






“The effect of corporate governance practices on firms’ sustainable growth: The moderating role of sustainability awards in Thailand’s ESG-oriented companies”

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THE EFFECT OF CORPORATE GOVERNANCE PRACTICES ON FIRMS' SUSTAINABLE GROWTH: THE MODERATING ROLE OF SUSTAINABILITY AWARDS IN THAILAND'S ESG-ORIENTED COMPANIES

Abstract

Corporate governance plays a crucial role in promoting sustainability by guiding firms toward responsible management that balance growth and accountability. This study examines the impact of corporate governance on sustainable growth of firms in the Thailand Sustainability Investment list and investigates whether the Stock Exchange of Thailand Sustainability Awards moderate this relationship. The analysis utilizes secondary panel data from 183 companies, comprising 778 firm-year observations from 2015 to 2022, sourced from the SETSMART database. The study considers board size, board independence, director shareholding, CEO duality, board meeting frequency, and the presence of risk committee as independent variables, with sustainable growth as the dependent variable. The multiple regression analysis was used to analyze the hypotheses. Empirical results reveal that board size ($\beta = 1.3607, p < 0.05$), independent directors ($\beta = 2.1223, p < 0.01$), executive shareholding ($\beta = 0.0456, p < 0.10$), and the presence of a risk committee ($\beta = 0.1339, p < 0.10$) positively affect sustainable growth, while CEO duality has a significant negative impact ($\beta = -1.2335, p < 0.10$). Furthermore, the Stock Exchange of Thailand Sustainability Awards played a moderating role, as its interaction with board size ($\beta = 1.2307, p < 0.10$) and independent directors ($\beta = 1.3123, p < 0.05$) strengthens their positive effects. These findings suggest that effective governance enhances sustainable growth, and sustainability awards amplify this influence among Thai listed firms. The study offers implications for regulators to foster governance frameworks and award programs supporting sustainable growth.

Keywords

corporate governance, sustainability, certification, moderator, Thailand

JEL Classification

G34, O16, Q01, G32

INTRODUCTION

In recent years, sustainable development has become a central concern in both public policy and corporate strategy, particularly within emerging capital markets. Investors and regulators are increasingly emphasizing environmental, social, and governance (ESG) principles to enhance transparency, accountability, and long-term value creation. In Thailand, the Stock Exchange of Thailand (SET) has promoted sustainability initiatives through the Thailand Sustainability Investment (THSI) list and the SET Sustainability Awards (SSA), both of which aim to encourage responsible business conduct and recognize firms that demonstrate excellence in sustainability performance. Despite these institutional efforts, a persistent research gap remains regarding how corporate governance (CG) practices contribute to firms' sustainable growth (SG) in emerging markets. While effective governance is

theoretically expected to enhance organizational resilience and value creation, empirical findings are mixed and often context-dependent. Some studies suggest that strong governance mechanisms foster sustainability performance, whereas others report insignificant or inconsistent effects, particularly within Southeast Asian markets. Moreover, limited attention has been paid to the moderating role of external recognition – such as sustainability awards – in strengthening the corporate governance–sustainable growth linkage. Therefore, the scientific problem underlying this study concerns the insufficient empirical understanding of how internal governance mechanisms interact with institutional recognition to influence firms' sustainable growth in the Thai capital market. Addressing this problem contributes to a deeper theoretical explanation of the governance–sustainability nexus and provides empirical evidence from a rapidly developing economy where sustainability-oriented reforms are gaining momentum.

1. LITERATURE REVIEW AND HYPOTHESES

Over the past two decades, research on corporate governance and sustainability has grown extensively, reflecting increasing global concern for responsible business practices and long-term value creation. Effective governance mechanisms are widely recognized as vital instruments that ensure firms' accountability, ethical leadership, and sustainable performance. Against this backdrop, the following review synthesizes theoretical and empirical studies to establish the conceptual foundation for analyzing how corporate governance influences sustainable growth in Thailand's ESG-oriented firms. The discussion is structured around three interrelated themes: (1) theoretical perspectives linking governance to sustainability, (2) empirical evidence on governance mechanisms and sustainable growth, and (3) the moderating role of external recognition through sustainability awards.

From a theoretical standpoint, corporate governance provides the institutional framework that aligns management decisions with stakeholder expectations. Agency theory (Jensen & Meckling, 1976) underscores that effective monitoring mechanisms mitigate managerial opportunism and reduce agency costs. Stakeholder theory (Freeman, 1984) expands this view by stressing that firms must balance the interests of diverse stakeholders to achieve long-term success. Similarly, Gray et al. (1996) emphasized ethical and social accountability as integral to sustainable corporate behavior. Together, these perspectives highlight that robust governance not only protects shareholder interests but also fosters transparency, fairness, and ESG-oriented management.

Empirically, corporate governance encompasses structural and procedural mechanisms that enhance corporate integrity and resilience (OECD, 2015; Stock Exchange of Thailand, 2023). Within emerging markets, reforms such as Thailand's 2017 CG Code and the Thai Institute of Directors' Corporate Governance Report (CGR) have sought to align domestic practices with global standards (Iamphongpaiboon, 2022; Securities and Exchange Commission of Thailand, 2024). Despite these initiatives, prior findings remain mixed. Some studies report insignificant or inconsistent effects of governance on firm performance (Chatromyen, 2015; Al-Absy & Hasan, 2023; Freire et al., 2020), while others confirm positive associations with profitability and growth (Upathampracha, 2015; Chai et al., 2023). These variations suggest that governance mechanisms may not uniformly translate into sustainability outcomes, possibly due to contextual factors, enforcement quality, or moderating influences.

Among governance dimensions, board characteristics have received particular attention. Prior studies indicate that board size can provide strategic diversity but may reduce efficiency when excessively large (Tibiletti et al., 2021; Kwarteng et al., 2023). Board independence strengthens oversight and reduces opportunistic behavior (Rashid, 2018; Pasko et al., 2021), though some findings reveal no significant impact on sustainability performance (Al-Absy & Hasan, 2023; Freire et al., 2020). Director shareholding presents mixed outcomes – some evidence suggests entrenchment effects (Chatromyen, 2015), while others highlight improved accountability (Chanprasit et al., 2023). CEO duality tends to weaken board monitoring (Rahman & Bremer, 2016; Vipoosikul, 2017), yet certain contexts find neutral or efficiency-related effects (Liu, 2012). Likewise, the frequency of board

meetings and the establishment of risk committees are increasingly recognized as indicators of proactive governance (Yu & Huang, 2024; Nawalmaneehi et al., 2020). Collectively, these attributes define how internal governance mechanisms can shape firms' sustainable growth trajectories.

Beyond internal mechanisms, external recognition such as the SET Sustainability Awards (SSA) operates as a symbolic and institutional assurance of a firm's commitment to responsible and transparent management. Programs like the SSA, Thailand Sustainability Investment (THSI), and the Dow Jones Sustainability Index (DJSI) strengthen stakeholder trust and reinforce firms' reputational capital. Empirical evidence demonstrates that award-winning firms outperform peers in profitability, stock performance, and growth potential (Apimonbutr & Hensawang, 2017; Khunthong et al., 2022; Thongchai & Akkho, 2025). These findings imply that sustainability awards can enhance the effectiveness of governance practices by legitimizing sustainable behavior and reinforcing ethical leadership. In this way, external recognition may serve as a moderating mechanism that amplifies the positive and mitigates the negative effects of governance on sustainable growth.

In summary, previous research underscores the importance of governance in fostering sustainable growth but remains inconclusive regarding its direct impact. The potential moderating influence of external recognition – particularly sustainability awards – has been relatively underexplored in emerging economies. Addressing this gap, the present study aims to examine how corporate governance mechanisms affect the sustainable growth of firms listed in the Thailand Sustainability Investment (THSI) and whether the SET Sustainability Awards (SSA) strengthen this relationship.

Based on these insights, the following hypotheses are proposed:

- H_1 : *Board size positively influences a firm's sustainable growth.*
- H_2 : *Board independence positively influences a firm's sustainable growth.*
- H_3 : *Director's shareholding proportion positively impacts a firm's sustainable growth.*

H_4 : *CEO duality negatively impacts a firm's sustainable growth.*

H_5 : *Board meeting frequency positively influences a firm's sustainable growth.*

H_6 : *The presence of a risk committee positively impacts a firm's sustainable growth.*

H_7 : *SET Sustainability Awards positively moderate the relationship between board size and a firm's sustainable growth.*

H_8 : *SET Sustainability Awards positively moderate the relationship between board independence and a firm's sustainable growth.*

H_9 : *SET Sustainability Awards positively moderate the relationship between director shareholding proportion and a firm's sustainable growth.*

H_{10} : *SET Sustainability Awards positively moderate the relationship between CEO duality and a firm's sustainable growth.*

H_{11} : *SET Sustainability Awards positively moderate the relationship between board meeting frequency and a firm's sustainable growth.*

H_{12} : *SET Sustainability Awards positively moderate the relationship between the presence of a risk committee and a firm's sustainable growth.*

2. METHODOLOGY

This study adopts a quantitative explanatory research design to examine the effect of corporate governance mechanisms and sustainable growth, as well as to investigate the moderating role of the SET Sustainability Awards (SSA). The analysis is based on secondary data obtained from firms listed in the Thailand Sustainability Investment (THSI) index, representing companies that have been recognized for their adherence to environmental, social, and governance (ESG) practices. The use of panel data allows for the simultaneous examination of cross-sectional and time-series

variations, thereby enhancing the reliability and validity of empirical findings.

The population comprises companies listed on the Stock Exchange of Thailand (SET) and the Market for Alternative Investment (MAI) that were included in the THSI group between 2015 and 2022. The study employs an unbalanced panel dataset covering eight years, capturing both firms that consistently appear on the THSI list and those intermittently included. A total of 183 firms were identified during the period, resulting in 778 firm-year observations. Annual reports and financial statements in the SETSMART database of the Stock Exchange of Thailand (SET) provided comprehensive information on firms' financial performance, governance structures, and

sustainability indicators for analysis. These data were used to formulate all variables shown in Table 1. The choice of THSI-listed firms as the sampling frame ensures that the analysis is conducted among ESG-oriented companies, making the findings relevant to the context of sustainable corporate practices in Thailand's capital market. This study uses independent variables such as board size, board independence, the proportion of director shareholding, CEO duality, board meeting frequency, and the presence of a risk committee. The dependent variable is sustainable growth, and three firm-specific characteristics are used as the control variables: firm size, financial leverage ratio, and sales growth. All the variable measurements, notations, and descriptions are shown in Table 1.

Table 1. Variable description

Variables	Measurement	Description
Sustainable Growth (SG)	$\frac{Net\ Income}{Sales} \cdot \frac{Sales}{Total\ Assets} \cdot \frac{Total\ Assets}{Total\ Equity} \cdot RR$	The highest growth rate of sales or revenue without changing operating and financing policies.
Board Size (BODSIZE)	Total number of directors in the board during the year	Larger boards may bring diverse perspectives but could reduce decision-making efficiency and oversight effectiveness.
Proportion of Independent Directors (IND)	$\frac{Number\ of\ Independent\ Directors}{Total\ number\ of\ Directors} \cdot 100\%$	Measures board independence; independent directors help mitigate agency conflicts and improve monitoring.
Proportion of Executive Shareholding (EXSHARE)	$\frac{Number\ of\ common\ shares\ held\ by\ executives}{Total\ issued\ shares} \cdot 100\%$	Indicates alignment of managerial and shareholder interests; excessive ownership may entrench management
CEO Duality (DUAL)	DUAL = 0 if CEO and Chairman positions are separated DUAL = 1 if CEO and Chairman positions are combined	Indicates concentration of power; duality may reduce checks and balances, impacting governance and long-term performance.
Board Meeting Frequency (MEET)	Number of board meetings held per year	Frequent meetings signal active oversight and engagement in decision-making, positively influencing firm performance.
Risk Committee (RC)	RC = 0 if no risk committee exists RC = 1 if a risk committee exists	Presence of a dedicated committee enhances risk management and strengthens stakeholder confidence.
SET Sustainability Awards (SSA)	SSR = 0 if the firm did not receive the award SSR = 1 if the firm received the award	Indicates recognition for ESG excellence; may reinforce the impact of governance on sustainable growth.
Firm size (SIZE)	$Ln(Total\ Assets)$	Natural logarithm of TA; larger firms may benefit from scale but face management complexity
Financial leverage (DE)	$\frac{Total\ Debt}{Total\ Equity}$	The proportion of total debt over total equity; high leverage increases financial risk but can enhance return on equity.
Sales Growth (GROWTH)	$\frac{Sales_1 - Sales_0}{Sales_0}$	Percentage change in sales; indicates revenue growth and market adaptability.

In analyzing the data, this study's objectives are: (1) to investigate the effect of six corporate governance elements on sustainable growth, and (2) to examine the moderating role of SET Sustainability Awards (SSA) in the relationship between the corporate governance elements and sustainable growth. Firstly, descriptive analysis is employed to examine the characteristics of the data used in this study. The correlation among variables is analyzed to identify potential issues of multicollinearity. Finally, multiple regression analysis is applied to determine the impact of the six corporate governance elements – board size (BODSIZE), proportion of independent directors (IND), proportion of executive shareholding (EXSHARE), CEO duality (DUAL), board meeting frequency (MEET), and risk committee (RC) – on sustainable growth, as well as to examine whether SSA moderates these relationships. Equation (1) specifies the baseline regression model used to examine the effects of corporate governance on sustainable growth:

$$\begin{aligned} SG_{i,t} = & B_0 + B_1 BODSIZE_{i,t} + B_2 IND_{i,t} \\ & + B_3 EXSHARE_{i,t} + B_4 DUAL_{i,t} \\ & + B_5 MEET_{i,t} + B_6 RC_{i,t} + B_7 SIZE_{i,t} + B_8 DE_{i,t} \\ & + B_9 GROWTH_{i,t} + e_{i,t}. \end{aligned} \quad (1)$$

In this model, the coefficients B_1 to B_6 correspond to the six corporate governance elements and are specifically used to test H_1 to H_6 , respectively. That is, B_1 represents the effect of board size (BODSIZE) on sustainable growth, B_2 captures the impact of proportion of independent directors (IND) on sustainable growth, B_3 measures the influence of proportion of executive shareholding (EXSHARE), B_4 estimates the effect of CEO duality (DUAL), B_5 reflects the impact of board meeting frequency (MEET), and B_6 represents the effect of risk committee (RC). The remaining coefficients (B_7 to B_9) account for control variables – firm size (SIZE), financial leverage (DE), and sales growth (GROWTH).

Equation (2) presents the regression model used to test the moderating role of SET Sustainability Awards (SSA) on the relationship between six corporate governance elements and sustainable growth:

$$\begin{aligned} SG_{i,t} = & B_0 + B_1 BODSIZE_{i,t} + B_2 IND_{i,t} \\ & + B_3 EXSHARE_{i,t} + B_4 DUAL_{i,t} + B_5 MEET_{i,t} \\ & + B_6 RC_{i,t} + B_7 SIZE_{i,t} + B_8 DE_{i,t} + B_9 GROWTH_{i,t} \\ & + B_{10} SSA_{i,t} + B_{11} (BODSIZE \cdot SSA)_{i,t} \\ & + B_{12} (IND \cdot SSA)_{i,t} + B_{13} (EXSHARE \cdot SSA)_{i,t} \\ & + B_{14} (DUAL \cdot SSA)_{i,t} + B_{15} (MEET \cdot SSA)_{i,t} \\ & + B_{16} (RC \cdot SSA)_{i,t} + B_{17} SIZE_{i,t} + B_{18} DE_{i,t} \\ & + B_{19} GROWTH_{i,t} + e_{i,t}. \end{aligned} \quad (2)$$

This model includes both the direct effects of corporate governance elements (B_1 to B_6) and SSA (B_{10}), as well as their interaction terms (B_{11} to B_{16}). These interaction coefficients specifically test whether SSA moderates the relationship between each corporate governance element and sustainable growth. That is, B_{11} tests the moderating effect of SSA on board size, B_{12} on proportion of independent directors, B_{13} on proportion of executive shareholding, B_{14} on CEO duality, B_{15} on board meeting frequency, and B_{16} on risk committee. Therefore, B_{11} to B_{16} correspond to H_7 to H_{12} , respectively.

3. RESULTS

Table 2 presents the summary of descriptive statistics for the continuous variables of 778 firm-year observations used in this study. Before performing the regression analysis, some preliminary tests were conducted. To assess normality, the study examined the skewness and kurtosis values of the variables. According to Hair et al. (2010), data are considered normally distributed when skewness ranges between -3 and $+3$ and kurtosis falls between -7 and $+7$. The initial results (untabulated) revealed that two variables, sustainable growth and firm size, deviated from normality, with skewness values of -8.35 and 25.56 , respectively. To address this issue, the dataset was transformed using the 95% Winsorization technique. The results show that the average sustainable growth is 1.2578, with a wide range from -29.5280 to 28.7252 , indicating considerable variability among firms. The average board size (BODSIZE) is 11.41 members, while the proportion of independent directors (IND) averages 44.27%, suggesting that nearly half of the board members are independent. The propor-

Table 2. Summary of descriptive statistics (Continuous variables)

Variable	Mean	Max	Min	S.D.	Obs
SG	1.2578	28.7252	-29.5280	1.5987	778
BODSIZE	11.41	23	6	11.41	778
IND	44.27	80	16.67	44.27	778
EXSHARE	12.57	78.97	0.045	12.57	778
MEET	9.25	27	4	3.79	778
SIZE	10.40	15.36	4.70	2.12	778
DE	1.62	8.70	0.22	1.68	778
GROWTH	7.40	83.42	-38.87	22.99	778

Table 3. Summary of descriptive statistics (Dummy variables)

Variable	Dummy	Frequency (N)	Percentage (%)
DUAL	1	358	46.02
	0	420	53.98
Total		778	100
RC	1	689	88.56
	0	89	11.44
Total		778	100
SSA	1	269	34.58
	0	509	65.42
Total		778	100

tion of executive shareholding (EXSHARE) has a mean of 12.57%, ranging from 0.045% to 78.97%, indicating differences in ownership structures across firms. Additionally, firms hold an average of 9.25 board meetings (MEET) annually, with a maximum of 27 meetings. The average firm size (SIZE), measured as the natural logarithm of total assets, is 10.40, while the average financial leverage (DE) stands at 1.62, with a maximum of 8.70, reflecting varying capital structures. Finally, the average sales growth (GROWTH) is 7.40%, with substantial dispersion ranging from -38.87% to 83.42%, suggesting significant differences in firm performance within the sample.

Table 3 summarizes the descriptive statistics of three dummy variables: CEO duality (DUAL), risk

committee (RC), and SET Sustainability Awards (SSA). The results indicate that 46.02% of the firms exhibit CEO duality, whereas 53.98% have separated the roles of CEO and chairperson. Regarding the risk committee, a substantial proportion of firms (88.56%) have established a dedicated committee, while 11.44% have not. Regarding the SET Sustainability Awards, 34.58% of the firms have received the award, whereas 65.42% have not.

Table 4 presents the Pearson correlation coefficients among the variables used in this study, providing insights into the relationships between sustainable growth (SG) and the explanatory variables. The results indicate that SG is positively and significantly correlated with board size (BODSIZE) ($r = 0.2315$, $p < 0.05$), proportion of independent direc-

Table 4. Correlation analysis

Variable	SG	BODSIZE	IND	EXSHARE	DUAL	MEET	RC	SSA
SG	1.0000							
BODSIZE	0.2315**	1.0000						
IND	0.1542*	-0.0760*	1.0000					
EXSHARE	0.0912*	-0.3660**	0.0380	1.0000				
DUAL	-0.1284	-0.0420	0.0020	0.2325*	1.0000			
MEET	0.2105	0.2690**	0.2905*	-0.1870**	0.0812	1.0000		
RC	0.0625*	0.0840*	0.0250	-0.3578	-0.0530	0.1260**	1.0000	
SSA	0.0458*	0.0860*	0.1553*	0.2080	0.1340	0.1440**	0.1280	1.0000

Note: ***, ** and * denote significance at the 1%, 5%, and 10% levels.

tors (IND) ($r = 0.1542, p < 0.10$), executive shareholding (EXSHARE) ($r = 0.0912, p < 0.10$), board meeting frequency (MEET) ($r = 0.2105, p < 0.05$), risk committee (RC) ($r = 0.0625, p < 0.10$), and SET Sustainability Awards (SSA) ($r = 0.0458, p < 0.10$). These findings suggest that firms with larger boards, higher independent director representation, greater executive shareholding, more frequent board meetings, established risk committees, and recognition through sustainability awards tend to exhibit higher sustainable growth. Moreover, the correlations among the explanatory variables show some notable relationships. Board size is positively correlated with board meeting frequency ($r = 0.2690, p < 0.01$) and SSA ($r = 0.0860, p < 0.10$), but negatively correlated with executive shareholding ($r = -0.3660, p < 0.05$). Similarly, board meeting frequency shows a positive association with independent directors ($r = 0.2905, p < 0.10$) and SSA ($r = 0.1440, p < 0.05$). Overall, the correlation coefficients are relatively low, suggesting that multicollinearity is unlikely to pose a significant concern for the subsequent regression analyses.

Table 5 presents the results of the multiple regression analysis using the Pooled OLS. To assess the suitability of this approach, the Breusch and Pagan LM test was first conducted. The null hypothesis could not be rejected (untabulated results, p -value > 0.05), confirming the appropriateness of the Pooled OLS specification.

The regression results in Model (1) demonstrate the direct effects of the six corporate governance (CG) elements on sustainable growth (SG). Board size (BODSIZE) exhibits a positive and significant effect ($\beta = 1.3607, p < 0.05$), implying that larger boards contribute to enhanced monitoring and strategic decision-making that foster sustainable growth; therefore, H_1 is supported. Independent directors (IND) also show a strong positive association with sustainable growth (SG) ($\beta = 2.1223, p < 0.01$), highlighting the importance of independent oversight in promoting transparency and long-term performance. H_2 is also confirmed. Executive shareholding (EXSHARE) has a positive but weaker effect ($\beta = 0.0456, p < 0.10$), sug-

Table 5. Empirical results of six corporate governance elements and the moderating role of SSA on sustainable growth using pooled OLS

Variables	Model (1)	Model (2)
	Direct Effect $H_1 - H_6$	Moderating Effect $H_7 - H_{12}$
Constant	8.5725*** (0.0000)	7.1720*** (0.0000)
BODSIZE	1.3607** (0.0340)	1.0607* (0.0740)
IND	2.1223*** (0.0003)	1.2523** (0.0306)
EXSHARE	0.0456* (0.0745)	0.0548* (0.0825)
DUAL	-1.2335* (0.0640)	-1.1945* (0.0905)
MEET	0.0059 (0.1205)	0.0049 (0.1307)
RC	0.1339* (0.0940)	0.1036* (0.0960)
SSA		0.0359 (0.1109)
BODSIZE x SSA		1.2307* (0.0840)
IND x SSA		1.3123** (0.0406)
EXSHARE x SSA		0.0488 (0.1825)
DUAL x SSA		-1.2945 (0.1105)
MEET x SSA		0.0065 (0.1409)
RC x SSA		0.1536 (0.1260)
SIZE	0.3320* (0.0640)	0.3325* (0.0750)
DE	-0.1030*** (0.0005)	-0.1045*** (0.0053)
GROWTH	0.290** (0.0440)	0.2345** (0.0035)
R-squared	0.1078	0.1345
Adjusted R-squared	0.0952	0.1142
Sum squared residual	3.4532	3.0502
Durbin-Watson stat	1.8045	1.9378
F-statistic	5.8824	8.7118
Prob (F-statistic)	0.0000	0.0000

Note: ***, ** and * denote significance at the 1%, 5%, and 10% levels. P-values are presented in parenthesis.

gesting that managerial ownership may align interests with shareholders, thereby encouraging sustainable strategies. H_3 is supported. Conversely, CEO duality (DUAL) is negatively related to sustainable growth (SG) ($\beta = -1.2335, p < 0.10$), indicating that the concentration of power in a dual leadership structure could hinder effective governance and undermine growth. H_4 is confirmed. However, board meeting frequency (MEET) is positively related to sustainable growth (SG) but not statistically significant ($\beta = 0.0059, p > 0.10$), suggesting that frequency of meetings alone may not enhance sustainable outcomes without consideration of meeting quality, so H_5 is rejected. The presence of a risk committee (RC) shows a positive effect ($\beta = 0.1339, p < 0.10$), underscoring its potential role in strengthening risk oversight; therefore, H_6 is also confirmed. Regarding control variables, firm size (SIZE) ($\beta = 0.3320, p < 0.10$) and sales growth (GROWTH) ($\beta = 0.290, p < 0.05$) are positively associated with sustainable growth (SG), while financial leverage (DE) exhibits a significant negative effect ($\beta = -0.1030, p < 0.01$). The model explains approximately 9.52% of the variation in sustainable growth (SG) (Adjusted $R^2 = 0.0952$).

Model (2) incorporates the moderating effect of the SET Sustainability Awards (SSA) on the relationship between corporate governance elements and sustainable growth. The direct effect of SSA is positive but insignificant ($\beta = 0.0359, p > 0.10$), indicating that the award itself does not directly enhance sustainable growth. However, its interaction with certain corporate governance elements reveals important moderating effects. The interaction between board size and SSA (BODSIZE \times SSA) is positive and marginally significant ($\beta = 1.2307, p < 0.10$), suggesting that sustainability awards amplify the positive influence of larger boards on sustainable growth, confirming H_7 . Similarly, the interaction of independent directors with SSA (IND \times SSA) is positive and statistically significant ($\beta = 1.3123, p < 0.05$), implying that the governance benefits of board independence are further strengthened when firms receive sustainability awards, confirming H_8 . By contrast, the interactions of executive shareholding (EXSHARE \times SSA), board meeting frequency (MEET \times SSA), and risk committee (RC \times SSA) are positive but not significant, indicating that SSA does not meaningfully alter these relationships. The interaction

of CEO duality and SSA (DUAL \times SSA) is negative ($\beta = -1.2945, p > 0.10$), suggesting that even in award-winning firms, dual leadership continues to exert an adverse effect on sustainable growth, thereby rejecting H_9 – H_{12} . Overall, the inclusion of SSA interactions improves model fit ($R^2 = 0.1345$; Adjusted $R^2 = 0.1142$), with the F -statistic (8.7118, $p < 0.01$) confirming the joint significance of the model. These findings suggest that while SSA does not have a direct impact on sustainable growth, it plays a significant moderating role in enhancing the effectiveness of certain corporate governance practices, particularly board independence and board size.

4. DISCUSSION

This study examined how corporate governance mechanisms influence the sustainable growth of Thai listed firms and whether the SET Sustainability Awards (SSA) strengthen this relationship. The results partially support the proposed hypotheses, showing that board composition, ownership alignment, and risk oversight enhance sustainability outcomes, whereas leadership duality and procedural mechanisms exert weaker effects. Overall, the findings extend current understanding of how internal governance interacts with external institutional recognition in emerging markets.

The positive and significant effect of board size on sustainable growth (H_1 supported) indicates that larger boards contribute to more diverse expertise and better monitoring, consistent with stakeholder theory and prior evidence from Upathampracha (2015) and Panchanathorn and Saengkiew (2021). Similar to Tibiletti et al. (2021) and Kwarteng et al. (2023), board size can enhance strategic adaptability when supported by active engagement. However, the result contrasts with Sabsombat et al. (2020), who found that excessively large boards may hinder decision efficiency. The difference likely reflects the THSI context, where firms adopt mature governance systems that offset coordination challenges. The strong positive influence of board independence (H_2 supported) supports agency theory (Jensen & Meckling, 1976) and aligns with Rashid (2018) and Pasko et al. (2021), confirming that independent directors improve transparency and stakeholder trust. This finding contradicts Al-Absy and Hasan (2023) and Freire et al. (2020), who found insignificant links between

independence and performance, suggesting that governance effectiveness depends on institutional quality and enforcement, which in Thailand have strengthened since the 2017 CG Code reform.

Executive shareholding shows a weakly positive association with sustainable growth (H_3 supported), consistent with the alignment-of-interest hypothesis (Jensen & Meckling, 1976) and with Chanprasit et al. (2023). However, the limited significance also echoes Chatromyen (2015), indicating that excessive ownership may lead to entrenchment. CEO duality negatively affects sustainable growth (H_4 supported), reaffirming the agency concern that power concentration undermines monitoring. This aligns with Rahman and Bremer (2016) and Vipoosikul (2017), while differing from Liu (2012), who found neutral effects in China. The persistence of a negative sign even after incorporating SSA confirms that external recognition cannot offset internal power imbalances.

Board meeting frequency is not significant (H_5 rejected), consistent with Vafeas (1999) and Kwarteng et al. (2023), who stressed that meeting quantity does not equate to governance quality. By contrast, the presence of a risk committee exerts a positive influence on sustainable growth (H_6 supported), reinforcing Nawalmaneehi et al. (2020) and Yu and Huang (2024) that formalized risk oversight enhances resilience and sustainability. Collectively, these findings imply that substantive governance mechanisms emphasizing accountability and risk control have greater relevance than procedural formality.

Regarding the moderating role of SSA, the award significantly strengthens the effects of board size and independence on sustainable growth (H_7 – H_8 supported). This supports signaling theory, demonstrating that sustainability awards serve as credible signals of firms' ESG commitment and institutional legitimacy. The result corroborates Apimonbutr and Hensawang (2017) and Khunthong et al. (2022), who found superior performance among recognized

firms. However, SSA does not significantly moderate the effects of executive shareholding, CEO duality, meeting frequency, or risk committee (H_9 – H_{12} rejected), differing from Jaisa-ard (2022). This selective effect suggests that awards amplify structural governance strengths but do not remedy weak internal mechanisms. The pattern is consistent with Thongchai and Akkho (2025), who emphasized that external recognition enhances reputation but cannot substitute for sound governance foundations.

Overall, the results reflect Thailand's evolving corporate governance environment during 2015–2022, particularly following the introduction of the 2017 CG Code, which progressively strengthened institutional frameworks and sustainability oversight. This evolving context has fostered a complementary system in which internal governance mechanisms drive sustainable growth, while external recognition programs such as the SET Sustainability Awards (SSA) reinforce corporate legitimacy. These findings integrate insights from agency, stakeholder, and signaling theories, illustrating that sustainability stems from both effective internal control and credible external validation. From a policy perspective, regulators should continue enhancing board independence and risk management standards, while refining award criteria to promote genuine governance improvement. For managers, the evidence suggests that SSA recognition yields the greatest benefits when supported by transparent, well-functioning boards and balanced ownership structures.

This study provides updated empirical support that board independence, board size, and risk oversight remain central to sustainable growth in Thailand's ESG-oriented firms. Sustainability awards magnify these benefits through reputational signaling but cannot replace authentic governance quality. The findings therefore reaffirm that robust governance mechanisms, complemented by credible external validation, form the cornerstone of corporate sustainability in emerging capital markets.

CONCLUSION

This study aimed to examine the influence of corporate governance mechanisms on the sustainable growth of firms listed in the Thailand Sustainability Investment, as well as the moderating role of the Stock Exchange of Thailand Sustainability Awards (SSA). The findings indicate that board size, board independence, managerial shareholding, and the presence of a risk committee contribute positively to

sustainable growth, whereas CEO duality hinders it. Moreover, the SSA strengthens the positive effects of board size and board independence, suggesting that external recognition can amplify the benefits of sound internal governance practices. These results highlight that sustainable growth depends primarily on effective internal governance structures rather than symbolic compliance. Sustainability awards serve as a complementary mechanism that enhances firm legitimacy and investor confidence but cannot replace genuine governance integrity. Therefore, firms should prioritize strengthening board effectiveness, leadership accountability, and risk oversight to achieve enduring growth and stakeholder trust. Future research should extend this analysis by examining other moderating or mediating mechanisms, such as ESG disclosure quality, board diversity, and ethical leadership. Comparative studies across ASEAN or developed economies and the use of longitudinal or causal modeling approaches would further clarify how governance quality shapes long-term sustainability outcomes.

AUTHOR CONTRIBUTIONS

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