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CORPORATE TAX PLANNING AND FINANCIAL STABILITY: THE CONTINGENT GOVERNANCE ROLE OF ESG

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Abstract

This study empirically investigates the relationship between corporate tax planning and financial stability, highlighting the moderating role of Environmental, Social, and Governance (ESG) performance. Analyzing a sample of 261 non-financial firms listed on the Stock Exchange of Thailand, the research utilizes effective tax rates (ETR) and book-tax differences (BTD) to measure tax planning. Financial stability is operationalized via the Altman Z-score and Ohlson O-score. Findings reveal that BTD is significantly and positively associated with financial stability, whereas ETR exhibits no significant relationship. Crucially, moderation analysis demonstrates that strong ESG performance amplifies the positive impact of BTD on financial stability. The results suggest that BTD effectively captures complex tax-planning dimensions linked to corporate resilience. At the same time, ESG performance functions primarily as a contingent governance mechanism that enhances the credibility of these strategies. Ultimately, this research provides vital insights, indicating that the financial implications of tax planning depend substantially on a firm's broader transparency and governance environment.

Keywords: Corporate Tax Planning, Financial Stability, ESG Performance, Book-Tax Differences, Contingent Governance

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Introduction

Financial stability is essential to corporate survival, organizational resilience, and long-term value creation. Firms with stronger financial stability are generally better able to absorb economic shocks, sustain investment, preserve operating continuity, and maintain stakeholder confidence, whereas financially fragile firms face greater distress risk, tighter financing constraints, and increased vulnerability to adverse market conditions (Agoraki et al., 2023; Altman, 1968; Campbell et al., 2008; Ohlson, 1980). In accounting and finance research, financial stability relates closely to a firm's ability to maintain sound financial condition over time, manage risk exposure, and support strategic decision-making under uncertainty. In this context, identifying the factors that strengthen or weaken firms' financial condition remains an important and timely issue.

Corporate tax planning is one such factor. By reducing tax liabilities within the boundaries of tax regulation, tax planning can increase after-tax cash flows, improve liquidity, and strengthen financial flexibility (Hanlon & Heitzman, 2010). These benefits may enhance firms' capacity to sustain operations, support investment, and manage financial pressure more effectively (Desai & Dharmapala, 2009; Edwards et al., 2016). From this perspective, tax planning can be interpreted as a strategic financial tool that helps firms preserve internal resources and reduce dependence on costly external financing. Such benefits are especially relevant in environments characterized by economic uncertainty, capital-market pressure, and increasing demands for financial resilience.

However, tax planning is not unambiguously beneficial. In addition to generating tax savings, tax-planning activities may also create opacity, increase agency concerns, and raise uncertainty among external stakeholders, particularly when such strategies are perceived as aggressive or difficult to evaluate (Desai & Dharmapala, 2006; Hanlon & Heitzman, 2010; Hanlon & Slemrod, 2009; Krieg & Li, 2025). In other words, the same tax-planning behavior that improves internal financial flexibility may simultaneously create doubts about managerial motives, reporting transparency, or long-term sustainability. This duality makes tax planning an analytically important but theoretically ambiguous determinant of firms' financial condition. Accordingly, its implications for financial stability may depend not only on the tax savings generated, but also on the governance and information environment in which such strategies are implemented.

In this regard, Environmental, Social, and Governance (ESG) performance may play an important conditioning role. Stronger ESG performance is commonly associated with greater transparency, better governance, lower information asymmetry, and stronger stakeholder trust (Agoraki et al., 2023; Cheng et al., 2014; Christensen et al., 2021; Dhaliwal et al., 2011; Eccles et al., 2014; Pinto & Gaio, 2025). Recent evidence also suggests that ESG disclosure can reduce agency costs, lower business risks, and improve the broader information environment, thereby shaping how stakeholders evaluate firm behavior and disclosures (Li et al., 2025; Pinto & Gaio, 2025). In this sense, ESG performance may enhance not only firms' reputational standing but also the credibility of their financial and strategic decisions. As a result, tax-planning activities undertaken by firms with stronger ESG performance may be interpreted as more credible and sustainable, rather than as opportunistic or opaque (Agoraki et al., 2023; Connelly et al., 2011). Although tax planning and ESG performance have both received substantial attention in prior research, they have largely been examined in separate streams of literature. Prior studies on tax planning have primarily focused on firm value, tax avoidance, reporting aggressiveness, and related risk outcomes. In contrast, ESG research has more often emphasized disclosure quality, information asymmetry, financing conditions, and firm performance. As a result, relatively limited evidence exists on whether ESG performance shapes the relationship between tax planning and firms' financial stability. This gap is important because firms' financial condition is unlikely to be influenced by tax-planning behavior in isolation. Instead, its implications may

depend on whether stakeholders view such behavior as efficient, disciplined financial management or as a source of opacity and risk.

This study addresses this gap by empirically investigating the relationship between corporate tax planning and financial stability, specifically highlighting the contingent governance role of ESG performance. Tax planning is captured using two distinct proxies—effective tax rates (ETR) and book-tax differences (BTD)—because they reflect different dimensions of corporate tax behavior (Frank et al., 2009; Hanlon & Heitzman, 2010). Financial stability is operationalized using distress-based proxy measures derived primarily from the Altman Z-score and, in supplementary analysis, the Ohlson O-score (Altman, 1968; Ohlson, 1980). These measures serve as proxy indicators of firms' financial condition rather than as locally recalibrated bankruptcy-classification models. By integrating corporate tax planning, ESG performance, and financial stability into a single framework, this study contributes to the literature in two principal ways. First, it clarifies whether alternative tax-planning proxies exhibit distinct associations with firms' financial resilience. Second, it provides vital insights into how ESG performance functions as a contingent governance mechanism, fundamentally shaping the financial implications of tax-planning behavior.

Literature Review

Financial Stability

Financial stability refers to a firm's ability to sustain operations, meet financial obligations, and withstand adverse shocks over time. In empirical accounting and finance research, this concept is often approximated through distress-based indicators derived from financial statement information, particularly the Altman Z-score and the Ohlson O-score (Altman, 1968; Ohlson, 1980). Although these measures were originally developed as bankruptcy-related models rather than universal measures of firm stability, they remain widely used as summary proxies of firms' relative financial condition and distress exposure (Boďa & Úradníček, 2016; Wu et al., 2010). In this study, they are employed as operational proxies for financial stability rather than as locally recalibrated Thai bankruptcy-classification models.

Tax Planning and Financial Stability

Corporate tax planning refers to managerial actions aimed at reducing tax liabilities within the boundaries of applicable tax regulation (Hanlon & Heitzman, 2010). From an economic perspective, tax planning can increase after-tax cash flows, improve internal liquidity, and strengthen financial flexibility, supporting firms' ability to sustain operations and absorb financial pressure (Desai & Dharmapala, 2009; Edwards et al., 2016). Prior literature therefore suggests that tax planning may contribute positively to firm outcomes when tax savings expand internal resources and improve financing capacity (Desai & Dharmapala, 2009; Drake et al., 2019; Edwards et al., 2016). At the same time, tax planning may also create opacity, increase monitoring difficulties, and expose firms to tax-related uncertainty, particularly when strategies are perceived as aggressive or difficult for outside stakeholders to assess (Desai & Dharmapala, 2006; Hanlon & Heitzman, 2010; Hanlon & Slemrod, 2009). Recent evidence further suggests that the consequences of tax planning are context-dependent rather than uniformly beneficial, reinforcing the view that the relationship between tax planning and firms' financial condition is likely to vary across tax-planning forms and governance environments (Krieg & Li, 2025). This study captures tax planning using two commonly used but conceptually distinct proxies: effective tax rates (ETR) and book-tax differences (BTD). ETR reflects the proportion of pre-tax income recognized as tax expense and is typically interpreted as a summary indicator of the effective tax burden (Hanlon & Heitzman, 2010). By contrast, BTD captures the divergence between accounting income and taxable income and therefore reflects a broader tax-reporting gap that may embody tax deferrals, timing differences, and more complex tax-planning arrangements (Frank et al., 2009; Hanlon & Heitzman, 2010). Because these two measures

capture different dimensions of tax behavior, prior tax research cautions against treating them as interchangeable proxies (Frank et al., 2009; Hanlon & Heitzman, 2010). Consistent with that view, this study examines ETR and BTD separately in relation to financial stability. On this basis, the following hypotheses are proposed:

H1a: Effective tax rates are negatively associated with financial stability.

H1b: Book-tax differences are positively associated with financial stability.

ESG Performance and Financial Stability

ESG performance has become increasingly significant in accounting and finance research because it indicates a set of dimensions about governance quality, transparency, and authenticity of disclosure (Eccles et al., 2014). Not only seen now as an attribute with sustainability as its essence, but ESG performance is much more widely understood as constitutive of the institutional and informational systems in which firms are embedded. In this instance, stronger ESG performance may therefore signal that a firm is better governed, more transparent, and more able to engage in positive relationships with investors, regulators, and other stakeholders. A growing body of research argues that companies with improved ESG performance will have an advantage in a more favorable information environment, lower information asymmetry, fewer financing frictions, and better overall firm performance (Agoraki et al., 2023; Carnini Pulino et al., 2022; Cheng et al., 2014; Pinto & Gaio, 2025). These benefits help explain why ESG performance is likely linked not only to reputational advantages but also to more stable financial outcomes. Outside stakeholders may also be less affected when corporate disclosure is more transparent and governance structures are perceived as more credible, reducing uncertainty about firm behavior and risk position. This, in turn, can boost access to capital and investor confidence and reduce the likelihood that the company will be penalized for a lack of information. Emerging research also suggests that ESG disclosure can serve to mitigate the risk of regulatory inquiry through a decrease in agency costs and business risks, with enhanced ESG performance reducing information asymmetry between listed companies (Li et al., 2025; Pinto & Gaio, 2025). These findings are relevant to the present study because financial stability may reflect not only internal accounting outcomes but also external stakeholders' perceptions of firm quality, disclosure credibility, and long-term resilience. Hence, firms with higher ESG performance may be better poised to protect stakeholder confidence, enhance financing conditions, and maintain better financial performance in the long run (Agoraki et al., 2023; Christensen et al., 2021; Dhaliwal et al., 2011). As such, ESG performance is seen as an overall phenomenon that benefits from its broader organizational characteristic of enhancing the credibility of firm-level information and strengthening the governance environment surrounding financial decisions. If this interpretation holds, firms with stronger ESG performance should be more likely to exhibit greater financial stability than firms with weaker ESG performance. Consequently, we expect ESG performance to be positively related to financial stability.

H2: ESG performance is positively associated with financial stability.

The Contingent Governance Role of ESG

The financial consequences of corporate tax planning are unlikely to be uniform across firms because such activities are deeply embedded within broader governance and disclosure environments (Connelly et al., 2011; Hanlon & Heitzman, 2010). The same level of tax planning may be interpreted differently depending on whether external stakeholders perceive the firm as transparent, credible, and well-governed. Therefore, the effect of tax planning on a firm's financial condition depends not only on the magnitude of tax savings but also on the institutional context in which these strategies are executed.

When tax-planning complexity creates uncertainty, the quality of a firm's broader information environment becomes paramount. In this regard, ESG performance serves as a vital contingent governance mechanism. Firms with robust ESG profiles tend to exhibit superior transparency

and lower information asymmetry, which subsequently reduces agency costs and regulatory scrutiny (Li et al., 2025; Pinto & Gaio, 2025). Consequently, tax-planning activities undertaken by high-ESG firms are more likely to be interpreted as credible and sustainable rather than opaque or opportunistic (Agoraki et al., 2023; Connelly et al., 2011). This suggests that ESG performance does not merely operate independently; it actively shapes stakeholder evaluations. If ESG performance enhances the credibility of the governance environment, the positive financial implications of tax planning should become more pronounced. Thus, ESG is expected to strengthen the relationship between tax planning and financial stability:

H3a: ESG performance positively moderates the relationship between effective tax rates and financial stability.

H3b: ESG performance positively moderates the relationship between book-tax differences and financial stability.

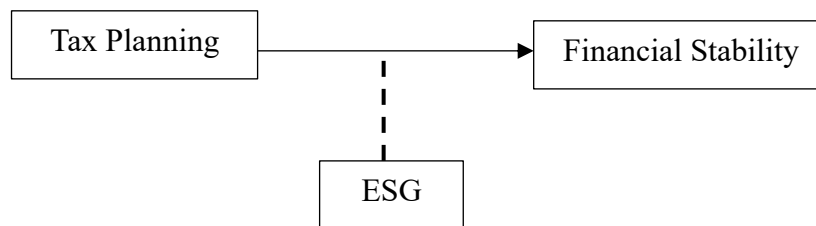


Figure 1 Conceptual Framework

Research Methodology

Sample and Data Sources

This study examines the relationship between tax planning and financial stability and tests the moderating role of Environmental, Social, and Governance (ESG) performance among listed firms in Thailand. The sample consists of non-financial firms included in the ESG rating universe of the Stock Exchange of Thailand (SET). ESG data were obtained from the SET ESG Ratings, while financial data were collected from publicly available annual financial statements and annual reports. Financial institutions were excluded because their regulatory environment and financial reporting structures differ substantially from those of non-financial firms, which may affect the comparability of tax-planning and financial-stability measures. Firms with incomplete financial or ESG data were also excluded. After applying these criteria, the final sample comprised 261 firms.

Variable Measurement

Dependent Variable: Financial Stability

Financial stability was operationalized primarily using the Altman Z-score, a widely used distress-based indicator derived from accounting and market information (Altman, 1968; Campbell et al., 2008). Higher Z-score values indicate stronger financial condition and lower distress exposure. As a supplementary robustness check, this study also employed Ohlson's O-score, for which higher values indicate greater financial distress and, therefore, lower financial stability (Ohlson, 1980). Because the two measures are coded in opposite directions, coefficient signs were interpreted relative to the direction of each proxy rather than as mechanically identical evidence.

Importantly, this study uses the Z-score and O-score as continuous proxy indicators of firms' financial condition rather than as threshold-based classification tools for separating firms into "stable" and "unstable" groups. This distinction is important because the study is concerned with cross-sectional variation in firms' relative financial condition, not with estimating a locally recalibrated bankruptcy-prediction model for the Thai capital market. Consistent with prior research, these measures are therefore employed as distress-based proxies rather than as locally reconstructed Thai bankruptcy-classification equations (Bod'a & Úradníček, 2016; Wu

et al., 2010). Accordingly, the empirical findings should be interpreted as association-based evidence using proxy indicators of firms' financial condition.

Independent Variables: Tax Planning

Tax planning was measured using two accounting-based proxies: effective tax rates (ETR) and book-tax differences (BTD). ETR represents the proportion of pre-tax income recognized as tax expense and is commonly used as a summary indicator of firms' effective tax burden (Hanlon & Heitzman, 2010). Lower ETR values indicate greater tax planning. BTD captures the divergence between accounting income and taxable income and is widely used as a broader proxy for tax-planning intensity because it reflects tax-reporting gaps arising from timing differences, deferrals, and more complex tax-planning arrangements (Frank et al., 2009; Hanlon & Heitzman, 2010). Because ETR and BTD reflect different dimensions of tax behavior, they were treated as distinct explanatory variables rather than interchangeable measures.

This distinction is important for the research design because the two variables do not necessarily capture the same economic mechanism. ETR more directly reflects the effective tax burden reported relative to accounting income, whereas BTD captures the broader divergence between tax reporting and financial reporting outcomes. For this reason, the study does not assume that the two proxies will produce identical empirical patterns.

Moderating Variable: ESG Performance

ESG performance was measured using the SET ESG Ratings. For empirical analysis, the ratings were converted into ordinal numerical values ranging from lower to higher ESG performance. This approach allows ESG performance to be incorporated directly into regression analysis and interaction terms. It is consistent with the use of standardized sustainability ratings in prior accounting and finance research examining information quality, transparency, and firm outcomes (Agoraki et al., 2023; Eccles et al., 2014). In the context of this study, stronger ESG performance is interpreted as reflecting a more credible governance and disclosure environment.

Model Specification

To test the hypotheses, this study employed ordinary least squares (OLS) regression. The baseline model estimated the direct effects of tax planning and ESG performance on financial stability:

$$FS_i = \beta_0 + \beta_1 ETR_i + \beta_2 BTD_i + \beta_3 ESG_i + \varepsilon_i$$

To test the moderating role of ESG performance, the interaction model was estimated as follows:

$$FS_i = \beta_0 + \beta_1 ETR_{c_i} + \beta_2 BTD_{c_i} + \beta_3 ESG_{c_i} + \beta_4 (ETRC_{c_i} \times ESG_{c_i}) + \beta_5 (BTD_{c_i} \times ESG_{c_i}) + \varepsilon_i$$

where FS denotes financial stability, operationalized primarily by the Altman Z-score; in supplementary analysis, Ohlson's O-score was used as an alternative proxy for financial distress. Because higher O-score values indicate greater distress, coefficients in that specification were interpreted in the opposite direction from those in the Z-score models (Altman, 1968; Ohlson, 1980). The primary purpose of the O-score analysis is not to provide an alternative bankruptcy classification, but to examine whether the main findings remain substantively informative under a second distress-based proxy with reverse directional coding. Consistent with standard practice, ETR, BTD, and ESG were mean-centered before the interaction terms were constructed to reduce non-essential multicollinearity and improve coefficient interpretability in moderation analysis. Mean-centering does not alter the substantive interaction effect or eliminate all forms of multicollinearity. Rather, it helps reduce non-essential collinearity between the interaction terms and their lower-order components, thereby making the estimation of moderation effects more stable and interpretable in regression-based models.

This study did not include firm size, profitability, or leverage as control variables in the final specification. Although such controls are frequently used in related research, they overlap conceptually and mechanically with the underlying components of the Z-score and O-score measures. Including them in the same regression could introduce redundancy and weaken interpretive clarity. The final specification therefore focused on the theoretically central variables of the study: ETR, BTD, ESG performance, and the interaction between ESG performance and the two tax-planning proxies.

Statistical Analysis

We first used descriptive statistics and Pearson correlation analysis to summarize sample characteristics and examine bivariate relationships among the variables. The hypotheses were then tested using OLS regression. Model adequacy was assessed using standard diagnostic procedures, including variance inflation factors (VIF) for multicollinearity and Durbin-Watson statistics for residual autocorrelation. Statistical significance was evaluated at the 1%, 5%, and 10% levels. This analytical sequence was designed to distinguish between the direct effects of tax-planning proxies and the conditional role of ESG performance while maintaining consistency between the theoretical model, the variable construction, and the empirical interpretation.

Ethics Statement

This study used secondary data obtained exclusively from publicly available sources and did not involve human participants, direct interaction with individuals, or access to personal data. The relevant institutional authority reviewed the project. It was certified as non-human-subject research under project code EC_KMITL_69_067 by the Office of Research Administration and Innovation, King Mongkut's Institute of Technology Ladkrabang.

Research Results

Descriptive Statistics and Correlation Analysis

Table 1 reports the descriptive statistics for the principal variables. The sample consists of 261 firms. The mean Z-score is 1.1315, indicating variation in firms' financial condition across the sample. The mean O-score is 13.3847, with a relatively large standard deviation, suggesting substantial heterogeneity in distress exposure. For the tax-planning variables, the mean ETR is 0.7910, and the mean BTD is 0.0088, while the mean ESG score is 2.9579 on the four-point coding scale.

Table 1 Descriptive statistics

Variable	Mean	SD	Minimum	Maximum
Z-score	1.1315	1.4794	-1.19	17.18
O-score	13.3847	342.1922	-195.20	5516.09
ETR	0.7910	2.7375	-11.44	24.08
BTD	0.0088	0.0708	-0.36	0.82
ESG	2.9579	0.9658	1.00	4.00

Table 2 presents the Pearson correlation matrix for the main variables in the primary specification. Z-score is positively and significantly correlated with BTD ($r = .681, p < .001$), whereas its correlations with ETR ($r = -.050, p = .423$) and ESG ($r = -.079, p = .202$) are not statistically significant. The correlations among the explanatory variables are generally low, providing initial evidence that multicollinearity is unlikely to be a serious concern.

Table 2 Pearson correlation matrix

Variable	1	2	3	4
Z-score	1.000			
ETR	-0.050	1.000		
BTD	0.681***	0.003	1.000	
ESG	-0.079	0.040	-0.028	1.000

Note: *** $p < .001$.

Direct-Effect Results Using Z-score

Table 3 presents the direct-effect regression results using Altman's Z-score as the dependent variable. Model 1 includes ETR as the sole predictor. The model is not statistically significant ($R^2 = .002$, Adjusted $R^2 = -.001$, $F = 0.644$), and ETR does not exhibit a significant association with Z-score ($B = -0.027$, $SE = 0.034$). Model 2 includes BTD as the only independent variable. The model is statistically significant ($R^2 = .463$, Adjusted $R^2 = .461$, $F = 223.571$, $p < .001$), and BTD is positive and highly significant ($B = 14.231$, $SE = 0.952$, $p < .001$). Model 3 includes both ETR and BTD simultaneously. The model remains statistically significant ($R^2 = .466$, Adjusted $R^2 = .462$, $F = 112.557$, $p < .001$), with a Durbin-Watson statistic of 1.938, indicating no material residual autocorrelation. In this specification, BTD remains positive and highly significant ($B = 14.234$, $SE = 0.951$, $p < .001$), whereas ETR remains statistically insignificant ($B = -0.028$, $SE = 0.025$). Overall, the direct-effect results indicate that BTD, rather than ETR, is the tax-planning proxy more strongly associated with the Z-score-based proxy of financial stability.

Table 3 Direct-effect regression results (dependent variable: Z-score)

Variable	Model 1: ETR onlyB (SE)	Model 2: BTD onlyB (SE)	Model 3: ETR + BTD B (SE)
Constant	1.153*** (0.095)	1.007*** (0.068)	1.029*** (0.070)
ETR	-0.027 (0.034)		-0.028 (0.025)
BTD		14.231*** (0.952)	14.234*** (0.951)
R^2	.002	.463	.466
Adjusted R^2	-.001	.461	.462
F	0.644	223.571***	112.557***
Durbin-Watson	2.044	1.920	1.938
N	261	261	261

Note: Dependent variable = Z-score. Higher Z-score values indicate stronger financial stability.

*** $p < .001$.

Moderation Results Using Z-score

Table 4 reports the moderation results using Altman's Z-score as the dependent variable. The overall model is statistically significant ($R^2 = .513$, Adjusted $R^2 = .503$, $F = 53.679$, $p < .001$), and the Durbin-Watson statistic of 1.993 indicates no material residual autocorrelation. Among the main effects, BTDc remains positive and statistically significant ($B = 12.074$, $p < .001$), whereas ETRc and ESGc are not statistically significant. With respect to the interaction terms, the coefficient on $ETR \times ESG$ is not statistically significant ($B = 0.024$, $p = .514$), indicating that ESG performance does not moderate the relationship between ETR and financial stability. In contrast, the coefficient on $BTD \times ESG$ is positive and statistically significant ($B = 7.284$, $p < .001$), suggesting that stronger ESG performance strengthens the positive association between BTD and the Z-score-based proxy of financial stability. Variance inflation factors range from 1.019 to 1.323, indicating that multicollinearity is not a serious concern in the final moderation model.

Table 4 Moderation regression results (dependent variable: Z-score)

Variable	B	SE	Beta	t	p	VIF
Constant	1.143***	0.065	-	17.666	< .001	-
ETR_c	-0.032	0.027	-0.060	-1.191	.235	1.318
BTD_c	12.074***	1.020	0.577	11.838	< .001	1.245
ESG_c	-0.057	0.068	-0.037	-0.840	.402	1.019
ETR_ESG	0.024	0.037	0.033	0.653	.514	1.323
BTD_ESG	7.284***	1.535	0.233	4.745	< .001	1.257
R ²	.513					
Adjusted R ²	.503					
F	53.679***					
Durbin-Watson	1.993					
N	261					

Note: Dependent variable = Z-score. Higher Z-score values indicate stronger financial stability. ETR, BTD, and ESG were mean-centered prior to the construction of the interaction terms. *** p < .001.

Direct-Effect Results Using O-score

Table 5 presents the direct-effect regression results using Ohlson's O-score as the dependent variable. Because higher O-score values indicate greater financial distress, the coefficients in this specification should be interpreted in the opposite direction from those in the Z-score models. Model 1 shows that ETR is not significantly associated with O-score (B = 5.585, SE = 7.759), and the overall model is not statistically significant (R² = .002, Adjusted R² = -.002, F = 0.518). Model 2 indicates that BTD is positive and highly significant (B = 3450.215, SE = 210.567, p < .001), with the model explaining a substantial proportion of variation in O-score (R² = .509, Adjusted R² = .507, F = 268.479, p < .001). In Model 3, where ETR and BTD are included jointly, BTD remains positive and statistically significant (B = 3449.637, SE = 210.584, p < .001), whereas ETR remains non-significant (B = 5.335, SE = 5.443). Overall, the O-score direct-effect results confirm that BTD, rather than ETR, is the tax-planning proxy more strongly associated with firms' financial condition in the sample. However, the substantive interpretation differs because higher O-score values indicate weaker financial stability.

Table 5 Direct-effect regression results (dependent variable: O-score)

Variable	Model 1: ETR onlyB (SE)	Model 2: BTD onlyB (SE)	Model 3: ETR + BTDB (SE)
Constant	8.967 (22.071)	-16.869 (14.985)	-21.084 (15.591)
ETR	5.585 (7.759)		5.335 (5.443)
BTD		3450.215*** (210.567)	3449.637*** (210.584)
R ²	.002	.509	.511
Adjusted R ²	-.002	.507	.507
F	0.518	268.479***	134.700***
Durbin-Watson	2.003	2.019	2.010
N	261	261	261

Note: Dependent variable = O-score. Higher O-score values indicate greater financial distress and, therefore, lower financial stability. *** p < .001.

Moderation Results Using O-score

Table 6 reports the moderation results using O-score as the dependent variable. The overall model is statistically significant ($R^2 = .599$, Adjusted $R^2 = .591$, $F = 76.101$, $p < .001$), and the Durbin-Watson statistic of 2.030 indicates no material residual autocorrelation. Among the main effects, BTDC remains positive and statistically significant ($B = 4158.103$, $p < .001$), whereas ETRc and ESGc are not statistically significant. Regarding the interaction terms, $ETR \times ESG$ is not statistically significant ($B = -2.598$, $p = .735$), indicating that ESG performance does not moderate the relationship between ETR and the O-score-based distress proxy. In contrast, the coefficient on $BTD \times ESG$ is negative and statistically significant ($B = -2403.464$, $p < .001$). Because higher O-score values indicate greater financial distress, this negative interaction implies that stronger ESG performance weakens the positive association between BTD and financial distress. In substantive terms, the O-score results are directionally consistent with the Z-score findings in showing that ESG performance moderates only the BTD-related dimension of tax planning. Variance inflation factors range from 1.019 to 1.323, indicating that multicollinearity is not a serious concern in the final moderation model.

Table 6 Moderation regression results (dependent variable: O-score)

Variable	B	SE	Beta	t	p	VIF
Constant	9.185	13.585	-	0.676	.500	-
ETR_c	5.172	5.692	0.041	0.909	.364	1.318
BTD_c	4158.103***	214.082	0.860	19.423	< .001	1.245
ESG_c	-2.799	14.186	-0.008	-0.197	.844	1.019
ETR_ESG	-2.598	7.673	-0.015	-0.339	.735	1.323
BTD_ESG	-2403.464***	322.235	-0.332	-7.459	< .001	1.257
R^2	.599					
Adjusted R^2	.591					
F	76.101***					
Durbin-Watson	2.030					
N	261					

Note: Dependent variable = O-score. Higher O-score values indicate greater financial distress and, therefore, lower financial stability. ETR, BTD, and ESG were mean-centered prior to the construction of the interaction terms. *** $p < .001$.

Conclusion and Discussion

The empirical results suggest that the impact of corporate tax planning on a firm's financial condition is proxy-sensitive rather than uniform across different measures. Specifically, effective tax rates (ETR) are not significantly associated with financial stability, whereas book-tax differences (BTD) demonstrate a consistently significant and positive relationship across all specifications. This pattern indicates that BTD captures a more comprehensive and economically relevant dimension of tax-planning behavior than ETR, aligning with prior literature that cautions against treating alternative tax proxies as interchangeable (Frank et al., 2009; Hanlon & Heitzman, 2010). Furthermore, the findings offer a nuanced interpretation of ESG performance. While ESG does not exhibit a statistically significant direct effect on financial stability in the presented models, it significantly amplifies the positive relationship between BTD and financial stability. This underscores that ESG functions primarily as a contingent governance mechanism rather than a uniformly direct driver of financial health (Agoraki et al., 2023; Connelly et al., 2011; Li et al., 2025). When companies demonstrate superior ESG performance, BTD-identified tax-related reporting gaps are perceived as more credible, disciplined, and sustainable, rather than as signals of opacity or opportunism.

Theoretical and Managerial Implications

Theoretically, this study offers two primary contributions. First, it reinforces the argument that tax-planning measures represent distinct constructs, and their empirical implications differ substantially. This necessitates a more precise approach when utilizing ETR and BTD in accounting and finance research. Second, it contributes to the sustainability literature by demonstrating that ESG performance may be less impactful as a standalone indicator of financial condition and more valuable as a contextual governance tool that authenticates other strategic financial decisions. From a practical standpoint, the results provide critical managerial implications. Financial planners and executives must recognize that corporate tax planning should not be evaluated solely by headline tax liabilities. Instead, its success depends heavily on how these strategies are integrated into broader systems of governance, disclosure, and stakeholder management. For investors and analysts, the evidence suggests that ESG information is most productively evaluated in conjunction with tax-related indicators, helping them differentiate between disciplined financial stewardship and opaque, high-risk tax outputs.

Limitations and Future Research

These conclusions should be interpreted with caution, given that financial stability was operationalized using distress-based proxy measures rather than locally recalibrated Thai bankruptcy-classification models. Additionally, the evidence is derived from a cross-sectional sample of ESG-rated firms in Thailand. Therefore, the association-based findings serve as proxy indicators for financial status rather than definitive classification-based predictions. Future research should extend this framework by incorporating alternative tax-planning proxies, broader governance variables, locally recalibrated distress models, or panel-data designs to verify whether these relationships remain stable across different time horizons and institutional settings.

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Data Availability Statement: The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

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