International Symposium on Green Innovation, Governance, and Sustainability
Vol. 4 No. 1 | 2026
E-ISSN 3047 - 1877

The Effect of Tax Avoidance on Firm Value: The Moderating Role of ESG Disclosure-Evidence from the IDX ESG Leaders Index

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Abstract. This study examines the effect of corporate tax avoidance on firm value and the moderating role of Environmental, Social, and Governance (ESG) Ratings among firms listed on the IDX ESG Leaders Index for the 2022–2025 period. Using purposive sampling and eliminating 20 extreme residual outliers, the final sample consists of 71 firm-year observations from 28 companies. Data were analyzed using a Random Effects Model with robust standard errors and mean-centering techniques. Tax avoidance, proxied by the Effective Tax Rate (ETR), has no significant effect on firm value (β = −0.0712, p = 0.666), while ESG Ratings do not significantly moderate this relationship (β = 0.0146, p = 0.696). ESG Ratings, measured using Morningstar Sustainalytics ESG Risk Ratings, are classified as a homologiser moderator. These findings suggest that tax avoidance and ESG risk ratings do not significantly influence firm value within the observed sample, whereas profitability (ROA) remains a key determinant. PMK No. 136 of 2024 is discussed as contextual background on global minimum tax policy. The study recommends enhancing tax transparency and substantive ESG commitments, alongside stronger sustainability reporting assurance and regulatory oversight.

Keywords: Tax avoidance; Firm value; ESG disclosure; Greenwashing, Global minimum tax.

1 Introduction

Tax revenue constitutes the primary pillar of Indonesia's fiscal structure. However, Indonesia's tax ratio has historically remained lower than that of neighboring ASEAN economies and OECD member states, indicating widespread corporate tax planning through

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tax avoidance strategies (2, 7). For corporate management, tax avoidance is often viewed as a cash efficiency measure designed to optimize net earnings (3). Conversely, for tax authorities and society, aggressive tax planning diminishes public revenues, heightens legal exposure, and triggers reputational damage (1, 14).

The impact of tax avoidance on firm value in capital markets remains a subject of ongoing theoretical and empirical debate. Under Signaling Theory (13), tax savings convey a positive signal regarding managerial cash flow optimization, enhancing firm valuation (3). From an Agency Theory perspective (8), however, complex tax structures create information asymmetry, enabling managerial opportunism that escalates agency costs and depresses market value (14, 15). Empirical findings reflect this dichotomy, reporting positive (3), negative (15), and non-significant relationships (10), highlighting the necessity of examining contextual moderating mechanisms.

Amid growing global demands for corporate transparency, Environmental, Social, and Governance (ESG) Ratings have emerged as strategic governance indicators (6, 7, 11). Companies in the IDX ESG Leaders Index represent entities evaluated for their ESG risk management practices. Theoretically, favorable ESG Ratings can serve as a positive signal, mitigating information asymmetry and establishing a legitimacy buffer (5) that insulates firm value from adverse market sentiment surrounding tax efficiency (4, 6). Nevertheless, theoretical tension surrounds the role of ESG Ratings. Under Legitimacy Theory (5), expansive sustainability disclosures and favorable ESG Ratings may be interpreted conceptually as potential greenwashing instruments deployed to distract stakeholders from aggressive tax avoidance (1, 6, 14).

Furthermore, recent international tax regulatory developments introduce new constraints for Indonesian listed firms. The issuance of Minister of Finance Regulation (PMK) No. 136 of 2024 enforces the Global Anti-Base Erosion (GloBE) Rules under Pillar Two of the OECD/G20 Inclusive Framework, establishing a 15% effective global minimum tax rate for multinational enterprise groups (9). Because PMK 136/2024 takes effect in 2025 and applies to specific multinational enterprise thresholds, it serves as an important background regulatory context rather than a sole direct cause of market behavior during the 2022–2025 sample window. Addressing these empirical and theoretical gaps, this study examines the effect of tax avoidance on firm value and tests the moderating role of ESG Ratings among IDX ESG Leaders for the 2022–2025 period utilizing a normalized sample free from extreme residual outliers.

2 Literature review and hypothesis

2.1 Theoretical framework

2.1.1 Agency theory

Agency Theory explains potential conflicts between shareholders and managers. Tax planning may create value through tax savings, but opaque structures can also make it difficult for shareholders to monitor how the savings are used [8].

2.1.2 Signaling theory

Signaling Theory explains how firms communicate information to reduce information asymmetry. Tax efficiency may be interpreted as a positive signal of financial management, while ESG-related information may communicate risk-management quality. When signals are inconsistent, investors may interpret them cautiously [13].

2.1.2 Legitimacy theory

Legitimacy Theory proposes that organizations seek alignment with societal expectations and values [5]. Sustainability reporting and ESG-related practices may support legitimacy although the possibility of symbolic disclosure or greenwashing.

2.2 Hypothesis

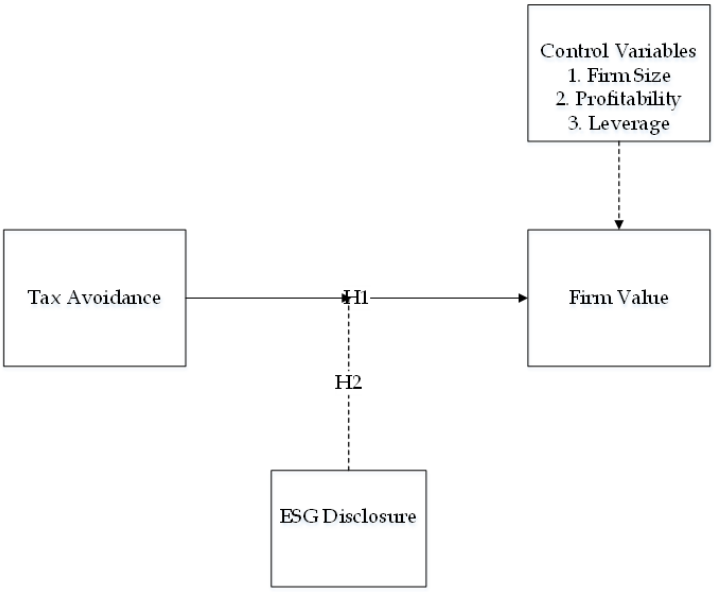


Fig. 1. Hypothesis.

2.2.1 Tax avoidance and firm value

Tax avoidance involves legal tax planning that exploits statutory ambiguities to reduce tax liabilities [7, 15]. Under Agency Theory, accounting opacity in tax avoidance restricts shareholder oversight of cash savings. Investors may perceive that tax savings fund managerial perks or risky investments, while aggressive tax efficiency increases exposure to audits, penalties, and reputational loss [1, 8, 14, 15].
H_1: Tax avoidance has a negative effect on firm value.

2.2.2 Tax avoidance and firm value

ESG Ratings reflect corporate commitments to managing environmental, social, and governance risks [7, 11]. Legitimacy Theory suggests that favorable ESG Ratings function as a legitimacy buffer, preserving investor confidence during tax planning activities [4, 5, 6] Conversely, Signaling Theory suggests favorable ESG Ratings paired with aggressive tax avoidance raise concerns over greenwashing [1, 6, 14], as scholars theoretically suggest that symbolic reporting or ESG Risk Ratings might be deployed as potential greenwashing instruments to mask underlying corporate tax non-compliance. Consequently, ESG Ratings

are positioned as a moderating variable following moderation classification frameworks [12].
H_2: ESG disclosure attenuates the negative effect of tax avoidance on firm value.

3 Research methods

The population comprises entities listed on the IDX ESG Leaders Index of the Indonesia Stock Exchange during 2022–2025. Purposive sampling required: [1] continuous index inclusion during 2022–2025, [2] consecutive annual financial and sustainability reports, and [3] complete metrics including Morningstar Sustainalytics ESG Risk Ratings. Initial sampling yielded 44 companies (136 unbalanced observations). Data cleaning removed 20 extreme residual outliers ($p < 0.05$ in preliminary Shapiro-Wilk testing), resulting in a final normalized sample of 71 firm-year observations across 28 companies ($W = 0.97019$, $p = 0.08912 > 0.05$).
Firm value (Y) is measured by Tobin's Q, calculated as:

$$Tobin's\ Q = \frac{MVE+TL}{TA} \quad (1)$$

where MVE is equity market value, TL is total liabilities, and TA is total assets. Tax avoidance (X) is proxied by Effective Tax Rate:

$$ETR = \frac{Tax\ Expense}{Pre{-}Tax\ Income} \quad (2)$$

where lower ETR indicates higher tax avoidance [2, 8]. ESG Risk Ratings (Z) are measured using Morningstar Sustainalytics ESG Risk Ratings obtained from the IDX website. The scores represent unmanaged material ESG risk on a scale from 0 to 100. Categories are Negligible (0.00–9.99), Low (10.00–19.99), Medium (20.00–29.99), High (30.00–39.99), and Severe (40.00 or higher) [8]. To eliminate multicollinearity, ETR and ESG ratings were mean-centered (ETR_C and $ESGRatings_C$) [6]. Control variables include Firm Size, Profitability, and Leverage:

$$SIZE = ln(TA) \quad (3)$$

$$ROA = \frac{Net\ Income}{TA} \quad (4)$$

$$DER = \frac{Total\ Debt}{Total\ Equity} \quad (5)$$

Hypotheses were tested using a Random Effects Model (REM) selected via Hausman test with cluster-robust standard errors (vce(robust)) [7]. The Moderated Regression Analysis (MRA) model is specified as:

$$\begin{aligned} TobinsQ_{it} = {} & \beta_0 + \beta_1 ETR_C_{it} + \beta_2 ESGRatings_C_{it} \\ & + \beta_3 (ETR_C \times ESGRatings_C)_{it} + \beta_4 Size_C_{it} + \beta_5 ROA_{it} \\ & + \beta_6 DER_{it} + v_{it} + \epsilon_{it} \end{aligned} \quad (6)$$

4 Results and discussion

4.1 Empirical results

Diagnostic checks confirmed econometric validity (N=71): Shapiro-Wilk residual normality test yielded W=0.97019 (p=0.08912>0.05), and mean VIF was 3.77 (interaction term VIF = 8.63 <10, Tolerance = 0.115 >0.10). Table 1 reports the Random Effects Model regression

results.

Table 1. Panel Data Moderated Regression Results (REM Robust, N = 71).

Variable	Coefficient (β)	Robust Std. Error	z-statistic	p-value ($P > \|z\|$)	Conclusion
ETR_C (Tax Avoidance)	-0.0712	0.1651	-0.43	0.666	Not Significant
ESGRatings_C (ESG Disclosure)	0.0133	0.0097	1.37	0.170	Not Significant
ETR_C × ESGRatings_C	0.0146	0.0373	0.39	0.696	Not Significant
Size_C (Firm Size)	-0.3318	0.1088	-3.05	0.002**	Significant Negative
ROA (Profitability)	8.7840	1.8784	4.68	0.000***	Significant Positive
DER (Leverage)	0.1518	0.0624	2.43	0.015**	Significant Positive
_cons (Constant)	0.6870	0.1892	3.63	0.000***	Significant Positive
Overall R-squared	0.6707				
Wald Chi-Square (χ^2)	107.16			0.0000	Model Fit / Valid

*Notes: Statistical significance denoted by ** ($p < 0.05$) and *** ($p < 0.01$).*

The overall model fit is valid ($Wald\ \chi^2 = 107.16$, $p = 0.0000$), explaining 67.07% of Tobin's Q variance ($R^2 = 0.6707$). For H1, ETR_C is non-significant ($\beta = -0.0712$, $p = 0.666 > 0.05$), so H1 is rejected. For H2, the interaction term is non-significant ($\beta = 0.0146$, $p = 0.696 > 0.05$), so H2 is rejected. Following Sharma et al. [13], ESG disclosure acts as a Homologiser Moderating Variable.

4.2 Discussion

The non-significant effect of tax avoidance on firm value (H_1) indicates that variations in corporate Effective Tax Rates do not significantly alter market valuations for IDX ESG Leaders [10, 15]. The primary driver of this empirical result is that capital market investors in Indonesia view tax planning primarily as routine operational cash management rather than a strategic valuation signal [10]. Instead of focusing on tax minimization, investors place primary weight on fundamental operational profitability, as demonstrated by the strong positive effect of ROA $\beta = 8.7840$, $p = 0.000$). As an additional discussion component beyond empirical testing, Minister of Finance Regulation (PMK) No. 136 of 2024 concerning the Global Minimum Tax (OECD/G20 GloBE Pillar Two framework, establishing a 15% effective minimum tax rate) is noted to provide broader regulatory context [9]. Because PMK 136/2024 takes effect in 2025 and applies to qualifying multinational enterprise groups, it is not utilized as an empirical interpretation or direct cause of the sample findings during 2022–2025, but is included merely as supplementary discussion illustrating potential future tax policy dynamics [9].

The non-significant interaction term H_2 confirms that ESG disclosure does not moderate the tax avoidance-firm value relationship. In line with Morningstar Sustainalytics ESG Risk Ratings operationalization (where a lower score indicates lower unmanaged risk), variations

in ESG risk management scores do not alter investor evaluations of corporate tax practices. This statistical result reflects neutrality in moderation rather than direct empirical proof of greenwashing behavior per se. Greenwashing skepticism serves as a plausible theoretical interpretation suggested in accounting literature [1, 6, 14] to explain why sustainability metrics may fail to function as a legitimacy buffer. Conceptually, when firms maintain favorable ESG risk scores alongside tax avoidance strategies, investors may experience signal ambiguity regarding corporate ethical commitments [1, 6]. Consequently, market participants evaluate sustainability disclosures and corporate tax decisions independently, focusing on core financial performance metrics without treating ESG Ratings as a valuation buffer.

5 Conclusion and recommendations

5.1 Conclusion

Based on Random Effects Model panel regression ($N = 71$) on IDX ESG Leaders during 2022–2025:

1. Tax avoidance (ETR) has a non-significant effect on firm value (Tobin's Q) (H1 rejected). Investors evaluate tax planning as routine cash management while prioritizing core operational profitability (ROA). The upcoming Global Minimum Tax under PMK No. 136 of 2024 (15% floor, effective 2025) provides background regulatory context reflecting prospective limits on tax efficiency gains.
2. ESG disclosure does not moderate the tax avoidance-firm value relationship (H2 rejected, homologiser moderation). Capital markets evaluate tax strategies and ESG performance independently. Greenwashing skepticism offers a plausible theoretical interpretation for why ESG Ratings fail to serve as a legitimacy buffer.

5.2 Implication and future research agenda

Executives should align substantive tax transparency with sustainability disclosures. Relying on favorable ESG Ratings or extensive reporting as symbolic impression management to offset aggressive tax planning creates ethical dissonance and is discounted by capital market investors. Executives should align substantive tax transparency with sustainability disclosures. Relying on favorable ESG Ratings or extensive reporting as symbolic impression management to offset aggressive tax planning creates ethical dissonance and is discounted by capital market investors.

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