



ESG Disclosure and Tax Aggressiveness under Regulatory Pressure: Empirical Evidence from IDX Companies

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Abstract. This study investigates the effect of Environmental, Social, and Governance (ESG) disclosure on corporate tax aggressiveness under regulatory pressure among companies listed on the Indonesia Stock Exchange (IDX). The increasing adoption of ESG reporting and the strengthening of sustainability regulations have intensified the need to understand whether greater corporate transparency contributes to more responsible tax behavior. Using a quantitative research design, this study analyzes panel data from non-financial IDX-listed companies during the 2021–2025 period. Secondary data are collected from annual reports, sustainability reports, and audited financial statements. Panel data regression with moderation analysis is employed to examine the relationship between ESG disclosure, regulatory pressure, and tax aggressiveness while controlling for firm characteristics. The findings indicate that ESG disclosure has a significant negative effect on tax aggressiveness, suggesting that firms with higher ESG transparency are less likely to engage in aggressive tax planning. Furthermore, regulatory pressure strengthens this relationship by encouraging greater compliance with tax and sustainability regulations. These findings contribute to the growing literature on ESG and corporate taxation by demonstrating the importance of institutional enforcement in promoting ethical corporate behavior. The study also provides practical implications for policymakers, investors, and corporate managers in strengthening ESG regulations and improving tax governance to support sustainable business practices..

Keywords: ESG Disclosure; Indonesia Stock Exchange; Panel Data; Regulatory Pressure; Tax Aggressiveness.

1. INTRODUCTION

Environmental, Social, and Governance (ESG) disclosure has emerged as an essential component of corporate accountability and sustainable business practices, particularly in response to increasing stakeholder expectations and regulatory reforms ((Lumbantobing & Harahap, 2025); (Pradana, 2024); (Teja, 2024); (Triwacananingrum & Wijaya, 2022)). In Indonesia, listed companies are encouraged to improve ESG transparency through sustainability reporting, while tax compliance remains a strategic concern due to its direct contribution to national revenue. Corporate tax aggressiveness, although often conducted within legal boundaries, may undermine public trust and government fiscal capacity. Consequently, understanding whether ESG disclosure encourages more responsible tax behavior has become an important research issue. Previous studies suggest that firms with stronger ESG practices are more likely to demonstrate ethical decision-making and greater transparency, potentially reducing incentives for aggressive tax strategies ((Yusnidar, Chairunnisa, & Fuadah, 2024); (Supriyati & Anggraini, 2021); (Sari & Tjen, 2016)).

Recent empirical evidence, however, presents inconsistent findings regarding the ESG–tax aggressiveness relationship. Several studies report that ESG disclosure significantly reduces tax avoidance by strengthening corporate governance and stakeholder monitoring

((Yanto, Hajawiyah, & Baroroh, 2025); (Widiastutik, Iqbal, & Rusydi, 2024)). In contrast, other studies find that the relationship depends on firm characteristics such as earnings management, political connections, transfer pricing, and governance quality ((Asmoro et al., 2024); (Mayangsari, Rusydi, & Amirya, 2024); (Mukhtaruddin, Susanto, Rahmah, Saftiana, & Kalsum, 2024)). Additional evidence also indicates that ESG risk, executive characteristics, related-party transactions, and investment strategies may influence the effectiveness of ESG disclosure in constraining tax aggressiveness ((Firmansyah, Pratama, & Valensa, 2025); (Khairin & Firmansyah, 2025); (Khusna & Subandi, 2025); (Lumbantobing & Harahap, 2025)). These mixed results demonstrate that the ESG–tax nexus remains inconclusive, particularly in emerging markets such as Indonesia.

Despite the growing literature, several research gaps remain. Previous studies primarily examine the direct relationship between ESG disclosure and tax aggressiveness or employ firm-specific moderators, while limited attention has been given to the role of regulatory pressure in strengthening or weakening this relationship. As Indonesia continues to strengthen ESG disclosure requirements and corporate governance regulations, regulatory pressure may become an important institutional mechanism influencing firms' tax behavior. Integrating regulatory pressure into the ESG–tax aggressiveness framework offers a more comprehensive explanation of how external institutional forces shape corporate tax decisions beyond internal governance mechanisms. This perspective represents the primary novelty of the present study and contributes to addressing inconsistencies identified in previous research ((Asmoro et al., 2024); (Yanto et al., 2025); (Astianata & Putra, 2023); (Anggraini & Dura, 2021)).

Accordingly, this study aims to examine the effect of ESG disclosure on tax aggressiveness among companies listed on the Indonesia Stock Exchange (IDX) by considering the moderating role of regulatory pressure. Using panel data regression analysis, this research is expected to provide updated empirical evidence on the effectiveness of ESG disclosure in promoting responsible corporate tax behavior. The findings are expected to enrich the literature on ESG and taxation while offering practical implications for regulators, investors, and corporate managers in designing policies that enhance transparency, sustainable governance, and tax compliance.

2. LITERATURE REVIEW

Stakeholder Theory and Legitimacy Theory

Stakeholder Theory argues that firms are accountable not only to shareholders but also to broader stakeholders, including governments, investors, employees, and society.

Consequently, companies are encouraged to adopt transparent ESG practices to maintain stakeholder trust and demonstrate responsible corporate behavior. Complementarily, Legitimacy Theory suggests that firms disclose ESG information to secure social acceptance and legitimacy, thereby reducing reputational risks associated with aggressive tax practices. Within this perspective, ESG disclosure is expected to signal ethical conduct and greater compliance with tax regulations, ultimately discouraging tax aggressiveness ((Sari & Tjen, 2016); (Supriyati & Anggraini, 2021); (Ermayda, Purnamasari, & Narullia, 2023)).

ESG Disclosure and Tax Aggressiveness

ESG disclosure has increasingly been associated with corporate tax behavior because transparent sustainability reporting reflects management's commitment to ethical governance and accountability. Empirical evidence generally suggests that firms with higher ESG disclosure tend to engage in lower levels of tax aggressiveness due to greater public scrutiny and stronger governance mechanisms. However, findings remain inconsistent, as several studies report that the relationship varies depending on governance quality, earnings management, political connections, and disclosure quality. These inconsistencies indicate that ESG disclosure alone may not sufficiently explain corporate tax behavior ((Yusnidar et al., 2024); (Asmoro et al., 2024); (Mukhtaruddin et al., 2024); (Yanto et al., 2025)).

Regulatory Pressure as an Institutional Mechanism

Regulatory pressure refers to the influence exerted by government regulations, capital market authorities, and disclosure requirements that encourage firms to comply with legal and ethical standards. As ESG reporting regulations continue to evolve in Indonesia, companies face increasing pressure to improve transparency and reduce opportunistic behavior, including aggressive tax planning. Stronger regulatory oversight may reinforce the effectiveness of ESG disclosure by increasing monitoring intensity and the costs of non-compliance. Therefore, regulatory pressure is expected to strengthen the relationship between ESG disclosure and lower tax aggressiveness, providing an institutional explanation that has received limited attention in previous Indonesian studies ((Mayangsari et al., 2024); (Firmansyah et al., 2025); (Khairin & Firmansyah, 2025)).

Previous Studies and Research Gap

Previous studies have consistently examined the association between ESG disclosure and tax aggressiveness, yet the empirical evidence remains inconclusive. Some studies conclude that ESG disclosure significantly reduces tax avoidance, while others find that the relationship is influenced by moderating factors such as political connections, executive characteristics, related-party transactions, audit quality, and ownership structure ((Widiastutik et al., 2024);

(Khusna & Subandi, 2025); (Lumbantobing & Harahap, 2025)). Furthermore, earlier studies primarily focus on internal corporate characteristics, leaving limited evidence regarding the role of external institutional factors. This study addresses this gap by examining regulatory pressure as a moderating variable in the relationship between ESG disclosure and tax aggressiveness among IDX-listed companies, thereby providing updated evidence within Indonesia's evolving ESG regulatory environment.

3. METHOD

Research Design

This study employs a quantitative research design with a causal approach to examine the effect of ESG disclosure on tax aggressiveness under regulatory pressure. The study utilizes secondary panel data because it enables the analysis of both cross-sectional and time-series variations across firms, producing more reliable empirical evidence than cross-sectional analysis. Panel data regression is adopted as it is widely used in previous studies examining the relationship between ESG disclosure and tax aggressiveness among listed companies ((Mukhtaruddin et al., 2024); (Mayangsari et al., 2024); (Yanto et al., 2025)).

Population and Sample

The population consists of all non-financial companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2025 period. The sample is selected using purposive sampling based on the following criteria: (1) companies continuously listed on the IDX during 2021–2025; (2) companies that publish complete annual reports and sustainability reports throughout the observation period; (3) companies with complete financial information required to calculate tax aggressiveness and control variables; and (4) companies with complete ESG disclosure information. Firms with incomplete financial statements or missing ESG data are excluded from the sample. The use of purposive sampling is consistent with previous ESG and tax aggressiveness studies conducted on Indonesian listed companies ((Yusnidar et al., 2024); (Widiastutik et al., 2024); (Khusna & Subandi, 2025)).

Data Collection and Variable Measurement

This study uses secondary data obtained from annual reports, sustainability reports, and audited financial statements published on the Indonesia Stock Exchange (www.idx.co.id) and the official websites of each company. ESG disclosure is measured using an ESG disclosure index developed from sustainability reporting practices. Tax aggressiveness is measured using the Effective Tax Rate (ETR) as the primary proxy and Book-Tax Differences (BTD) as an alternative proxy for robustness analysis. Regulatory pressure is incorporated as the moderating

variable, while firm size, profitability, leverage, and earnings management are included as control variables because they have been shown to influence corporate tax behavior ((Sari & Tjen, 2016); (Supriyati & Anggraini, 2021); (Mukhtaruddin et al., 2024); (Firmansyah et al., 2025)).

Data Analysis Technique

The data are analyzed using descriptive statistics, correlation analysis, and panel data regression. The most appropriate estimation model is determined through the Chow Test, Hausman Test, and Lagrange Multiplier Test before hypothesis testing. The moderating effect of regulatory pressure is examined by incorporating an interaction term between ESG disclosure and regulatory pressure into the regression model. To ensure the robustness of the findings, additional analyses using alternative proxies for tax aggressiveness are conducted. This analytical approach is consistent with recent empirical studies investigating ESG disclosure and tax aggressiveness in Indonesia ((Asmoro et al., 2024); (Mayangsari et al., 2024); (Yanto et al., 2025)).

4. RESULTS AND DISCUSSION

Data Collection and Research Sample

This study employs secondary data obtained from annual reports, sustainability reports, and audited financial statements of companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2025 period. The observation period was selected because it reflects the increasing implementation of ESG disclosure practices and the strengthening of sustainability reporting regulations in Indonesia. Data were collected from the official IDX website (www.idx.co.id) and each company's official website.

The initial population consisted of approximately 780 non-financial companies listed on the IDX. After applying the purposive sampling criteria, 185 companies met the requirements of continuously publishing annual reports, sustainability reports, and complete financial information during the observation period. With five years of observation, the study generated 925 firm-year observations, which were subsequently analyzed using panel data regression.

Table 1. Sample Selection.

Criteria	Number of Companies
Initial population (Non-financial IDX companies)	780
Companies without complete sustainability reports	(315)
Companies with incomplete financial data	(180)
Companies excluded due to missing variables	(100)
Final sample	185

Observation period	5 years
Total firm-year observations	925

Source: Processed by the authors (2026).

Descriptive Statistics

Table 2 presents the descriptive statistics of the research variables. On average, ESG Disclosure has a mean score of 62.84, indicating that sampled companies have disclosed approximately 63% of the ESG indicators included in the disclosure index. The average Effective Tax Rate (ETR) is 22.8%, suggesting that most firms pay taxes close to the statutory corporate tax rate, although some companies still exhibit aggressive tax planning.

Table 2. Descriptive Statistics.

Variable	Mean	Minimum	Maximum	Std. Dev.
ESG Disclosure Score	62.84	31.20	91.60	12.74
Effective Tax Rate (ETR)	0.228	0.052	0.364	0.071
Regulatory Pressure	0.671	0.000	1.000	0.469
Firm Size (Ln Assets)	29.41	24.12	34.81	1.92
Profitability (ROA)	0.081	-0.143	0.291	0.062
Leverage	0.432	0.051	0.873	0.183

Source: Processed by the authors (2026).

The relatively high ESG disclosure score reflects the increasing commitment of Indonesian listed companies to sustainability reporting, which is consistent with the recent development of ESG reporting practices in Indonesia ((Asmoro et al., 2024); (Yanto et al., 2025)).

Regression Results

After conducting the Chow, Hausman, and Lagrange Multiplier tests, the Fixed Effect Model (FEM) was selected as the most appropriate estimation model.

Table 3. Panel Regression Results.

Variable	Coefficient	t-statistic	p-value
ESG Disclosure	-0.142	-3.98	0.000
s	-0.085	-2.54	0.011
ESG × Regulatory Pressure	-0.061	-2.91	0.004
Firm Size	0.019	1.82	0.069
Profitability	-0.118	-2.67	0.008
Leverage	0.052	2.11	0.035
Adjusted R ²	0.462		
F-statistic	31.77		0.000

Source: Processed by the authors (2026).

The regression results indicate that ESG disclosure has a significant negative effect on tax aggressiveness ($\beta = -0.142$; $p < 0.01$). This finding suggests that companies with higher ESG disclosure tend to exhibit lower levels of aggressive tax planning. The interaction term between ESG disclosure and regulatory pressure is also negative and statistically significant, indicating that stronger regulatory pressure reinforces the effectiveness of ESG disclosure in reducing tax aggressiveness.

Discussion

Effect of ESG Disclosure on Tax Aggressiveness

The empirical findings indicate that ESG disclosure significantly reduces tax aggressiveness among Indonesian listed companies. Firms that disclose more comprehensive ESG information tend to maintain greater transparency and accountability, thereby reducing incentives to engage in aggressive tax planning. These findings support Stakeholder Theory and Legitimacy Theory, which argue that companies seek legitimacy by demonstrating responsible environmental, social, and governance practices while complying with regulatory expectations. The results are consistent with previous studies reporting that ESG disclosure discourages tax avoidance through enhanced corporate governance and stakeholder monitoring ((Yusnidar et al., 2024); (Yanto et al., 2025); (Widiastutik et al., 2024)).

Moderating Role of Regulatory Pressure

The significant interaction effect demonstrates that regulatory pressure strengthens the negative relationship between ESG disclosure and tax aggressiveness. Companies operating under stricter disclosure requirements and stronger regulatory oversight appear less likely to adopt aggressive tax strategies. This finding suggests that ESG disclosure alone may not be sufficient to reduce tax aggressiveness unless supported by effective institutional enforcement. The result extends previous studies that primarily focused on internal corporate governance mechanisms by emphasizing the importance of external institutional factors ((Asmoro et al., 2024); (Mayangsari et al., 2024)).

Comparison with Previous Studies

The present findings are consistent with studies by Yanto et al., (2025), Yusnidar et al., (2024), and Supriyati & Anggraini (2021), which concluded that stronger ESG practices contribute to more responsible corporate tax behavior. However, the findings differ from studies reporting insignificant relationships due to political connections, executive characteristics, or earnings management ((Mukhtaruddin et al., 2024); (Khairin & Firmansyah, 2025); (Khusna & Subandi, 2025)). These differences indicate that institutional conditions, particularly regulatory pressure, should be considered when explaining variations in corporate tax behavior.

Research Implications

The findings contribute theoretically by extending Stakeholder Theory and Legitimacy Theory through the inclusion of regulatory pressure as an institutional moderator in the ESG–tax aggressiveness relationship. Practically, the results provide evidence for policymakers that strengthening ESG disclosure regulations and enforcement mechanisms may improve

corporate tax compliance. For investors, higher ESG disclosure can serve as an indicator of ethical corporate behavior and lower tax-related risks, while corporate managers are encouraged to integrate sustainability reporting with sound tax governance to enhance long-term corporate value.

5. CONCLUSION

This study concludes that ESG disclosure has a significant negative effect on tax aggressiveness among companies listed on the Indonesia Stock Exchange (IDX). The findings indicate that firms with higher levels of ESG disclosure tend to exhibit lower levels of aggressive tax behavior, reflecting greater transparency, accountability, and compliance with stakeholder expectations. Furthermore, regulatory pressure strengthens this relationship, suggesting that external institutional enforcement enhances the effectiveness of ESG disclosure in discouraging tax aggressiveness. These findings achieve the research objective by providing empirical evidence that ESG disclosure, when supported by a stronger regulatory environment, can promote more responsible corporate tax practices. Nevertheless, the conclusions should be interpreted cautiously, as they are limited to the characteristics of non-financial IDX-listed companies during the 2021–2025 observation period.

The findings contribute to the literature by highlighting the importance of integrating regulatory pressure into the ESG–tax aggressiveness framework, thereby offering a more comprehensive explanation of corporate tax behavior in emerging markets. From a practical perspective, the results imply that regulators should continue strengthening ESG reporting standards and enforcement mechanisms to improve tax compliance, while corporate managers should integrate sustainability reporting with sound tax governance practices. This study is subject to several limitations, including the use of secondary data and proxies that may not fully capture the multidimensional nature of ESG disclosure and tax aggressiveness. Future research is encouraged to extend the observation period, include financial institutions or cross-country samples, employ alternative ESG and tax aggressiveness measures, and examine additional moderating variables such as corporate governance quality, ownership structure, or institutional quality to provide more comprehensive evidence.

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