

Corporate Tax Avoidance in Emerging Markets: The Limited Role of ESG, Earnings Management, and Financial Leverage

Mira¹, Masrullah², Fitri Eka Wardani³

Department of Accounting, Faculty of Economics and Business, Universitas Muhammadiyah Makassar

Email: fitriekawardani@gmail.com

ARTICLE INFO

Keywords:

Earnings Management, ESG, Tax Avoidance, Leverage, Emerging Markets

Journal Story – Manuscript Review Process

- April 01, 2026 – Manuscript submitted.
- May 24, 2026 – Pre-review revision requested.
- May 25, 2026 – Pre-review revision submitted.
- May 31, 2026 – Revised manuscript submitted.

ABSTRACT

This study examines the effect of earnings management and Environmental, Social, and Governance (ESG) disclosure on corporate tax avoidance, with financial leverage as a moderating variable, in LQ45 companies listed on the Indonesia Stock Exchange. Grounded in agency, stakeholder, and legitimacy theories, this research aims to provide empirical evidence on the determinants of tax avoidance behavior in emerging markets. This study employs a quantitative associative approach using secondary data from 32 LQ45 companies over the 2022–2024 period, resulting in 96 firm-year observations. Tax avoidance is proxied by the Effective Tax Rate (ETR), earnings management by discretionary accruals (DA), ESG by disclosure scores based on Global Reporting Initiative (GRI), and leverage by the Debt-to-Equity Ratio (DER). Data analysis includes multiple linear regression, classical assumption tests, hypothesis testing (t-test), coefficient of determination (R^2), and Moderated Regression Analysis (MRA). The results indicate that earnings management has a negative but insignificant effect on tax avoidance, while ESG disclosure shows a positive but insignificant relationship with tax avoidance. Furthermore, leverage is not found to moderate the relationship between earnings management and tax avoidance, nor between ESG and tax avoidance. These findings suggest that earnings management, ESG performance, and leverage are not key determinants of tax avoidance among LQ45 companies. The study highlights the complexity of corporate tax behavior and implies that other factors may play a more substantial role. The results provide important insights for policymakers, investors, and regulators in improving corporate tax compliance and governance practices in emerging markets.

1. Introduction

Taxation has long been recognized as one of the primary sources of state revenue used to finance national development, public infrastructure, education, health services, and economic stability. In Indonesia, taxes play a strategic role in supporting fiscal sustainability and increasing state capacity in achieving national welfare objectives. According to Indonesian tax regulations, taxes are compulsory contributions imposed on individuals or entities based on law without direct compensation and are utilized for the

greatest prosperity of society ([Harahap, 2020](#)).

Corporate taxation, particularly corporate income tax, constitutes a substantial component of national tax revenue. Companies operating as legal entities are obligated to fulfill tax responsibilities in accordance with applicable regulations. In practice, companies are subject to several forms of taxation, including Corporate Income Tax (PPh Badan), Value Added Tax (VAT), and Land and Building Tax (PBB). Tax compliance is therefore not only a legal obligation but also an important indicator of corporate accountability and

governance quality ([Silvera et al., 2024](#)).

Nevertheless, many corporations attempt to minimize tax expenses through various tax planning strategies. One of the most widely discussed practices is tax avoidance, which refers to legal efforts undertaken by companies to reduce tax burdens by exploiting loopholes within tax regulations ([Falbo & Firmansyah, 2021](#); [Lalita & Rahayuningsih, 2024](#)). Unlike tax evasion, tax avoidance operates within legal boundaries, although it frequently raises ethical concerns regarding corporate responsibility and fairness. Tax avoidance practices continue to attract attention globally because they potentially reduce state revenues and undermine fiscal justice.

Recent developments indicate that tax avoidance remains a significant issue in Indonesia, especially among large corporations. One notable case involved PT Adaro Energy Tbk, which was alleged to conduct transfer pricing practices through its subsidiary in Singapore to reduce tax liabilities in Indonesia. Reports indicated that the company benefited from regulatory loopholes that allowed coal exports to be sold at lower prices internally, thereby decreasing taxable profits domestically. This phenomenon demonstrates how multinational corporations can strategically manage financial reporting to minimize tax obligations while maintaining substantial profitability.

In recent years, discussions regarding Environmental, Social, and Governance (ESG) practices have increasingly been associated with corporate taxation behavior. ESG disclosure reflects corporate commitment to sustainability, transparency, and ethical business conduct ([Triyani et al., 2020](#); [Ruan & Liu, 2021](#)). Companies with strong ESG performance are generally expected to demonstrate higher accountability, including tax compliance. However, empirical findings regarding the relationship between ESG and tax avoidance remain inconsistent. Several studies found that ESG disclosure negatively affects tax avoidance because sustainability-

oriented companies tend to prioritize transparency and long-term legitimacy.

Conversely, other studies indicate that some firms may use ESG disclosure strategically to maintain legitimacy while simultaneously engaging in aggressive tax planning practices. This suggests that ESG activities may function as reputational tools rather than genuine indicators of ethical corporate behavior ([Christy & Sofie, 2023](#); [Agustini et al., 2023](#)). Research conducted by recent scholars found that although ESG disclosure may improve public perception, it does not always prevent companies from practicing tax avoidance.

Another important factor influencing tax avoidance is earnings management. Earnings management refers to managerial actions intended to manipulate accounting information to achieve certain financial objectives ([Setiawati & Na'im, 2000](#)). Managers may alter financial reporting to present favorable company performance, attract investors, or achieve compensation targets. Agency Theory explains that managers as agents possess more information than shareholders as principals, creating information asymmetry that may encourage opportunistic behavior, including earnings management and tax avoidance practices.

The relationship between earnings management and tax avoidance has been extensively debated in accounting literature. Some studies demonstrate that firms engaging in earnings management are more likely to conduct aggressive tax planning to increase after-tax profits ([Handayani et al., 2024](#); [Manuel et al., 2022](#)). However, other studies found no significant relationship between earnings management and tax avoidance, suggesting inconsistencies in empirical findings ([Muda et al., 2020](#)). These contradictory results indicate the existence of research gaps that require further investigation, particularly within the Indonesian context.

In addition to ESG and earnings management, leverage is considered an

important determinant of tax avoidance. Leverage represents the proportion of debt used in corporate financing (Fajar, 2021). Companies with high leverage generally benefit from interest expense deductions that reduce taxable income. Consequently, leverage may strengthen managerial incentives to minimize taxes. Previous studies found mixed results regarding the effect of leverage on tax avoidance. Some researchers concluded that leverage positively influences tax avoidance because debt financing creates tax shields. However, others reported insignificant relationships between leverage and tax avoidance (Wanda & Halimatusadiah, 2021).

This study focuses on companies listed in the LQ45 Index on the [Indonesia Stock Exchange](#), (2024). LQ45 companies represent firms with high liquidity, large market capitalization, and strong financial fundamentals. These companies are highly influential in the Indonesian capital market and attract significant investor attention. Despite their reputation and financial performance, several LQ45 companies are suspected of engaging in tax planning activities aimed at reducing tax burdens. Therefore, examining tax avoidance behavior among LQ45 companies becomes important because these firms significantly contribute to Indonesia's economy and financial market stability.

The selection of LQ45 companies also reflects the growing importance of sustainability reporting and corporate governance in highly visible corporations. Large public companies face greater pressure from stakeholders, regulators, and investors to maintain transparency and social legitimacy. According to Stakeholder Theory, companies are expected to consider the interests of all stakeholders, including government, investors, employees, and society. Failure to fulfill tax responsibilities may trigger negative public reactions and damage corporate reputation.

Legitimacy Theory further explains that corporations seek alignment with social norms and expectations to gain public approval and maintain operational continuity. Companies

involved in tax avoidance may attempt to restore legitimacy through ESG disclosures and sustainability programs. Prior studies revealed that firms with strong ESG practices tend to gain greater investor trust and stakeholder support, whereas companies associated with aggressive tax practices often experience reputational risks and regulatory pressure.

This study integrates Agency Theory, Stakeholder Theory, and Legitimacy Theory to explain the relationships among earnings management, ESG disclosure, leverage, and tax avoidance. Agency Theory explains managerial incentives to engage in opportunistic tax strategies, Stakeholder Theory highlights the importance of stakeholder trust and corporate accountability, while Legitimacy Theory emphasizes corporate efforts to maintain social acceptance through sustainability initiatives. These theoretical perspectives provide a comprehensive framework for understanding corporate tax behavior in Indonesia.

Several previous studies have investigated the determinants of tax avoidance; however, limited research simultaneously examines earnings management and ESG disclosure with leverage as a moderating variable, particularly among LQ45 companies. Most previous studies also produced inconsistent findings regarding the impact of ESG and leverage on tax avoidance behavior. Therefore, this research seeks to contribute to the literature by examining the effect of earnings management and ESG on tax avoidance with leverage as a moderating variable in LQ45 companies listed on the Indonesia Stock Exchange.

This study is expected to provide theoretical contributions to the development of accounting, taxation, and sustainability literature, particularly regarding corporate tax behavior in emerging markets. Practically, the findings may provide useful insights for regulators, investors, and policymakers in formulating strategies to improve corporate tax compliance and strengthen ESG implementation in Indonesia. Furthermore, the research is expected to encourage companies

to conduct business ethically and transparently while fulfilling their tax obligations responsibly.

Based on the explanation above, the researcher is interested in conducting a study entitled “The Effect of Earnings Management and Environmental, Social, and Governance (ESG) on Tax Avoidance with Leverage as a Moderating Variable.”

2. Literature Review

2.1 Conceptual and Theoretical Foundations

2.1.1 Taxation

Tax plays a fundamental role in supporting national development and fiscal sustainability. In Indonesia, tax revenue contributes approximately 70% of total government income, making it the primary source of funding for public expenditure, infrastructure, and social welfare programs (Wanda & Halimatusadiah, 2021). According to Law No. 28 of 2007, tax is defined as a mandatory contribution imposed on individuals or entities based on statutory regulations without direct compensation, aimed at achieving the greatest prosperity of the people (Harahap, 2020).

In modern fiscal systems, taxation is not only an instrument of revenue collection but also a tool for economic regulation, redistribution, and stabilization. The effectiveness of tax systems is closely linked to compliance behavior, regulatory enforcement, and institutional capacity. Recent studies emphasize that improving tax compliance requires not only stricter regulation but also enhanced transparency, digitalization, and taxpayer awareness (World Bank, 2023).

2.1.2 Tax Avoidance

Tax avoidance refers to legal strategies employed by corporations to minimize tax liabilities by exploiting loopholes in tax regulations. Unlike tax evasion, which is illegal, tax avoidance operates within legal frameworks but often raises ethical concerns (Putri Heryana et al., 2024).

Tax avoidance can be categorized into

passive and active forms. Passive tax avoidance relates to structural conditions that reduce tax obligations, while active tax avoidance involves deliberate managerial actions to minimize tax payments (Sadjiarto et al., 2024).

Recent empirical studies (2021–2026) indicate that tax avoidance remains a global concern, particularly among multinational and large-cap firms. According to OECD (2023), base erosion and profit shifting (BEPS) practices continue to reduce government tax revenues worldwide. In Indonesia, tax avoidance is often driven by profit maximization motives, regulatory complexity, and weak monitoring systems (Aprilliana et al., 2024).

2.1.3 Earnings Management

Earnings management is defined as managerial intervention in financial reporting processes to achieve desired financial outcomes. This practice involves manipulating accounting policies or estimates to influence reported earnings (Ambarwati et al., 2024).

Earnings management reduces the reliability and credibility of financial statements and may mislead stakeholders regarding a company's true financial performance. Prior research suggests that managers engage in earnings management to meet performance targets, secure bonuses, or influence investor perceptions (Muda et al., 2020).

Recent studies (2022–2025) reveal that earnings management is closely associated with tax avoidance behavior. Firms engaging in aggressive earnings manipulation tend to adopt tax minimization strategies to increase after-tax income (Nabiilah & Fahira, 2024). However, empirical findings remain inconsistent, indicating the need for further investigation.

2.1.4 Environmental, Social, and Governance (ESG)

Environmental, Social, and Governance (ESG) represents a corporate framework that integrates sustainability, ethical practices, and

governance quality into business operations. ESG emphasizes environmental protection, social responsibility, and effective corporate governance ([Sadjiarto et al., 2024](#)).

The environmental dimension evaluates corporate efforts in managing natural resources, reducing emissions, and addressing climate change. The social dimension focuses on employee welfare, community engagement, and human rights. The governance dimension examines corporate leadership, transparency, and accountability.

ESG disclosure has become increasingly important in recent years, particularly among publicly listed companies. The Global Reporting Initiative (GRI) provides standardized guidelines for sustainability reporting, enabling firms to communicate ESG performance transparently ([Sekar Sari et al., 2023](#)).

Recent literature (2021–2026) highlights mixed findings regarding ESG and tax avoidance. Some studies suggest that firms with strong ESG performance exhibit lower tax avoidance due to higher ethical standards and transparency ([Pratiwi et al., 2024](#)). Conversely, other studies argue that ESG may be used as a reputational tool to mask opportunistic behavior, including tax avoidance ([Nabiilah & Fahira, 2024](#)).

2.1.5 Leverage

Leverage refers to the use of debt financing in a company's capital structure. High leverage increases financial risk but also provides tax benefits through interest expense deductions ([Silvera et al., 2024](#)).

Leverage is often used as a proxy for financial risk and corporate financing decisions. Companies with high leverage tend to have lower taxable income due to interest tax shields, which may encourage tax avoidance practices ([Hidayat & Wijaya, 2021](#)).

Recent studies (2022–2025) indicate that leverage plays a significant role in influencing tax avoidance behavior. Firms with higher debt levels are more likely to engage in aggressive tax planning strategies ([Hasan et al.,](#)

[2022](#)).

2.1.6 Theoretical Framework

a. Agency Theory

Agency Theory explains the relationship between shareholders (principals) and managers (agents). Managers possess more information than shareholders, leading to information asymmetry and potential opportunistic behavior ([Jensen & Meckling, 1976](#)). Managers may engage in earnings management and tax avoidance to maximize personal benefits, such as bonuses and compensation. Recent studies confirm that agency conflicts significantly influence corporate tax strategies ([Sadjiarto et al., 2024](#)).

b. Legitimacy Theory

Legitimacy Theory suggests that companies strive to align their operations with societal norms and expectations to gain public acceptance. Firms may use ESG disclosure to maintain legitimacy and enhance reputation ([Baroroh & Kusumawati, 2024](#)). Companies involved in tax avoidance may attempt to offset negative perceptions through sustainability initiatives. However, excessive reliance on ESG for legitimacy may lead to symbolic rather than substantive practices.

c. Stakeholder Theory

Stakeholder Theory emphasizes that companies must consider the interests of all stakeholders, including investors, regulators, employees, and society ([Freeman, 1984](#)). Failure to fulfill tax obligations may damage stakeholder trust and corporate reputation. Firms that prioritize ESG are more likely to adopt transparent and responsible practices, including tax compliance.

2.2 Review of Empirical Studies

Recent empirical studies have extensively examined the determinants of tax avoidance, particularly earnings management, ESG performance, and leverage. Several studies report that earnings management significantly increases tax avoidance because managers

manipulate accounting information and taxable income to maximize corporate benefits ([Nabiilah & Fahira, 2024](#); [Sadjiarto et al., 2024](#)). However, other studies have found insignificant or inconsistent relationships, indicating that the impact of earnings management may vary across industries and institutional settings.

Research on ESG and tax avoidance has also produced mixed findings. Some studies suggest that firms with stronger ESG performance exhibit lower tax avoidance due to greater transparency, ethical standards, and accountability ([Pratiwi et al., 2024](#)). Conversely, other studies argue that ESG disclosures may serve as symbolic legitimacy tools that conceal opportunistic managerial behavior, including aggressive tax planning ([Nabiilah & Fahira, 2024](#)). These conflicting findings demonstrate that the role of ESG in influencing tax avoidance remains inconclusive.

Regarding leverage, prior studies generally indicate that highly leveraged firms tend to engage in more aggressive tax planning because interest expenses provide tax-deductible benefits ([Hasan et al., 2022](#); [Hidayat & Wijaya, 2021](#); [Silvera et al., 2024](#)). Nevertheless, the moderating role of leverage in the relationship between earnings management, ESG, and tax avoidance has received relatively limited empirical attention.

Overall, previous studies have predominantly focused on direct relationships between corporate governance variables and tax avoidance. Limited evidence exists regarding the simultaneous examination of earnings management and ESG as determinants of tax avoidance while considering leverage as a moderating variable, particularly within the context of Indonesian publicly listed companies.

2.3 Identification of the Research Gap

Based on the theoretical and empirical review, several research gaps can be identified.

First, previous studies have reported inconsistent findings regarding the effect of

earnings management on tax avoidance. While some studies support a positive relationship, others find weak or insignificant effects ([Nabiilah & Fahira, 2024](#); [Sadjiarto et al., 2024](#)). This inconsistency suggests the need for further empirical investigation.

Second, the relationship between ESG and tax avoidance remains inconclusive. Existing studies provide conflicting evidence regarding whether ESG serves as a mechanism for improving ethical tax behavior or merely functions as a reputational strategy ([Pratiwi et al., 2024](#); [Nabiilah & Fahira, 2024](#)).

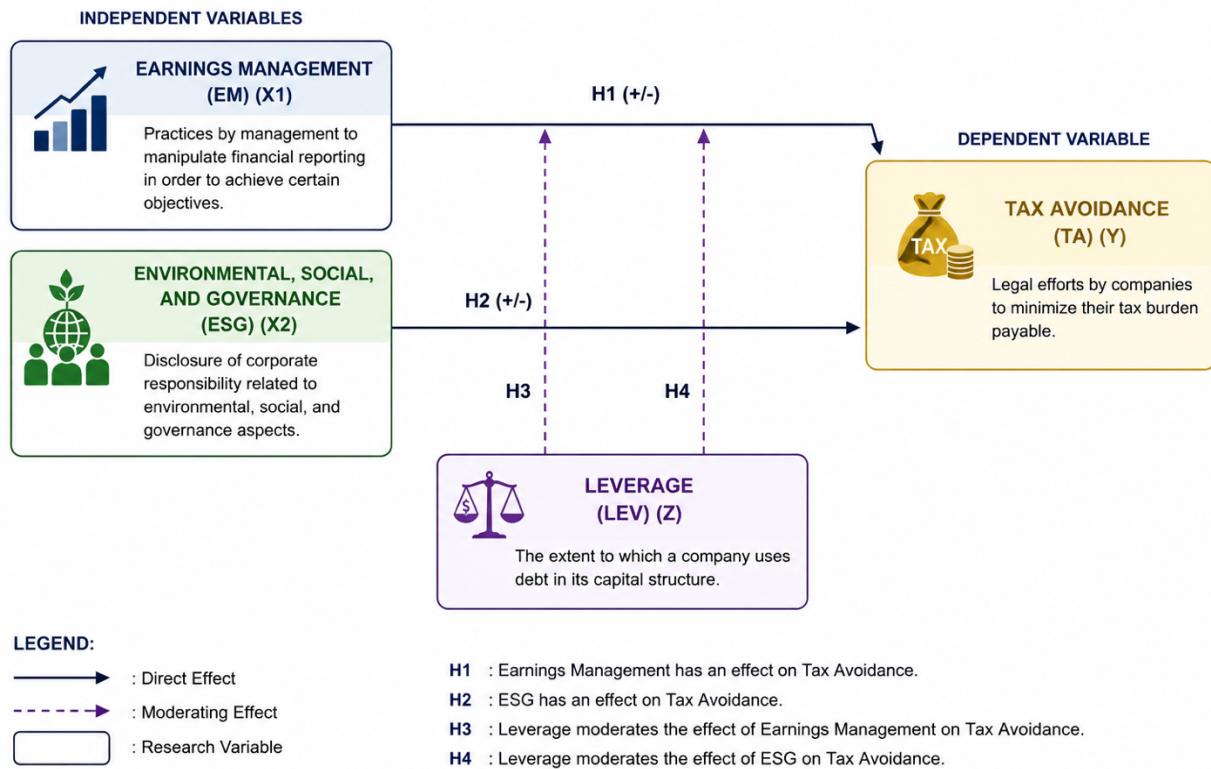
Third, although leverage has been widely examined as a determinant of tax avoidance, its moderating role in influencing the relationships between earnings management, ESG, and tax avoidance remains underexplored ([Hasan et al., 2022](#); [Silvera et al., 2024](#)).

Finally, empirical evidence focusing on companies included in the LQ45 index remains limited despite their strategic importance in the Indonesian capital market. Therefore, this study addresses these gaps by examining the effects of earnings management and ESG on tax avoidance, while simultaneously investigating the moderating role of leverage in LQ45 companies.

2.4 Development of the Conceptual Framework

This study examines the relationship between earnings management and ESG as independent variables, tax avoidance as the dependent variable, and leverage as a moderating variable.

RESEARCH FRAMEWORK



The framework proposes that:

- 1) Earnings management influences tax avoidance
- 2) ESG influences tax avoidance
- 3) Leverage moderates both relationships

2.5 Hypotheses or Research Propositions

2.5.1 Effect of Earnings Management on Tax Avoidance

Earnings management enables managers to manipulate financial reporting, which may also influence tax planning strategies. Firms engaging in earnings management may reduce taxable income to minimize tax liabilities. Empirical studies show mixed results. Some studies find a significant relationship, while others report no effect ([Nabiilah & Fahira, 2024](#); [Sadjiarto et al., 2024](#)). Therefore, the first hypothesis is:

H1: Earnings Management affects Tax Avoidance in LQ45 companies.

2.5.2 Effect of ESG on Tax Avoidance

ESG reflects corporate responsibility and

ethical behavior. Firms with strong ESG performance are expected to exhibit lower tax avoidance due to increased transparency and accountability. However, some firms may use ESG strategically to maintain reputation while still engaging in tax avoidance practices.

H2: ESG affects Tax Avoidance in LQ45 companies.

2.5.3 Moderating Role of Leverage on Earnings Management and Tax Avoidance

Leverage provides tax benefits through interest deductions, which may strengthen the relationship between earnings management and tax avoidance. Firms with high leverage are more likely to engage in aggressive tax planning strategies.

H3: Leverage moderates the effect of Earnings Management on Tax Avoidance.

2.5.4 Moderating Role of Leverage on ESG and Tax Avoidance

Leverage may also influence how ESG affects tax avoidance. Firms with high leverage

may prioritize financial performance over sustainability, weakening the impact of ESG on tax behavior.

H4: Leverage moderates the effect of ESG on Tax Avoidance.

3. Research Methods

3.1 Research Design

This study employs a quantitative research approach using an associative design to examine the relationships between variables, namely earnings management, Environmental, Social, and Governance (ESG), leverage, and tax avoidance. Quantitative research is characterized by its systematic, objective, and empirical nature, where data are expressed in numerical form and analyzed using statistical techniques ([Utomo et al., 2024](#)).

The associative approach is appropriate for this study because it aims to identify and analyze the causal relationships between independent variables (earnings management and ESG), the dependent variable (tax avoidance), and the moderating variable (leverage).

3.2 Research Context and Setting

This research is conducted on companies listed on the Indonesia Stock Exchange (IDX), focusing specifically on firms included in the LQ45 Index. The LQ45 index represents companies with high liquidity, strong fundamentals, and large market capitalization, making them highly relevant for financial and taxation studies.

The study utilizes secondary data obtained from annual reports and financial statements published on the official IDX website (www.idx.co.id). The observation period covers three years (2022–2024), ensuring data consistency and relevance for recent financial conditions.

3.3 Population and Sample / Research Participants

a. Population

The population of this study consists of

all companies listed in the LQ45 Index on the Indonesia Stock Exchange during the period 2022–2024.

LQ45 companies are selected because:

- 1) They have strong financial fundamentals and high transparency
- 2) They are highly liquid and actively traded
- 3) They have greater incentives to engage in tax planning strategies
- 4) They are more likely to disclose ESG information
- 5) Their activities significantly influence the national economy

b. Sample

The sampling technique used is purposive sampling, where samples are selected based on specific criteria.

Sampling Criteria:

- 1) Companies consistently listed in LQ45 during 2022–2024
- 2) Companies publishing complete annual reports during the study period
- 3) Companies with complete data for all research variables
- 4) Companies reporting financial data in Indonesian Rupiah

Based on these criteria, 32 companies were selected as the sample, resulting in 96 observations (32 companies × 3 years).

3.4 Data Sources and Data Collection

a. Data Type

This study uses secondary data, which refers to data collected and published by external parties. Secondary data are considered reliable because they are derived from audited financial reports and official disclosures.

b. Data Source

The primary data sources include:

- 1) Annual reports of LQ45 companies
- 2) Financial statements published on the IDX website
- 3) Sustainability reports (for ESG disclosure)

These sources provide comprehensive information required to measure all research

variables.

c. Data Collection Method

The data collection method used in this study is documentation, where data are obtained from existing financial statements, annual reports, and sustainability reports. This method ensures objectivity and reliability since the data have been officially published and audited.

3.5 Measurement of Variables and Research Instruments

3.5.1 Dependent Variable

a. Tax Avoidance (Y)

Tax avoidance is measured using the **Effective Tax Rate (ETR)** as follows:

$$ETR_{it} = \frac{\text{Tax Expense}_{it}}{\text{Pre-tax Income}_{it}}$$

Where:

- 1) ETR_{it} = Effective Tax Rate of company *i* in year *t*
- 2) Tax Expense_{it} = Total tax expense of company *i* in year *t*
- 3) $\text{Pre-tax Income}_{it}$ = Earnings before tax of company *i* in year *t*

A lower ETR indicates higher tax avoidance, while a higher ETR reflects lower tax avoidance.

3.5.2 Independent Variables

a. Earnings Management (X_1)

Earnings management is measured using Discretionary Accruals (DA) based on the Modified Jones Model (Dechow et al., 1995):

$$DA_{it} = \frac{TA_{it}}{A_{it-1}} - NDA_{it}$$

Where:

- 1) DA_{it} = Discretionary Accruals of company *i* in year *t*
- 2) TA_{it} = Total Accruals of company *i* in year *t*
- 3) NDA_{it} = Non-Discretionary Accruals of company *i* in year *t*
- 4) A_{it-1} = Total Assets of company *i* in year *t* – 1

This model is widely used due to its high accuracy in detecting earnings manipulation.

b. Environmental, Social, and Governance (ESG) (X_2)

ESG performance is measured using the ESG disclosure score based on the Global Reporting Initiative (GRI) standards:

$$ESG_{it} = \frac{\text{Number of ESG Disclosure Items}_{it}}{\text{Total Possible ESG Disclosure Items}}$$

Where:

- 1) ESG_{it} = ESG disclosure score of company *i* in year *t*
 - 2) Number of ESG Disclosure Items = Total ESG items disclosed by the company
 - 3) Total Possible ESG Disclosure Items = Total ESG items required by the disclosure index
- Each disclosure item is scored using a dummy approach:

- 1) 1 = disclosed
- 2) 0 = not disclosed

Higher ESG scores indicate better sustainability reporting quality.

3.5.3 Moderating Variable

a. Leverage (Z)

Leverage is measured using the Debt-to-Equity Ratio (DER):

$$DER_{it} = \frac{\text{Total Debt}_{it}}{\text{Total Equity}_{it}} \times 100\%$$

Where:

- 1) DER_{it} = Debt-to-Equity Ratio of company *i* in year *t*
- 2) Total Debt_{it} = Total liabilities of company *i* in year *t*
- 3) Total Equity_{it} = Total shareholders' equity of company *i* in year *t*

Leverage reflects the extent to which companies rely on debt financing and its potential tax implications.

3.6 Data Analysis Techniques

3.6.1 Descriptive Statistics

Descriptive statistics are used to summarize and describe the characteristics of the data, including mean, minimum, maximum,

and standard deviation.

3.6.2 Classical Assumption Tests

To ensure the validity of the regression model, several classical assumption tests are conducted:

- a. Normality Test
Using Kolmogorov-Smirnov test (significance level 0.05)
- b. Multicollinearity Test
Using Variance Inflation Factor (VIF) and tolerance values
VIF < 10 indicates no multicollinearity
- c. Heteroscedasticity Test
To examine variance consistency of residuals
- d. Autocorrelation Test
To detect correlation between residuals across time

3.6.3 Multiple Linear Regression Analysis

This study employs multiple linear regression analysis to examine the effect of earnings management and ESG disclosure on tax avoidance. The regression model is specified as follows:

$$Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \varepsilon_{it}$$

Where:

- 1) Y_{it} = Tax Avoidance of company i in year t
- 2) X_{1it} = Earnings Management of company i in year t
- 3) X_{2it} = ESG disclosure score of company i in year t
- 4) α = Constant term
- 5) β_1, β_2 = Regression coefficients
- 6) ε_{it} = Error term

3.6.4 Hypothesis Testing

a. t-Test (Partial Test)

The t-test is used to evaluate the individual effect of each independent variable on the dependent variable.

Decision criteria:

- 1) Significance level (α) = 5% (0.05)
- 2) If the p-value < 0.05, the hypothesis is accepted, indicating a significant effect.
- 3) If the p-value $\geq$ 0.05, the hypothesis is rejected, indicating no significant effect.

b. Coefficient of Determination (R^2)

The coefficient of determination (R^2) is used to measure the proportion of variation in the dependent variable that can be explained by the independent variables included in the regression model. A higher R^2 value indicates greater explanatory power of the model.

c. Moderated Regression Analysis (MRA)

To examine the moderating role of leverage, this study employs Moderated Regression Analysis (MRA). The moderation model is formulated as follows:

$$Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 Z_{it} + \beta_4 (X_{1it} \times Z_{it}) + \beta_5 (X_{2it} \times Z_{it}) + \varepsilon_{it}$$

Where:

- 1) Y_{it} = Tax Avoidance of company i in year t
- 2) X_{1it} = Earnings Management of company i in year t
- 3) X_{2it} = ESG disclosure score of company i in year t
- 4) Z_{it} = Leverage of company i in year t
- 5) $(X_{1it} \times Z_{it})$ = Interaction term between Earnings Management and Leverage
- 6) $(X_{2it} \times Z_{it})$ = Interaction term between ESG and Leverage
- 7) α = Constant term
- 8) $\beta_1 - \beta_5$ = Regression coefficients
- 9) ε_{it} = Error term

This model is used to determine whether leverage strengthens or weakens the relationship between:

- 1) Earnings Management and Tax Avoidance.
- 2) ESG Disclosure and Tax Avoidance.

This study adopts a quantitative research approach with a clearly defined sampling framework, standardized variable measurements, and comprehensive statistical analysis techniques. By integrating multiple linear regression and moderated regression analysis, the study seeks to provide empirical evidence regarding the influence of earnings management and ESG disclosure on tax avoidance, as well as the moderating role of leverage among companies included in the LQ45 Index in Indonesia.

3.7 Validity, Reliability, and Trustworthiness

To ensure the robustness of the findings, several procedures are implemented. Data validity is supported through the use of audited financial statements, annual reports, and sustainability reports obtained from official corporate disclosures. Reliability is enhanced by applying standardized measurement approaches that are widely accepted in prior accounting and taxation research, including the Effective Tax Rate (ETR), Modified Jones Model, ESG disclosure index based on GRI standards, and Debt-to-Equity Ratio (DER). Furthermore, classical assumption testing is conducted to verify the appropriateness and stability of the regression models.

3.8 Ethical Considerations

This study exclusively utilizes secondary data obtained from publicly available sources. No human participants are involved, and therefore informed consent is not required. All data are collected and analyzed in accordance with academic integrity principles, ensuring proper citation, transparency, and responsible use of publicly disclosed information. Confidentiality concerns are minimized because the data originate from publicly accessible corporate reports.

3.9 Research Procedure

The research procedure consists of the following stages:

- Identifying the research problem and developing the research framework.
- Reviewing relevant literature and formulating hypotheses.
- Determining the population and selecting the sample using purposive sampling.

- Collecting annual reports, financial statements, and sustainability reports for the period 2022–2024.
- Measuring all research variables using the specified formulas and indicators.
- Conducting descriptive statistical analysis and classical assumption tests.
- Performing multiple linear regression and moderated regression analysis.
- Interpreting the results and drawing conclusions regarding the relationships among earnings management, ESG disclosure, leverage, and tax avoidance.

3.10 Methodological Limitations

Several methodological limitations should be acknowledged. First, the study focuses exclusively on companies included in the LQ45 Index, which may limit the generalizability of the findings to other listed or non-listed firms. Second, the observation period is limited to three years (2022–2024), potentially restricting the ability to capture long-term behavioral patterns. Third, the measurement of ESG performance relies on disclosure-based indicators, which may not fully reflect actual sustainability performance. Despite these limitations, the study provides valuable empirical evidence regarding the determinants of tax avoidance and the moderating role of leverage among leading publicly listed companies in Indonesia.

4. Results and Discussion

4.1 Result

4.1.1 Descriptive Statistics

Descriptive statistics were employed to summarize the characteristics of the research variables, including the minimum value, maximum value, mean, and standard deviation. These statistics provide an overview of the distribution of the data before conducting further analyses.

Table 1. Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
DA	96	-1.120	1.260	-0.100	0.492
ESG	96	0.000	1.000	0.583	0.296
ETR	96	-8.100	3.620	-0.298	1.035
DER	96	-0.190	13.560	2.179	2.776

Source: Processed SPSS Output (2025).

Table 1 indicates that all variables exhibit substantial variation across the sample. Earnings management (DA) ranges from -1.120 to 1.260, with a mean value of -0.100, suggesting that, on average, discretionary accruals are relatively low. ESG disclosure has an average score of 0.583, indicating that firms disclose approximately 58% of the ESG indicators employed in this study. Tax avoidance (ETR) demonstrates considerable

variation, reflected in a standard deviation of 1.035. Meanwhile, leverage (DER) records the highest dispersion among all variables, suggesting substantial differences in firms' capital structures.

4.1.2 Classical Assumption Tests

Normality Test

The normality test was performed using the Kolmogorov-Smirnov (K-S) test.

Table 2. Normality Test

Indicator	Value
N	96
Test Statistic	0.084
Asymp. Sig. (2-tailed)	0.094

Source: Processed SPSS Output (2025).

The Asymp. Sig. value of 0.094 exceeds the significance threshold of 0.05, indicating that the residuals are normally distributed. Therefore, the regression model satisfies the normality assumption.

Multicollinearity Test

Multicollinearity was evaluated using the tolerance value and Variance Inflation Factor (VIF).

Table 3. Multicollinearity Test

Variable	Tolerance	VIF	Conclusion
DA	>0.10	<10	No multicollinearity
ESG	>0.10	<10	No multicollinearity

Source: Processed SPSS Output (2025).

The tolerance values exceed 0.10, while the VIF values remain below 10. These findings indicate that multicollinearity is not present in the regression model.

Heteroskedasticity Test

The Glejser test was conducted to examine heteroskedasticity.

Table 4. Heteroskedasticity Test

Variable	Significance	Conclusion
DA	>0.05	No heteroskedasticity
ESG	>0.05	No heteroskedasticity

Source: Processed SPSS Output (2025).

Since the significance values exceed 0.05, the regression model is free from heteroskedasticity.

Autocorrelation Test

Autocorrelation was examined using the Durbin–Watson statistic.

Table 5. Durbin–Watson Test

Indicator	Value
Durbin–Watson	2.060
dL	1.2437
dU	1.6505
4 – dU	2.3495

Source: Processed SPSS Output (2025).

The Durbin–Watson statistic (2.060) falls between the upper bound (dU = 1.6505) and 4 – dU (2.3495), indicating that the regression model is free from autocorrelation.

4.1.3 Multiple Linear Regression Analysis

Multiple linear regression analysis was conducted to examine the effects of earnings management and ESG disclosure on tax avoidance.

Table 6. Multiple Linear Regression Results

Variable	B	t	Sig.
Constant	0.554		
DA	-0.209		
ESG	0.403		

Source: Processed SPSS Output (2025).

The estimated regression equation is:

$$ETR = 0.554 - 0.209DA + 0.403ESG$$

The regression coefficient for discretionary accruals (DA) is negative, whereas ESG disclosure exhibits a positive coefficient. However, statistical significance should be evaluated using the hypothesis testing results.

4.1.4 Hypothesis Testing

Partial Test (t-test)

The t-test was employed to assess the individual influence of each independent variable on tax avoidance.

Table 7. Hypothesis Testing

Hypothesis	Relationship	Decision
H1	DA → ETR	Rejected
H2	ESG → ETR	Rejected

Source: Processed SPSS Output (2025).

The findings reveal that neither earnings management nor ESG disclosure has a statistically significant effect on tax avoidance at the 5% significance level.

Coefficient of Determination

Table 8. Coefficient of Determination

Indicator	Value
R²	0.073

Source: Processed SPSS Output (2025).

The coefficient of determination indicates that earnings management and ESG disclosure jointly explain approximately 7.3% of the variation in tax avoidance. The remaining 92.7% is attributable to other variables not included in the model.

4.1.5 Moderated Regression Analysis

Moderated Regression Analysis (MRA) was employed to investigate whether leverage strengthens or weakens the relationship between earnings management, ESG disclosure, and tax avoidance.

Table 9. Moderated Regression Analysis

Hypothesis	Interaction	Decision
H3	DA × DER → ETR	Rejected
H4	ESG × DER → ETR	Rejected

Source: Processed SPSS Output (2025).

The results demonstrate that leverage does not significantly moderate the relationship between earnings management and tax avoidance or between ESG disclosure and tax avoidance.

Model Summary After Moderation

Table 10. Model Summary

Indicator	Value
R ²	0.057

Source: Processed SPSS Output (2025).

The moderated regression model explains 5.7% of the variation in tax avoidance. Compared with the baseline regression model, the inclusion of interaction terms does not improve the model's explanatory power, suggesting that leverage does not function as an effective moderating variable in this study.

4.2 Research Discussion

4.2.1 Interpretation of Key Findings

a. The Effect of Earnings Management on Tax Avoidance in LQ45

Based on the results of hypothesis testing conducted using SPSS software, it is found that the earnings management variable (X1) shows a negative but insignificant effect on tax avoidance. This implies that although statistically there is a tendency for increased earnings management to reduce tax avoidance, the relationship is not sufficiently strong to be considered significant for generalization to the population.

This insignificance may be caused by other more dominant factors influencing tax avoidance, or because fluctuations in earnings management are not directly associated with tax avoidance strategies reflected in the Effective Tax Rate (ETR). These findings indicate that earnings management, particularly through discretionary accruals (DA), does not necessarily have a direct impact on the amount of tax paid by companies.

The results of this study are consistent with prior research conducted by [Handayani et al. \(2024\)](#), which found that earnings management has a negative but insignificant effect on tax avoidance. In their study, the significance value of earnings management on tax avoidance was reported at (0.1659 > 0.05), with a calculated t-value of (-1.398918), while the t-table value was 1.99167. This indicates that the calculated t-value is smaller than the

critical value (-1.398918 < 1.99167), leading to the conclusion that earnings management has a negative but insignificant effect on tax avoidance.

Similarly, [Wijaya and Hidayat \(2022\)](#) also found that earnings management does not significantly affect tax avoidance. This lack of significance may be attributed to several factors, such as stringent tax regulations, effective supervision by tax authorities, or firm characteristics that favor alternative tax avoidance mechanisms rather than accrual-based earnings management.

Therefore, although theoretically earnings management is expected to influence tax avoidance, in practice this relationship does not always occur significantly. This suggests that companies may employ other, more effective tax planning strategies beyond accounting manipulation.

b. The Effect of Environmental, Social, and Governance (ESG) on Tax Avoidance in LQ45

Based on the hypothesis testing results, the Environmental, Social, and Governance (ESG) variable (X2) shows a positive but insignificant effect on tax avoidance. This indicates that although statistically there is a tendency for higher ESG scores to be associated with increased tax avoidance, the relationship is not strong enough to be statistically significant.

In other words, the implementation of corporate sustainability principles through ESG aspects does not necessarily have a direct impact on the effectiveness of taxes paid by companies. These findings suggest that ESG performance does not guarantee higher tax compliance.

This result is consistent with the study by [Pratiwi et al. \(2024\)](#), which concluded that ESG performance does not have a significant effect on tax avoidance. Their findings suggest that companies with high ESG scores do not necessarily avoid taxes, as sustainability motivations are often directed toward improving corporate reputation and

maintaining long-term relationships with stakeholders rather than optimizing tax strategies.

The insignificance of ESG may be caused by several factors, including inconsistent ESG implementation and measurement in Indonesia, differences in corporate orientation toward ESG practices, and tax policies that do not directly incorporate ESG considerations.

Thus, although theoretically companies with high ESG scores are expected to have good governance practices, including tax compliance, in practice the relationship between ESG and tax avoidance is not consistently supported by empirical evidence. This also raises the possibility that ESG disclosures may sometimes serve as symbolic or reputational tools rather than reflecting substantive corporate behavior.

c. Leverage as a Moderator of the Relationship Between Earnings Management and Tax Avoidance in LQ45

Based on the results of the interaction test between earnings management and leverage on tax avoidance, the significance value obtained is 0.675, which is higher than the significance level of 0.05. This indicates that the interaction between earnings management and leverage does not have a significant effect on tax avoidance.

Therefore, it can be concluded that leverage does not act as a moderating variable that strengthens or weakens the relationship between earnings management and tax avoidance. In other words, the presence of leverage does not influence the magnitude of the effect of earnings management on tax avoidance.

This finding suggests that the level of corporate leverage, as reflected in the Debt-to-Equity Ratio (DER), is not strong enough to modify the relationship between earnings management (measured by discretionary accruals) and tax burden effectiveness (measured by ETR).

One possible explanation is that leverage does not play a sufficiently important role in

influencing the relationship between earnings management practices and tax avoidance decisions. Companies with high levels of debt are not necessarily driven to engage in earnings management specifically for tax avoidance purposes. This is because earnings management can serve multiple objectives, such as improving reported earnings or meeting performance targets, rather than focusing solely on tax reduction.

Moreover, high leverage may actually encourage companies to be more cautious in their accounting practices to avoid violating legal obligations and debt covenants. As a result, the moderating effect becomes insignificant.

This finding is consistent with previous studies. [Yunita Ulandari and Susila \(2024\)](#) found that leverage does not significantly affect tax avoidance in retail sub-sector companies listed on the Indonesia Stock Exchange during the 2019–2023 period. Similarly, [Sadjarto et al. \(2024\)](#) reported that leverage does not significantly influence tax avoidance, and firm size is unable to moderate the relationship between leverage and tax avoidance.

Given the insignificant role of leverage as a moderating variable, it can be concluded that the relationship between discretionary accruals and tax avoidance is not influenced by the level of corporate leverage.

Interestingly, leverage may be more appropriately positioned as an independent variable rather than a moderating variable. This is because leverage has a direct impact on tax policy through interest expenses, which reduce taxable income. High leverage can therefore serve as a direct tax management tool rather than a moderator of relationships between variables.

d. Leverage as a Moderator of the Relationship Between ESG and Tax Avoidance in LQ45

Based on the moderated regression analysis, the significance value for the interaction between ESG and leverage is 0.107, which is greater than the significance level of

0.05. This indicates that the interaction between ESG and leverage does not have a significant effect on tax avoidance.

Thus, leverage does not function as a moderating variable in the relationship between ESG and tax avoidance. This means that the level of corporate leverage, as measured by DER, is not capable of strengthening or weakening the influence of ESG performance on the company's effective tax rate.

These findings are consistent with previous research. [Amalia and Kusuma \(2023\)](#) found that ESG performance has a positive and significant effect on market performance, but ESG controversies do not moderate this relationship. Furthermore, [Pratiwi et al. \(2024\)](#) reported that ESG disclosure does not significantly affect firm value in the energy and basic materials sectors listed on the Indonesia Stock Exchange.

The insignificant moderating role of leverage suggests that regardless of whether a company has high or low leverage, it does not alter how ESG influences tax management effectiveness. This may serve as an important consideration for management in integrating sustainability policies without heavily relying on financial structure decisions related to debt and equity.

In this context, leverage may have its own internal motivations for influencing tax avoidance independently of ESG. Therefore, leverage does not have a sufficiently strong conceptual or logical position to affect the direction of the relationship between ESG and tax avoidance.

4.2.2 Comparison with Previous Studies

The finding that earnings management does not significantly affect tax avoidance is consistent with [Handayani et al. \(2024\)](#), who reported a negative but insignificant relationship between earnings management and tax avoidance. Similarly, [Wijaya and Hidayat \(2022\)](#) found that earnings management does not significantly influence tax avoidance because companies may utilize

alternative tax planning mechanisms rather than accrual-based earnings manipulation.

The insignificant relationship between ESG and tax avoidance is also in line with [Pratiwi et al. \(2024\)](#), who concluded that ESG performance does not significantly influence tax avoidance practices. Their findings suggest that companies often implement ESG initiatives primarily to enhance reputation and stakeholder trust rather than to influence tax strategies.

Regarding the moderating role of leverage, the results are consistent with [Yunita Ulandari and Susila \(2024\)](#), who found that leverage does not significantly affect tax avoidance. Likewise, [Sadjiarto et al. \(2024\)](#) reported that leverage has no significant relationship with tax avoidance and that moderating variables are often unable to alter this relationship. The finding that leverage does not moderate the relationship between ESG and tax avoidance is also consistent with [Amalia and Kusuma \(2023\)](#) and [Pratiwi et al. \(2024\)](#), who reported limited moderating effects in ESG-related relationships.

4.2.3 Theoretical Contributions

This study contributes to the literature on tax avoidance by providing evidence that earnings management and ESG performance are not necessarily determinants of corporate tax avoidance among highly liquid and well-established firms represented by the LQ45 Index. These findings suggest that agency-based motivations reflected in earnings management activities may not always translate into tax avoidance behavior.

In addition, the results challenge the assumption that strong ESG performance automatically leads to greater tax compliance. The findings indicate that ESG disclosures may not always reflect substantive corporate behavior related to taxation, thereby supporting the argument that ESG implementation can sometimes be symbolic rather than directly associated with financial reporting and tax strategies.

The study also contributes to the

literature on capital structure by demonstrating that leverage does not function as an effective moderating variable in explaining the relationship between earnings management, ESG, and tax avoidance. This finding suggests that leverage may exert a more direct influence on tax-related decisions through interest expense deductions rather than through interaction effects with other organizational variables.

4.2.4 Practical and Policy Implications

For corporate managers, the findings indicate that tax avoidance practices cannot be adequately explained solely by earnings management activities or ESG performance. Therefore, tax planning strategies should be evaluated within a broader organizational context that includes regulatory compliance, governance quality, and long-term business objectives.

For investors, the results imply that high ESG scores should not automatically be interpreted as indicators of stronger tax compliance or lower tax avoidance risk. Investors should complement ESG assessments with additional analyses of corporate governance, taxation policies, and financial reporting quality.

For policymakers and regulators, the findings highlight the importance of strengthening tax oversight mechanisms independently of ESG disclosure requirements. Since ESG performance does not significantly affect tax avoidance, regulatory efforts should focus on enhancing transparency and monitoring tax-related practices directly rather than assuming that sustainability initiatives will automatically improve tax compliance.

4.2.5 Integration with the Research Gap

Previous studies have reported inconsistent findings regarding the influence of earnings management and ESG on tax avoidance, as well as the role of leverage in moderating these relationships. Some studies found significant effects, while others reported insignificant results. This inconsistency created

a research gap that warranted further investigation, particularly within the context of Indonesian publicly listed companies.

By examining companies included in the LQ45 Index, this study addresses the identified gap and provides evidence that neither earnings management nor ESG significantly affects tax avoidance, while leverage fails to act as a moderating variable. These findings contribute to resolving inconsistencies in the literature and suggest that the determinants of tax avoidance may be more complex than previously assumed.

4.2.6 Acknowledgement of Study Limitations

Several limitations should be considered when interpreting the findings. First, the study focuses exclusively on companies included in the LQ45 Index, which generally consist of large and highly liquid firms. Consequently, the findings may not be fully generalizable to smaller firms or companies operating in different market segments.

Second, the insignificant results may indicate the presence of other influential factors that were not included in the research model, such as corporate governance quality, ownership structure, political connections, profitability, or institutional pressures. These factors may provide additional explanatory power regarding tax avoidance behavior.

Third, ESG measurements and disclosures in Indonesia are still evolving, which may limit the ability of ESG indicators to fully capture firms' sustainability performance. Future studies may benefit from employing alternative ESG measurements, broader samples, and additional moderating or mediating variables to obtain a more comprehensive understanding of corporate tax avoidance practices.

5. Conclusion

Based on the results of hypothesis testing using multiple linear regression analysis and Moderated Regression Analysis (MRA), several key conclusions can be drawn.

First, earnings management has a negative but insignificant effect on tax avoidance. This finding indicates that although there is a tendency for earnings management practices, particularly through discretionary accruals (DA), to reduce the effective tax rate, the effect is not statistically significant. This suggests that discretionary accruals are not the primary determinant of tax avoidance behavior. Companies may rely on alternative strategies that are more effective and sustainable in managing their tax obligations.

Second, Environmental, Social, and Governance (ESG) performance has a positive but insignificant effect on tax avoidance. This implies that firms with higher ESG scores do not necessarily exhibit significantly different tax avoidance behavior. Although ESG is theoretically associated with better corporate governance and ethical practices, its influence on tax compliance in LQ45 companies is not empirically supported. This may be attributed to inconsistencies in ESG reporting practices and the lack of alignment between fiscal policies and sustainability initiatives.

Third, leverage is unable to moderate the relationship between earnings management and tax avoidance. This indicates that the level of corporate leverage does not strengthen or weaken the effect of earnings management on tax outcomes. In other words, the company's capital structure does not significantly alter how earnings management influences tax avoidance practices.

Fourth, leverage also does not moderate the relationship between ESG and tax avoidance. This means that regardless of whether firms have high or low leverage, the relationship between ESG performance and tax avoidance remains unchanged. This finding suggests that corporate sustainability policies operate independently from financial structure decisions and are not directly associated with tax avoidance strategies.

Overall, the findings highlight that tax avoidance behavior is complex and cannot be explained solely by earnings management, ESG performance, or leverage. Other factors beyond

the scope of this study likely play a more substantial role.

5.2 Theoretical Contributions

From a theoretical perspective, this study contributes to the existing literature by providing empirical evidence that challenges several commonly held assumptions.

First, the findings suggest that earnings management and tax avoidance do not necessarily operate through the same mechanisms, indicating a separation between financial reporting strategies and tax planning behavior.

Second, the results highlight that ESG performance does not automatically translate into ethical tax behavior, thereby questioning the assumption derived from stakeholder theory that firms with higher ESG engagement are more compliant in all aspects, including taxation.

Third, the absence of a moderating role of leverage suggests that capital structure may not always function as a contextual variable influencing the relationship between corporate behavior and tax outcomes. This opens opportunities for further theoretical refinement regarding the interaction between financial policy and corporate governance.

5.3 Practical and Policy Implications

The findings of this study provide several practical implications for various stakeholders.

For corporate management, the results suggest that relying solely on earnings management as a tool for tax optimization is insufficient. Companies are encouraged to adopt more transparent, compliant, and sustainable approaches to tax management that align with regulatory requirements and good corporate governance principles.

For policymakers and tax authorities, the insignificant influence of ESG on tax avoidance indicates the need to strengthen regulatory frameworks that integrate sustainability and taxation. Policies that encourage transparency in both tax reporting and ESG disclosure could improve corporate accountability. Additionally,

the development of fiscal incentives linked to measurable and standardized ESG performance may help promote both sustainability and tax compliance.

For investors, the findings imply that ESG performance should not be interpreted as a direct indicator of tax compliance. Therefore, investment decisions should consider additional financial and governance indicators when assessing corporate behavior.

5.4 Limitations of the Study

This study is limited to the context of KPP Pratama Batulicin, so the findings may not fully represent conditions in other mining regions with different administrative and operational characteristics. In addition, the analysis relies on secondary data and descriptive estimation methods, meaning that the calculated untapped revenue potential should be interpreted as indicative estimates rather than exact measurements of actual tax losses.

5.5 Directions for Future Research

Based on the conclusions and limitations, several recommendations are proposed for future research.

First, future studies are encouraged to treat leverage (DER) as an independent variable rather than a moderating variable, as it may have a more direct effect on tax avoidance behavior.

Second, researchers should consider incorporating other moderating variables that are theoretically more relevant, such as corporate governance, audit quality, or institutional ownership, which may better explain the interaction between earnings management, ESG, and tax avoidance.

Third, future research should expand the scope by including a broader range of industries beyond LQ45, extending the observation period, and incorporating additional control variables such as firm size, return on assets (ROA), capital intensity, and good corporate governance (GCG).

Fourth, the use of alternative measurement methods, such as different discretionary accrual models or ESG scores from multiple sources, is recommended to enhance the robustness and validity of the findings.

Finally, there is a need for improving ESG standardization and reporting quality, particularly in Indonesia. Inconsistent ESG scoring may reduce the reliability of academic research and limit its usefulness in business practice. Therefore, ESG standard-setting institutions are encouraged to refine their methodologies and enhance transparency in their evaluation criteria.

6. References

- Agustini, Y., Azwardi, A., & Mukhtaruddin, M. (2023). The effect of environmental, social, and governance and financial distress on tax aggressiveness in Indonesia: CEO gender as a moderating variable. *Jurnal Informatika Ekonomi Bisnis*, 5, 920–926. <https://doi.org/10.37034/infeb.v5i3.670>
- Amalia, R., & Kusuma, I. W. (2023). The effect of environmental, social, and governance performance on market performance with ESG controversy as a moderating variable. *ABIS: Accounting and Business Information Systems Journal*, 11(2). <https://doi.org/10.22146/abis.v11i2.84771>
- Ambarwati, S., Azizah, W., & Aprizalni, L. (2024). Corporate governance and earnings management. *Jurnal Akuntansi dan Bisnis Indonesia*, 5(1), 73–84.
- Aprilliana, D., Ajitama, O., Rachman, R. A., Wahono, P., & Pahala, I. (2024). The effect of firm performance on tax avoidance through firm size in LQ45 companies listed on IDX. *Jurnal EBI*, 6(1), 1–9. <https://doi.org/10.52061/ebi.v6i1.229>
- Baroroh, F., & Kusumawati, E. (2024). The effect of institutional ownership, leverage, profitability, and media exposure on corporate social

- responsibility disclosure. *Economics and Digital Business Review*, 5(2), 678–692.
- Christy, E., & Sofie. (2023). The effect of environmental, social, and governance disclosure. *Jurnal Ekonomi Trisakti*, 3(2), 3899–3908.
- Divisi Perdagangan dan Riset. (2024). *Evaluation of IDX30, LQ45, IDX80, KOMPAS100, PEFINDO25, BISNIS-27, MNC36, and SMinfra18 indices*. Indonesia Stock Exchange.
- Fajar, F. D. (2021). *The effect of leverage, firm size, and profitability on accounting conservatism* (Undergraduate thesis). Sekolah Tinggi Ilmu Ekonomi Indonesia Jakarta.
- Falbo, T. D., & Firmansyah, A. (2021). Tax avoidance in Indonesia: Multinationality and earnings management. *Bisnis-Net Jurnal Ekonomi dan Bisnis*, 4(1), 94–110. <https://doi.org/10.46576/bn.v4i1.1325>
- Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Cambridge University Press.
- Handayani, N. T., Marundha, A., & Khasanah, U. (2024). The effect of earnings management, profitability, and liquidity on tax avoidance. *Jurnal Economina*, 3(2), 197–218. <https://doi.org/10.55681/economina.v3i2.1191>
- Harahap, N. D. (2020). Legal consequences for taxpayers committing tax crimes based on Indonesian tax law. *Jurnal Ilmiah Maksitek*, 5(3), 68.
- Hasan, I., Lynch, D. K., & Siddique, A. R. (2022). Usefulness of hard information and soft information: Case of default risk and ESG factors. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4015878>
- Hidayat, H., & Wijaya, S. (2021). The effect of earnings management and transfer pricing on tax avoidance. *Bina Ekonomi*, 25(2), 155–173.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Lalita, A., & Rahayuningsih, D. A. (2024). The effect of corporate governance and firm characteristics on tax avoidance. *Jurnal Ilmiah Akuntansi dan Keuangan*, 3(1), 1–14. <https://doi.org/10.24034/jiaku.v3i1.6245>
- Manuel, D., Sandi, S., Firmansyah, A., & Trisnawati, E. (2022). Earnings management, leverage, and tax avoidance: The moderating role of CSR. *Jurnal Pajak Indonesia*, 6(2S), 550–560. <https://doi.org/10.31092/jpi.v6i2s.1832>
- Maulana, A. (2022). Analysis of validity, reliability, and feasibility of instruments. *Jurnal Kualita Pendidikan*, 3(3), 133–139. <https://doi.org/10.51651/jkp.v3i3.331>
- Muda, I., Abubakar, E., & others. (2020). The effect of firm size, profitability, leverage, and earnings management on tax avoidance moderated by political connection. *Jurnal Riset Akuntansi dan Keuangan*, 8(2), 375–392.
- Nabiilah, A., & Fahira, H. (2024). The effect of corporate governance, internal auditor competence, and ESG on earnings management. *Jurnal Ekonomi Manajemen dan Bisnis*, 1(5), 77–87.
- OECD. (2023). *Base erosion and profit shifting (BEPS)*. <https://www.oecd.org/en/topics/base-erosion-and-profit-shifting-beps.html>
- Pratiwi, N. I., Fuadah, L. L., & Yunisvita. (2024). The effect of ESG and capital intensity on tax avoidance. *Management Studies and Entrepreneurship Journal*, 5(2), 7772–7783.
- Putri Heryana, R., Luthfi, D., & Santoso, R. A. (2024). The effect of profitability and leverage on tax avoidance. *Jurnal Revenue: Jurnal Akuntansi*, 5(1), 511–532.

- Ruan, L., & Liu, H. (2021). ESG activities and firm performance: Evidence from China. *Sustainability*, 13(2), 1–16. <https://doi.org/10.3390/su13020767>
- Sadjiarto, A., Alvin, J., Angela, L., & others. (2024). *Earnings management and ESG on tax avoidance with leverage as moderating variable*.
- Sekar Sari, P., Widiatmoko, J., & others. (2023). ESG disclosure and financial performance with gender diversity as moderator. *Jurnal Ilmiah Akuntansi dan Keuangan*, 5(9), 3634–3642.
- Setiawati, L., & Na'im, A. (2000). Earnings management. *Jurnal Ekonomi dan Bisnis Indonesia*, 15(4), 424–441.
- Silvera, D. L., Heriyani, & Sahara. (2024). Corporate governance and CSR: Their impact on tax avoidance and earnings management. *Jurnal Akademi Akuntansi Indonesia Padang*, 4(1), 35–53. <https://doi.org/10.31933/5dz3ke89>
- Syauqoti, R., & Ghazali, M. (2018). Analysis of Islamic and conventional financial institutions. *Iqtishoduna*, 15–30. <https://doi.org/10.18860/iq.v0i0.4820>
- Triyani, A., Setyahuni, S. W., & Kiryanto, K. (2020). The effect of ESG disclosure on firm performance. *Jurnal Reviu Akuntansi dan Keuangan*, 10(2), 261–280. <https://doi.org/10.22219/jrak.v10i2.11820>
- Utomo, P., Asvio, N., & Prayogi, F. (2024). Classroom action research methods. *Pubmedia Jurnal Penelitian Tindakan Kelas Indonesia*, 1(4), 19. <https://doi.org/10.47134/ptk.v1i4.821>
- Wanda, A. P., & Halimatusadiah, E. (2021). The effect of solvency and profitability on tax avoidance. *Jurnal Riset Akuntansi*, 1(1), 59–65. <https://doi.org/10.29313/jra.v1i1.194>
- Wijaya, S., & Hidayat, H. (2022). Earnings management and transfer pricing on tax avoidance. *Bina Ekonomi*, 25(2), 155–173. <https://doi.org/10.26593/be.v25i2.5331>
- World Bank. (2023). *Innovations in Tax Compliance: Building Trust, Navigating Politics, and Tailoring Reform*.
- Yunita Ulandari, & Susila, G. P. A. J. (2024). The effect of ROA and DER on stock prices. *Bisma: Jurnal Manajemen*, 9(3), 363–369. <https://doi.org/10.23887/bjm.v9i3.63826>