

# Governance, Strategy, and Sustainability: The Effect of Sustainability Committees on ESG scores in Indonesia

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## ABSTRACT

This study investigates whether a Sustainability Committee (SC) improves firms' ESG performance and whether this effect depends on business strategy. Using a split-sample design for Analyzer and Defender firms, we analyze 359 firm-year observations from companies listed on the Indonesia Stock Exchange (IDX) during 2017–2022. ESG performance (ESG Score) is constructed from the proportion of Global Reporting Initiative (GRI) indicators disclosed. Business strategy is classified following the Miles and Snow (1976), operationalized by Bentley et al.'s (2013) financial metrics. The empirical approach employs regression analysis with year fixed effects and a Propensity Score Matching (PSM) robustness check to mitigate selection bias. The sample is distributed between Defender (50.7%) and Analyzer (49.3%) strategies. Defender firms focus on efficiency, cost control, and operational stability within well-defined product markets, while Analyzer firms balance efficiency with adaptability by maintaining stable core operations but simultaneously exploring innovation and market opportunities. Regression results show that SCs are positively and significantly associated with ESG Scores in Defender firms and in the full sample, but not in Analyzer firms. PSM results corroborate these findings. Overall, the evidence indicates that the effectiveness of sustainability governance is contingent on strategic orientation: SCs appear most impactful in efficiency- and compliance-oriented settings typical of Defender firms. At the same time, their influence is weaker in more adaptive Analyzer settings. The study extends stakeholder-oriented governance research in an emerging-market context and offers practical and policy insights for strengthening sustainability oversight in Indonesia.

**Keywords:** Sustainability Committee; ESG disclosure; Business strategy; Analyzer; Defender; Indonesia.

## INTRODUCTION

The growing importance of environmental, social, and governance (ESG) issues has reshaped how regulators, investors, and society evaluate firms. In both developed and emerging markets, firms are increasingly required to demonstrate financial performance and accountability for their broader social and environmental impacts. This trend has accelerated in recent years due to the adoption of international reporting frameworks, such as the Global Reporting Initiative (GRI) and, more recently, the International Sustainability Standards Board (ISSB) with IFRS S1 and S2 (IFRS Foundation, 2023). For emerging economies such as Indonesia, the introduction of domestic regulations—particularly OJK Regulation No. 51/2017 on sustainable finance—has further reinforced the expectation that companies must integrate sustainability considerations into corporate governance and reporting practices.

Against this backdrop, the Sustainability Committee (SC) has emerged as a critical governance mechanism designed to oversee sustainability strategies, ensure compliance with



reporting standards, and integrate ESG considerations into corporate decision-making. Prior studies suggest that firms with SCs tend to disclose higher-quality ESG information and demonstrate stronger social and environmental performance (Burke et al., 2019). However, the effectiveness of SCs is not uniform across firms; their impact may vary depending on the firm's strategic orientation.

Drawing on the typology of Miles & Snow, (1978), business strategies can be classified into Prospectors, Analyzers, Defenders, and Reactors, each reflecting a distinct approach to risk-taking, innovation, and efficiency. In the Indonesian context, characterized by high levels of uncertainty, economic volatility, and institutional constraints, the most relevant strategies are Analyzers and Defenders. Firms adopting these strategies rely on SCs differently: while Analyzers leverage SCs to balance innovation with operational efficiency, Defenders use SCs primarily to ensure compliance and maintain legitimacy. Empirical evidence confirms that Analyzer and Prospector firms are more responsive to sustainability pressures and thus achieve higher ESG performance than Defenders (Yuan et al., 2018). This study, therefore, seeks to examine the effect of Sustainability Committees on ESG performance in Indonesian firms, with a particular focus on how the impact of SCs differs between Analyzer and Defender strategies. By integrating insights from stakeholder theory (Freeman, 1984) and the business strategy literature, this research contributes to a deeper understanding of the contingent role of governance structures in shaping sustainability outcomes in emerging markets.

The analysis of 359 firm-year observations reveals that most firms were classified as either Defenders (50.7%) or Analyzers (49.3%), reflecting the dominance of these two strategies in the Indonesian context. On average, firms disclosed 35.6% of GRI indicators, with approximately 52.9% of firms establishing a Sustainability Committee (SC). Correlation analysis indicates a positive and significant association between SCs and ESG Scores ( $r = 0.207$ ,  $p < 0.01$ ). The OLS regression results further demonstrate that SCs exert a positive and statistically significant effect on ESG Scores in Defender firms ( $\beta = 0.042$ ,  $p < 0.01$ ) and in the full sample ( $\beta = 0.027$ ,  $p < 0.01$ ). In contrast, the effect is insignificant for Analyzer firms. Robustness tests using Propensity Score Matching (PSM) confirm these findings, showing that the positive influence of SCs on ESG performance in Defender firms is not attributable to selection bias. Taken together, the results reject Hypothesis 1—that SCs positively affect ESG Scores in Analyzer firms—but support Hypothesis 2, indicating that SCs are more effective in firms pursuing compliance- and stability-oriented strategies. In contrast, their influence is weaker in adaptive Analyzer firms.

This study offers significant theoretical, practical, and policy implications. From a theoretical perspective, it contributes to the sustainability governance literature by highlighting the role of the Sustainability Committee (SC) in enhancing ESG performance within the context of an emerging market such as Indonesia. Much of the existing research has focused on developed economies with stronger regulatory infrastructures and stakeholder pressures; thus, this study enriches the understanding of how business strategies—particularly the Analyzer and Defender typologies—moderate the effectiveness of SCs. These findings strengthen the argument of stakeholder theory, which posits that corporate legitimacy is strongly influenced by the capacity of internal governance mechanisms to respond to stakeholder demands (Burke et al., 2019; Freeman, 1984).

From a practical perspective, the study underscores the importance of Indonesian firms positioning SCs not merely as compliance instruments but as strategic tools to enhance ESG credibility and competitiveness. Firms pursuing an Analyzer strategy can leverage SCs to integrate sustainability innovations into their core business activities. In contrast, Defender firms can benefit from SCs to ensure minimum compliance, safeguard reputation, and mitigate risks amid global pressures such as the European Union's Carbon Border Adjustment Mechanism (CBAM) and international reporting requirements under IFRS S1 and S2 (IFRS Foundation, 2023).

From a policy perspective, the findings provide valuable insights for regulators such as the Otoritas Jasa Keuangan (OJK) and the Indonesia Stock Exchange (IDX) to consider strengthening the role of SCs within the regulatory framework. While current regulations—such as POJK 51/2017 on sustainable finance and SEOJK 16/2021 on sustainability reporting—have mandated disclosure, specific requirements for internal governance mechanisms such as SCs remain limited. The results of this study could serve as a basis for policymakers to require or recommend the establishment of

SCs, particularly for publicly listed firms and state-owned enterprises in strategic sectors. Such measures would encourage Analyzer firms to adopt a more proactive stance and Defender firms to become more adaptive in addressing global ESG pressures. In sum, this study not only extends academic discourse but also provides actionable insights for firms and concrete policy recommendations to strengthen Indonesia's competitiveness in the era of green transition.

This study is structured into five parts. The introduction presents the background, objectives, and significance. The Literature Review and Theoretical Framework outline prior studies and develop hypotheses. The methodology describes the research design, data, variables, and analytical techniques. The Results and Discussion report empirical findings and their interpretation, while the Conclusion highlights key implications and directions for future research.

## LITERATURE STUDY

### Sustainability Committee

The Sustainability Committee (SC) is a governance structure at the board or management level focusing on sustainability-related issues. Its primary functions include overseeing the firm's sustainability strategy, ensuring compliance with reporting standards, and integrating environmental, social, and governance (ESG) considerations into business practices. The presence of an SC can facilitate cross-departmental coordination, strengthen monitoring mechanisms, and improve the quality of information disclosed in sustainability reports. Prior research has shown that an SC is positively associated with firms' social and environmental performance. However, its effectiveness is significantly influenced by committee characteristics such as member independence, meeting frequency, and ESG expertise (Burke et al., 2019).

Further evidence suggests that SCs equipped with external audit or assurance mechanisms can mitigate ESG-related controversies, thereby contributing not only to enhanced reporting quality but also to reputational risk management (Issa A., 2025). In addition, the presence of sustainability governance structures such as SCs has been linked to improved credibility of sustainability reporting and stakeholder trust, especially when complemented by independent assurance (Peters & Romi, 2015). Moreover, board-level sustainability oversight, including SCs, has been found to significantly influence firms' environmental performance, carbon disclosure, and climate-related practices (Liao et al., 2015; Michelon & Parbonetti, 2012). Nonetheless, the role of SCs is not always uniform across contexts. In some cases, their establishment may be largely symbolic, serving as a formality to meet stakeholder expectations without substantive engagement in sustainability governance (Elsevier, 2024).

Additionally, the effectiveness of SCs may depend on broader institutional and cultural contexts, where regulatory environments and stakeholder pressures shape the extent to which committees influence substantive ESG outcomes (Walls et al., 2012). Taken together, these findings indicate that SCs have the potential to serve as a robust governance mechanism to strengthen ESG performance. However, the ultimate impact depends heavily on the quality of implementation, the substantive involvement of committee members, and the degree of strategic support the firm's leadership provides.

### Business Strategy

Miles & Snow, (1978) classify corporate strategies into four main typologies: Prospector, Analyzer, Defender, and Reactor. Firms adopting a Prospector strategy are typically aggressive in pursuing new market opportunities, highly innovation-oriented, and willing to take substantial risks to drive growth. The Analyzer strategy represents a hybrid approach, combining Prospectors' exploratory orientation with Defenders' efficiency focus. Analyzer firms are relatively adaptive to environmental changes while maintaining stability in their core business lines. By contrast, firms following a Defender strategy emphasize efficiency, stability, and the protection of existing market share. This conservative orientation makes Defenders more reluctant to adopt new initiatives that require additional investment, including sustainability-related practices. Meanwhile, the Reactor strategy is considered the weakest, as such firms lack a coherent strategic orientation and generally respond to environmental changes inconsistently and reactively (Miles & Snow, 1978).

In the context of sustainability, the literature highlights that business strategy plays a crucial role in shaping how firms integrate ESG considerations into their operations. Companies with more adaptive strategies, such as Prospectors and Analyzers, are more likely to proactively adopt sustainability practices, whereas Defenders and Reactors tend to be more passive. Empirical evidence by (Yuan et al., 2018) demonstrates that Analyzer and Prospector firms are more likely to achieve superior CSR and ESG performance than Defenders, largely because they are more responsive to stakeholder pressures and innovation-driven. Furthermore, the Miles & Snow, (1978) framework underscores that Analyzer firms possess an ambidextrous advantage, as they can balance efficiency with exploration, while Defender firms focus primarily on exploitation and cost control. Therefore, understanding these strategic typologies is essential for explaining the role of the Sustainability Committee (SC) in enhancing ESG performance. The effectiveness of SCs may vary depending on the firm's strategic orientation, with adaptive strategies (Analyzer and Prospector) creating greater opportunities for SCs to influence sustainability integration. In contrast, conservative strategies (Defender) may limit their potential impact.

### **Theoretical Framework**

Stakeholder theory, as introduced by Freeman, (1984), emphasizes that firms are not solely accountable to shareholders but also to a broad range of stakeholders, including customers, employees, suppliers, regulators, communities, and the natural environment. From this perspective, the firm is viewed as a social entity whose long-term viability depends on its ability to balance the interests of diverse stakeholders. Consequently, sustainable performance is not measured exclusively by profit generation, but also by the extent to which firms can create social and environmental value. Within this framework, establishing a Sustainability Committee (SC) can be understood as a governance mechanism designed to integrate stakeholder perspectives into strategic decision-making. The SC facilitates the identification of material ESG issues, ensures that the voices of internal and external stakeholders are incorporated, and encourages firms to manage sustainability risks more systematically. Empirical evidence supports this view: (Burke et al., 2019) find that firms with SCs exhibit stronger social and environmental performance, suggesting that the committee plays a critical role in bridging stakeholder concerns with corporate strategy.

Moreover, stakeholder theory also explains how SCs enhance corporate legitimacy. By instituting dedicated oversight of ESG matters, firms can improve transparency, reduce reputational risks, and strengthen stakeholder trust. It aligns with the argument that corporate legitimacy derives from regulatory compliance and public perceptions of a firm's contribution to addressing social and environmental issues (Suchman, 1995). Ultimately, the presence of an SC can enhance long-term firm value by improving ESG scores, which investors, regulators, and consumers increasingly recognize as critical indicators of corporate sustainability. From these theoretical arguments, we expect that firms establishing a Sustainability Committee are more likely to demonstrate superior ESG performance. The SC serves as a governance bridge between stakeholder expectations and corporate strategic decisions, fostering accountability and responsiveness to social and environmental concerns. Therefore, consistent with stakeholder theory, it is hypothesized that the existence of an SC positively influences a firm's ESG outcomes by institutionalizing stakeholder-oriented governance practices.

### **Hypothesis development**

#### **Indonesian Context**

This study focuses on examining the impact of the existence of a Sustainability Committee (SC) on firms' ESG Scores, while taking into account the business strategies they pursue. Within the theoretical framework of (Miles & Snow, 1978), firms can be categorized into four strategic typologies: Prospector, Analyzer, Defender, and Reactor. However, the most relevant strategies in the Indonesian context are Analyzer and Defender. This relevance is shaped by the characteristics of Indonesia's business environment, which is marked by high uncertainty, global fluctuations, and domestic constraints that together create a volatile and unpredictable setting. As a developing country with an economy heavily dependent on natural commodities (e.g., coal, palm oil, and minerals), Indonesian firms are highly exposed to global commodity price volatility (International

Monetary Fund, 2023). In addition, the country's reliance on foreign capital inflows makes its business climate particularly sensitive to policy changes in advanced economies. For instance, the European Union's decarbonization policy through the Carbon Border Adjustment Mechanism (CBAM) and the adoption of global sustainability reporting standards such as IFRS S1 and S2 directly pressure Indonesian firms to strengthen their ESG practices.

Domestically, further complexity arises from rupiah exchange rate volatility, inflation driven by energy and food prices, and regulatory uncertainty. Indonesia also continues to face challenges in strengthening the rule of law and ensuring consistent regulatory enforcement, which often compels firms to adopt more cautious strategies (World Bank, 2023). In such conditions, companies avoid highly aggressive techniques such as the Prospector, which emphasizes radical innovation and high risk. Instead, the Analyzer and Defender typologies appear more appropriate, enabling firms to balance adaptability with operational prudence. Analyzer firms leverage SCs to enhance ESG-related adaptation and innovation, while Defender firms rely on SCs primarily to ensure compliance and safeguard legitimacy. Accordingly, this study proposes that while SCs positively affect ESG Scores, the intensity of this influence is likely to differ depending on the firm's strategic orientation.

The Sustainability Committee (SC) serves as a corporate governance mechanism explicitly established to ensure that firms' strategies, policies, and business practices are aligned with sustainability principles. Its functions include oversight, monitoring, and providing recommendations to management and the board of directors on ESG issues, ensuring that sustainability commitments extend beyond rhetoric and are integrated into strategic decision-making and day-to-day operations. The presence of SCs in Indonesian firms can be explained through the lens of stakeholder theory (Freeman, 1984), which posits that firms are accountable not only to shareholders but also to a broader set of stakeholders. SCs play a critical role in integrating internal and external stakeholder interests into corporate strategy, particularly in the face of increasing sustainability pressures. They can strengthen transparency, mitigate reputational risks, and help firms align with tightening global standards (Burke et al., 2019). Nonetheless, the extent to which SCs improve ESG performance is contingent upon the business strategy pursued by the firm.

### **Firm With Analyzer Strategy**

Firms adopting an Analyzer strategy are characterized by ambidexterity—the ability to balance exploring new opportunities with pursuing operational efficiency. This typology is particularly relevant in the Indonesian context, as Analyzer firms can maintain stability in their core sectors while simultaneously responding to external pressures to adopt sustainability practices. For instance, Analyzer firms are generally better prepared to comply with new ESG-related regulations because they selectively allocate resources to sustainability innovations that provide the most relevance and value-added outcomes. Within global capital markets, international investors increasingly demand high-quality ESG disclosures as a prerequisite for legitimacy and access to financing (Eccles & Klimenko, 2019).

The presence of a Sustainability Committee (SC) strengthens the capacity of Analyzer firms to meet these demands by enhancing the credibility of ESG-related information, designing measurable environmental and social policies, and embedding sustainability into long-term corporate strategy. Accordingly, an SC is expected to exert a significant and positive influence on ESG Scores in firms following an Analyzer strategy. This argument rests on the logic that an SC provides a governance structure that supports the balance between exploration and exploitation inherent in the Analyzer strategy, thereby enabling firms to improve the quality of ESG implementation and ultimately achieve higher ESG performance.

Consistent with these insights, Xaviera and Rahman (2024) show that business strategy moderates the relationship between ESG performance and firm value in Indonesian listed firms. Their findings reveal that Defender-type firms, which emphasize efficiency, risk control, and compliance, benefit more from ESG initiatives in enhancing firm value, whereas Analyzer-type firms exhibit weaker or even insignificant effects due to their flexible and innovation-oriented nature. This supports the argument that sustainability governance mechanisms—such as

Sustainability Committees—are most effective when aligned with stable, efficiency-focused strategic orientations that favor structured oversight and compliance. Furthermore, Jeandry and Nurdin (2023) provide complementary evidence that business strategy also shapes how ESG disclosure influences firm risk, particularly stock price crash risk. Their study finds that while Prospector strategies increase the likelihood of stock price crashes due to aggressive innovation and information asymmetry, Defender and Analyzer firms experience a mitigating effect when ESG disclosure is high. ESG transparency acts as a signal mechanism that reduces information risk and enhances investor confidence, thereby lowering crash probability.

Taken together, these findings reinforce the view that formal sustainability structures and disclosures are most beneficial in firms with conservative or efficiency-oriented strategic orientations, where governance frameworks—such as Sustainability Committees—enhance transparency, stability, and stakeholder trust. Nevertheless, within Analyzer firms, the SC can still play a strategic role in institutionalizing sustainability practices that balance innovation with accountability, providing a pathway toward improving ESG performance while maintaining strategic flexibility.

### **H1: The Sustainability Committee positively affects the ESG Score in companies with an Analyzer strategy.**

#### **Firm With Defender Strategy**

Defender firms are primarily oriented toward stability, efficiency, and risk control. In the Indonesian context, this strategic orientation is particularly prevalent, as many firms emphasize cost management and the preservation of established market positions amid economic volatility and regulatory uncertainty. Although such firms tend to be more conservative, the presence of a Sustainability Committee (SC) remains essential. For Defender firms, the SC often functions as a compliance-oriented governance mechanism that ensures adherence to domestic sustainability regulations—most notably OJK Regulation No. 51/POJK.03/2017 on sustainable finance—while simultaneously safeguarding corporate legitimacy in the eyes of regulators, investors, and the broader public. Prior research in emerging markets indicates that conservative firms frequently perceive ESG initiatives as costly or secondary to financial objectives. Nevertheless, regulatory pressures and evolving investor expectations continue to encourage these firms to enhance their sustainability performance (Kuzey & Uyar, 2017). Within this context, the establishment of an SC enables Indonesian Defender firms to fulfill sustainability obligations in a structured and systematic manner, even if their initiatives tend to focus more on compliance than innovation. Consistent with these insights, Xaviera and Rahman (2024) show that business strategy moderates the relationship between ESG performance and firm value in Indonesian listed firms. Their findings reveal that Defender-type firms, which emphasize efficiency, risk control, and compliance, benefit more from ESG initiatives in enhancing firm value, whereas Analyzer-type firms exhibit weaker or even insignificant effects due to their flexible and innovation-oriented nature. This supports the argument that sustainability governance mechanisms—such as Sustainability Committees—are most effective when aligned with stable, efficiency-focused strategic orientations that favor structured oversight and compliance. Furthermore, Jeandry and Nurdin (2023) provide complementary evidence that business strategy shapes how ESG disclosure influences firm risk, particularly stock price crash risk. Their study finds that while Prospector strategies increase the likelihood of stock price crashes due to aggressive innovation and information asymmetry, Defender and Analyzer firms experience a mitigating effect when ESG disclosure is high. ESG transparency acts as a signal mechanism that reduces information risk and enhances investor confidence, thereby lowering crash probability. Taken together, these findings reinforce the view that formal sustainability structures and disclosures are most beneficial in conservative, compliance-oriented firms, where governance frameworks—such as Sustainability Committees—enhance transparency, stability, and stakeholder trust. Therefore, even though the positive effect of SCs on ESG performance in Defender firms may be less pronounced than in Analyzer firms, their presence remains crucial for maintaining legitimacy and resilience amid global regulatory and market pressures.

## H2: The Sustainability Committee positively affects the ESG Score in companies with a Defender strategy.

### METHOD

This study aims to examine the effect of the existence of a Sustainability Committee on firms' ESG Scores, while considering the moderating role of corporate business strategy. The research focuses on companies listed on the Indonesia Stock Exchange (IDX) during 2017–2022. The selection of this timeframe is primarily based on data availability, comparability, and reliability. Sustainability reports and disclosures based on the Global Reporting Initiative (GRI) standards have been more consistent. In contrast, more recent data (2023–2024) remain incomplete or are subject to changes due to adopting the revised GRI Standards (2021) and the emerging ISSB/IFRS S1–S2 frameworks. By restricting the analysis to 2017–2022, the study also avoids potential biases arising from transitional reporting practices and the post-pandemic regulatory environment, ensuring that the sample remains homogeneous across firms. Moreover, a six-year observation window provides a sufficient horizon to capture dynamic patterns in establishing sustainability committees and their impacts on ESG performance, without introducing distortions from incomplete or non-comparable disclosures in more recent years.

The research population includes all companies listed on the IDX during the observation period, while the sample is selected using a purposive sampling approach. To be included, firms are required to: (i) publish annual reports and/or sustainability reports, (ii) provide ESG disclosure information based on the GRI index, and (iii) present complete financial data necessary for the construction of research variables. The period 2017–2022 also coincides with a crucial regulatory milestone in Indonesia, namely the enactment of POJK 51/2017 on implementing sustainable finance, which marked the beginning of mandatory sustainability reporting, making this timeframe particularly relevant for analysis.

One of the key steps in this study is the categorization of corporate business strategy. For this purpose, the research adopts the Miles and Snow (1978) strategic typology, operationalized following the methodology of Bentley et al. (2013). Firms are classified into strategic groups of Defender, Analyzer, and Prospector based on six financial indicators: (1) R&D intensity (R&D expenditures to sales), (2) employee intensity (number of employees to sales), (3) annual sales growth, (4) SG&A intensity (selling, general, and administrative expenses to sales), (5) employee fluctuation (variance in employee-to-sales ratio), and (6) capital intensity (fixed assets to total assets). Each indicator is measured using a five-year rolling average, and firms are assigned quintile scores ranging from one to five. The total strategic score (ranging from 6 to 30) is then used to classify firms as Defenders (6–12), Analyzers (13–23), or Prospectors (24–30).

For example, manufacturing firms with relatively low R&D intensity but high SG&A and capital intensity—reflecting efficiency-focused operations and cost control—are typically categorized as Defenders. In contrast, firms showing moderate R&D spending, stable employee intensity, and moderate sales growth—balancing efficiency with selective innovation—are identified as Analyzers. This approach captures strategic heterogeneity across industries while aligning with firms' operational priorities and risk orientations. All financial and firm-level data used for strategy classification are obtained from annual financial reports of companies listed on the Indonesia Stock Exchange (IDX). Meanwhile, data on ESG performance and sustainability governance (including the presence of a Sustainability Committee) are derived from corporate sustainability reports and verified through public disclosures compliant with the Global Reporting Initiative (GRI) standards. These multiple data sources enhance the reliability and robustness of the classification process and subsequent analyses.

The independent variable in this study is the existence of a Sustainability Committee (SC), measured as a dummy variable that takes the value of 1 if the firm has established a sustainability committee as disclosed in the annual or sustainability report, and zero otherwise. The dependent variable is the ESG Score, which is measured based on the extent of ESG disclosure using the GRI index. The ESG Score is calculated as the ratio of the number of GRI indicators disclosed by a firm to the total mandatory indicators (91 items), expressed as a percentage. To reduce omitted variable bias, several control variables are included: firm age (measured as the number of years since

establishment), firm size (logarithm of total assets), profitability (ROA, net income divided by total assets), asset turnover (sales to total assets), R&D intensity (R&D expenses to sales), leverage (total debt to total assets), and debt-to-equity ratio (total debt to equity). The empirical model is specified as a multiple linear regression, formulated as follows:

$$CSRScore_{i,t} = \beta_0 + \beta_1 CSRCom + \beta_2 FAGE_{i,t} + \beta_3 FSIZE_{i,t} + \beta_4 ROA_{i,t} + \beta_5 ASTURN_{i,t} + \beta_6 RNDINT_{i,t} + \beta_7 LEV_{i,t} + \beta_8 DER_{i,t} + Year_t + \varepsilon_{i,t} \quad (1)$$

Data analysis is conducted using the statistical software STATA. The empirical procedure begins with presenting descriptive statistics and correlation tests among the variables. The main model is estimated using the ordinary least squares (OLS) regression method, which is appropriate for examining the relationship between the existence of a Sustainability Committee (SC) and firms' ESG Scores. To strengthen the validity of the findings and reduce potential selection bias, a robustness check is performed using Propensity Score Matching (PSM). The PSM technique matches firms with SCs and those without SCs based on comparable firm characteristics, such as size, age, leverage, and profitability, thereby ensuring that systematic differences in firm attributes do not confound the estimated effect of SCs on ESG Scores.

## RESULT

The table presents the distribution of business strategies among firms listed on the Indonesia Stock Exchange (IDX) from 2017 to 2022. Out of a total of 359 firm-year observations, 182 firms (50.70%) were classified as Defenders (coded 0), while 177 firms (49.30%) were categorized as Analyzers (coded 1). It indicates a relatively balanced distribution between the two strategies, with a slight dominance of the Defender strategy. These findings are consistent with the broader assumptions regarding the Indonesian business context, which is characterized by economic uncertainty, dynamic regulatory environments, and an evolving institutional framework. Under such conditions, firms are less likely to adopt the Prospector strategy, which requires more stable environments, greater resource availability, and mature market conditions to sustain aggressive innovation and exploration. Instead, most firms rely on Defender or Analyzer strategies, emphasizing operational efficiency, risk control, and selective adaptation to external opportunities. Thus, the results reinforce the argument that the Analyzer and Defender strategies are the most relevant responses for balancing internal efficiency with external adaptability within the Indonesian setting. In contrast, the Prospector strategy is less prevalent due to its higher level of uncertainty, while the Reactor strategy is largely considered unsuitable for sustaining long-term business performance and corporate sustainability practices.

**Table 1. The Distribution of Business Strategy Within the Sample**

Business Strategy	Frequency	Cumulative
Defender (0)	182	50,70
Analyzer (1)	177	49,30
Total	359	100

The descriptive statistics show that ESG disclosure among firms is modest but relatively consistent (mean ESG score of 0.356), with about half of firms (52.9%) adopting sustainability committees. Firms are mature and generally large, averaging 40 years in age. Profitability is low (mean ROA 4.3%) and innovation investment minimal (R&D intensity 0.002), though asset efficiency varies (asset turnover 0.87). In terms of capital structure, firms are moderately leveraged (average leverage 49.4%), but debt-to-equity ratios vary widely, indicating heterogeneity and the presence of some highly indebted firms.

**Table 2. Statistic Descriptive**

	Obs.	Mean	STD	Minimum	Median	Maximum
ESGSCORE	359	0.356	0.061	0.154	0.352	0.505
SC	359	0.529	0.500	0.000	1.000	1.000
FAGE	359	40.518	19.991	3.000	40.000	121.000
FSIZE	359	19.599	1.799	15.312	19.510	23.992
ROA	359	0.043	0.128	-0.871	0.038	0.599
ASTURN	359	0.870	0.579	0.004	0.770	5.357
RNDINT	359	0.002	0.009	0.000	0.000	0.074
LEV	359	0.494	0.270	0.033	0.474	2.022
DER	359	0.474	12.697	-235.217	0.822	27.038

Table 3 presents the Pearson correlation coefficients among the study variables. The results indicate the strength and direction of the linear relationships between each pair of variables. Positive coefficients suggest that increases in one variable are associated with increases in another, while negative coefficients indicate an inverse relationship.

**Table 3. Pearson Correlation**

	ESGSCORE	SC	FAGE	FSIZE	ROA	ASTURN	RNDINT	LEV	DER
ESGSCORE	1.000								
SC	0.207*** (0.000)	1.000							
FAGE	0.035 (0.512)	0.092* (0.080)	1.000						
FSIZE	0.165*** (0.002)	0.674*** (0.000)	0.275*** (0.000)	1.000					
ROA	-0.024 (0.645)	0.206*** (0.000)	0.261*** (0.000)	0.065 (0.220)	1.000				
ASTURN	-0.098* (0.063)	-0.053 (0.316)	0.173*** (0.001)	-0.098* (0.064)	0.268*** (0.000)	1.000			
RNDINT	-0.020 (0.711)	0.107** (0.042)	0.319*** (0.000)	0.075 (0.154)	0.296*** (0.000)	0.225*** (0.000)	1.000		
LEV	0.022 (0.680)	-0.044 (0.410)	0.002 (0.969)	0.119** (0.025)	-0.462*** (0.000)	-0.095* (0.073)	0.038 (0.475)	1.000	
DER	-0.032 (0.549)	-0.060 (0.256)	0.058 (0.275)	0.050 (0.343)	0.161*** (0.002)	0.020 (0.713)	0.025 (0.642)	-0.074 (0.160)	1.000

p-values in parentheses

\* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

Table 4 reports the results of the OLS regressions with ESGSCORE as the dependent variable across three models: Analyzer (Model 1), Defender (Model 2), and the full sample (Model 3). The findings show that SC has a positive and statistically significant effect on ESGSCORE in the Defender model ( $\beta = 0.042$ ,  $p < 0.01$ ) and in the full sample ( $\beta = 0.027$ ,  $p < 0.01$ ), indicating that firms engaging in ESG reporting tend to achieve higher ESG scores. However, the effect is not significant for Analyzer firms. The explanatory power of the models remains relatively modest, with  $R^2$  ranging from 0.103 to 0.213, implying that additional factors beyond those included in the models likely account for variation in ESG scores. Overall, the results suggest that the sustainability committee plays a central role in driving ESG performance, particularly in defender firms, whereas traditional firm characteristics exert limited influence.

**Table 4. Ordinary Least Squares Regression**

	(1)	(2)	(3)
	ESGSCORE	ESGSCORE	ESGSCORE
SC	0.014 (1.06)	0.042*** (3.02)	0.027*** (2.85)
FAGE	0.000	0.000	0.000

	(1.42)	(0.40)	(0.63)
FSIZE	-0.003	0.006	0.002
	(-0.63)	(1.53)	(0.76)
ROA	0.016	-0.020	-0.021
	(0.25)	(-0.56)	(-0.71)
ASTURN	-0.015**	-0.001	-0.008
	(-2.01)	(-0.10)	(-1.29)
RNDINT	-0.550	-2.122	-0.083
	(-1.52)	(-1.50)	(-0.34)
LEV	0.037	-0.008	0.001
	(1.47)	(-0.63)	(0.10)
DER	0.000	-0.001	0.000
	(0.15)	(-0.61)	(0.20)
_cons	0.396***	0.171**	0.284***
	(5.12)	(2.20)	(5.19)
Year FE	Yes	Yes	Yes
r2	0.103	0.213	0.107
r2_a	0.031	0.153	0.074
N	177	182	359

The regression results are reported for three specifications: Model 1, which includes firms classified as Analyzers; Model 2, which includes firms classified as Defenders; and Model 3, which represents the full sample of firms.

t-statistics in parentheses

\* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

These results reject Hypothesis 1, which predicted that the Sustainability Committee would positively affect ESG performance in firms with an Analyzer strategy. Instead, the findings support Hypothesis 2, namely that the Sustainability Committee significantly influences firms adopting a Defender strategy. One plausible explanation is that Defender firms, which emphasize operational efficiency, stability, and control, tend to integrate sustainability governance mechanisms in a more structured and compliance-oriented manner. The presence of a Sustainability Committee within such firms reinforces their focus on monitoring, standard-setting, and ensuring adherence to sustainability reporting requirements, thereby enhancing the quality and extent of ESG disclosure.

The Propensity Score Matching (PSM) results are shown in Table 5. This analysis provides further support for the robustness of the main regression findings. Specifically, the coefficient of SC in column (2) is positive and statistically significant at the 1% level ( $\beta = 0.042$ ,  $t = 2.93$ ), indicating that corporate social responsibility commitment is positively associated with the ESG score even after accounting for potential selection bias. This result contrasts with the insignificant coefficient in column (1), suggesting that the matching procedure enhances the precision of the estimation. Overall, the PSM results confirm the consistency of the baseline regression by demonstrating that observable firm characteristics do not drive the positive impact of SC on ESG performance but remain robust after controlling for them.

**Table 5. Propensity Score Matching**

	(1)	(2)
	ESGSCORE	ESGSCORE
SC	0.013	0.042***
	(0.99)	(2.93)
FAGE	0.000	0.000*
	(1.58)	(1.75)
FSIZE	-0.002	0.013**
	(-0.60)	(2.60)
ROA	0.020	-0.001
	(0.30)	(-0.02)
ASTURN	-0.014*	0.007
	(-1.95)	(0.41)
RNDINT	-0.579	-2.419*
	(-1.59)	(-1.77)
LEV	0.034	-0.020
	(1.37)	(-1.14)

DER	0.000 (0.04)	-0.006** (-2.58)
_cons	0.392*** (5.04)	0.005 (0.05)
Year FE	Yes	Yes
r2	0.102	0.281
r2_a	0.029	0.210
N	174	144

t statistics in parentheses

\* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

## DISCUSSION

By contrast, Analyzer firms, which combine efficiency with selective exploration, may prioritize flexibility in strategic decision-making. In such cases, the existence of a Sustainability Committee does not necessarily translate into stronger ESG outcomes, as decision-making processes may be more decentralized and adaptive, thereby diluting the formal influence of governance structures. This suggests that institutionalizing sustainability through dedicated committees is more effective when firms pursue efficiency-driven strategies aligned with regulatory compliance and stakeholder accountability (Bentley et al., 2013; Miles & Snow, 1978).

The findings also align with prior evidence that formal governance mechanisms, such as Sustainability Committees or ESG boards, are particularly impactful in firms that operate in highly regulated or risk-averse contexts (Peters & Romi, 2015; Rao & Tilt, 2016). In such firms, the committee's role in overseeing disclosure practices, ensuring consistency with Global Reporting Initiative (GRI) standards, and aligning with regulatory frameworks such as OJK Regulation No. 51/2017 in Indonesia becomes central to improving ESG performance. Conversely, in firms characterized by adaptive and exploratory strategic orientations, informal processes and managerial discretion may play a greater role in shaping ESG activities, thereby reducing the direct impact of formal governance bodies.

## CONCLUSION

This study provides empirical evidence that the effectiveness of a Sustainability Committee (SC) in enhancing ESG performance depends on a firm's strategic orientation. The results show that SCs are more influential in Defender firms, where efficiency and compliance dominate strategic priorities, while their effect is weaker and statistically insignificant in Analyzer firms that emphasize flexibility and innovation. This study is among the first to empirically demonstrate that the strategic orientation of firms moderates the governance-ESG relationship in an emerging market context. Theoretically, it extends stakeholder theory by illustrating how internal governance structures interact with business strategy in shaping sustainability outcomes. Practically, the findings emphasize that firms should leverage SCs not only as compliance instruments but also as strategic mechanisms to enhance ESG credibility and competitiveness. For policymakers, the results suggest embedding SC requirements within regulatory frameworks to strengthen corporate accountability. Future research could expand this line of inquiry by examining other governance mechanisms (e.g., board diversity, ESG-linked executive compensation), employing longitudinal designs to capture dynamic changes, or conducting cross-country comparisons to assess institutional moderating effects. Moreover, qualitative approaches could offer deeper insights into how SCs function in practice, particularly regarding their composition, expertise, and leadership in driving ESG integration.

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