
	The existence of sustainability committee (SC)	Whether the SR contain information about the presence of sustainability committee (1) or not (0)
	IDX Cluster listing board	(4 = main board 3 = development board, 2 = acceleration board, 1 = watchlist board)

2.2.2 Sample and data description

This study employed a sample comprising sustainability reports (SR) from Indonesian companies listed on the Indonesia Stock Exchange (IDX). The data, including both sustainability reports and annual reports, were hand- collected from the official websites of the respective companies. ESG scores used in this study were sourced from Morningstar Sustainalytics, as published on the official IDX website. Similarly, data on the companies' cluster classifications were also obtained from the official IDX website.

3 Result and Discussion

3.1 Descriptive statistics

Table 2 presents the sample composition and outlines the key characteristics of the firms included in this study. It provides a descriptive overview of the distribution of companies based on the presence of sustainability committees, external assurance practices, and IDX listing board classification, offering important context for understanding the governance and structural profiles of the sampled firms.

Based on sample of 118 companies, the Environmental, Social, and Governance (ESG) scores ranged from a minimum of 18.37 to a maximum of 46.51. The average ESG score was 30.28, which places the sample, on average, within the **High-Risk category** according to the Sustainalytics ESG Risk Rating classification (Negligible: 0–10, Low: 10.1–20, Medium: 20.1–30, High: 30.1–40, Severe: >40). Regarding sustainability-oriented governance practices, the presence of dedicated sustainability committees and the use of external assurance were relatively uncommon in the sample. Only 23 companies (19.5%) had a sustainability committee in place, whereas the vast majority (95 companies, 80.5%) did not. Similarly, just 22 companies (18.6%) employed an external assurance for their sustainability reporting, compared to 96 companies (81.4%) that did not use external assurance. These figures indicate that roughly only one in five firms has instituted a sustainability committee or obtained external assurance, suggesting that these specific sustainability governance mechanisms are not yet widespread among the companies studied.

Table 2. Sample data and composition

Variable	N	Minimum	Maximum	Mean	Std. Deviation
ESG	118	18.37	46.51	30.2793	6.93251
Valid N (listwise)	118				

Variable	Measurement	Frequencies	Percent	Cumulative Percent
Sustainability Committee	Present	23	19.5	19.5
	Absent	95	80.5	100.0
	Total	**118**	**100.0**	**100.0**
External Assurer	Yes	22	18.6	18.6
	No	96	81.4	100.0
	Total	118	100.0	100.0
Cluster Listing Board	Main board	108	91.5	91.5
	Development board	10	8.5	100.0
	Acceleration board	0	0	100.0
	Watchlist board	0	0	100.0
	Total	118	100.0	100.0

In terms of listing board classification, the overwhelming majority of firms in the sample were listed on the Main Board. Specifically, 108 companies (91.5%) were Main Board listings, while only 10 companies (8.5%) appeared on the Development Board. Notably, none of the sampled firms were listed on either the Acceleration Board or the Watchlist Board (0% in both cases). This distribution indicates that the sample predominantly comprises mature firms that meet the primary listing criteria set by the Indonesia Stock Exchange (IDX), including a minimum paid-up capital of IDR 100 billion, audited financial statements with unqualified opinions over the past three years, and a proven track record of profitability. However, compliance with these financial and governance requirements does not necessarily reflect robust ESG implementation. On average, the sample still falls within the High-Risk category according to the Sustainalytics ESG Risk Rating. This discrepancy highlights a potential gap between regulatory listing standards and the actual effectiveness of sustainability risk management.

3.2 Regression analyses

A multiple linear regression analysis was conducted to examine the influence of governance-related sustainability attributes on ESG Risk Scores, as measured by the Sustainalytics ESG Risk Rating. It is essential to note that in this rating system, higher scores indicate a higher level of unmanaged ESG risk, which corresponds to poorer sustainability risk management. Prior to model estimation, classical assumption tests were performed to ensure the validity of the regression analysis. These included tests for multicollinearity, heteroscedasticity, and autocorrelation, all of which indicated that the model met the required assumptions. Additionally, the normality of residuals was tested using the Kolmogorov-Smirnov method, with results showing a significance value of 0.200 (Asymp. Sig. 2-tailed), indicating that the residuals are normally distributed and thus satisfying the assumption of normality.

The results of the regression analysis in Table 3 show that the coefficient for the presence of a sustainability committee was negative ($B = -1.536$) but not statistically significant ($p = .320$), suggesting that although firms with such committees tend to exhibit slightly lower ESG risk, the effect is not robust across the sample. This result suggests that merely establishing a committee may not guarantee improved ESG risk management in practice.

On the other hand, the use of an external assurer showed a strong and statistically significant relationship with ESG risk scores. The negative coefficient ($B = -5.494$, $p = .001$) indicates that companies employing external assurance mechanisms tend to have significantly lower ESG Risk Scores, implying better-managed ESG risks. This finding suggests that external assurance may enhance the credibility and reliability of ESG disclosures, which in turn contributes to stronger risk mitigation and performance outcomes.

The listing board classification variable also showed a statistically significant effect on ESG Risk Scores ($B = -4.388$, $p = .046$). The negative coefficient implies that firms listed on the Main Board, typically larger and more mature companies, tend to have lower ESG risk than those on the Development Board. This result may reflect differences in organizational capacity, regulatory readiness, or access to resources between more established and developing firms. Among the three predictors, external assurance had the largest standardized effect ($Beta = -0.310$), indicating its substantial role in explaining variation in ESG risk. Collectively, these findings highlight the importance of external assurance as a crucial governance mechanism in mitigating sustainability-related risks. While listing board classification also plays a meaningful role, the presence of a sustainability committee alone does not significantly influence ESG outcomes in this context.

Table 3. Regression analyses result

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	46.735	8.583		5.445	.000
	Sustainability Committee	-1.536	1.539	-.088	-.998	.320
	External Assurer	5.494	1.567	-.310	3.507	.001
	Cluster Listing Board	-4.388	2.174	-.177	-2.019	.046

These results partially align with recent empirical findings by Tumewang, Almarayeh, and Alharasis [14], who analysed 643 firm-year observations from banks in emerging economies using ESG performance data from Refinitiv. Their study reported that both the presence of board-level sustainability committees and the adoption of external assurance were significantly associated with higher ESG performance. However, a critical distinction must be made between performance-based ESG scores, as used in Refinitiv, and risk-based ESG scores, as employed in this study using Sustainalytics data. While Refinitiv ESG ratings reflect the extent and quality of a firm's ESG disclosures and actions, Sustainalytics focuses on the level of unmanaged ESG risk, meaning that a lower score indicates better risk mitigation, not merely better disclosure.

In our study, only external assurance demonstrated a statistically significant effect, showing a clear association with lower ESG risk. In contrast, the presence of a sustainability committee did not exhibit a significant relationship with ESG risk scores. This divergence suggests that the existence of formal sustainability structures does not automatically translate into effective risk management, particularly when such structures are not functionally integrated or lack operational influence. Therefore, while Tumewang et al. (2025) support the role of sustainability committees in enhancing ESG performance, our findings imply that their impact on actual risk management may be limited or context-dependent.

Meanwhile, although this study confirms the significant influence of external assurance in reducing ESG risk, supporting prior findings in large-sample empirical research from the United States also supports the positive role of external ESG assurance that link third-party assurance with enhanced credibility, stakeholder trust, and stronger ESG outcomes, emerging literature offers a more critical perspective. Recent studies have highlighted that the perceived effectiveness of external assurance in preventing greenwashing remains a contested issue [15]. Key stakeholders have raised concerns regarding the ambiguity of assurance practices, limited expertise in verifying complex ESG data, high assurance costs, particularly for smaller firms, and the absence of strong mechanisms to ensure the reliability of the underlying data. These findings suggest that while external assurance may serve as a governance mechanism to strengthen ESG credibility, its role is not without limitations. In light of these critiques, the present study reinforces external assurance as a relevant but not universally sufficient indicator of sustainability risk governance in the Indonesian context, especially when compared to the symbolic existence of internal ESG structures such as committees.

4 Conclusion

The study reveals that while the majority of the 118 sampled companies are listed on the Main Board and meet IDX's financial and governance standards, their average ESG Risk Score remains in the High-Risk category based on Sustainalytics' ranking, where a higher score indicates greater unmanaged ESG risk. Corporate governance structures, represented in this study by sustainability committees, which are present in only 19.5% of companies, do not demonstrate a significant impact on ESG risk, suggesting that formal structures alone do not guarantee effective risk management. In contrast, external assurance, although adopted by only 18.6% of companies, significantly reduces ESG risk, highlighting its role as a key governance tool. Listing board status also impacts ESG outcomes, with Main Board companies generally showing lower levels of risk. These findings suggest a gap between regulatory compliance and actual sustainability effectiveness. To address this, greater emphasis should be placed on substantive practices such as third-party assurance. At the same time, assurance mechanisms themselves should evolve to avoid superficial compliance and ensure they contribute meaningfully to ESG risk mitigation. These findings also carry implications for climate-related sustainability performance, as ESG Risk Scores incorporate climate-relevant environmental indicators. Strengthening credible governance mechanisms, particularly external assurance can enhance corporate preparedness for climate risks and support more reliable climate-related disclosures.

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