CHAPTER I
INTRODUCTION

1.1 Background

Tax revenue remains the single largest source of national income for most governments around the world, including Indonesia. For developing economies that continue to invest heavily in infrastructure, social welfare programs, and economic transformation, the reliability of tax collection is particularly critical. In Indonesia, tax receipts have consistently accounted for the majority of the state budget, making corporate income tax from large-scale industries an especially significant contributor to fiscal sustainability; between 2021 and 2023, tax revenue contributed an average of 77.17 percent of total state income and grants, with the mining and quarrying sector alone accounting for an average of 7.23 percent of total tax revenue over the same period (Wibowo & Sari, 2024). Given this dependence, any systematic reduction in corporate tax contributions by major sectors of the economy raises important questions about both equity and the long-term capacity of the government to finance public goods.

Because such a large share of state revenue depends on consistent and proportional corporate tax collection, understanding the extent to which large taxpayers may legally minimize their tax obligations, a practice commonly referred to as corporate tax avoidance, has become an important area of accounting and public policy research. Corporate tax avoidance is broadly defined as managerial actions aimed at reducing a company's tax burden through legally permissible tax planning strategies without violating applicable regulations (Desai & Dharmapala, 2006). In practice, tax avoidance encompasses a wide spectrum of activities, from straightforward utilization of statutory deductions and incentives to more sophisticated arrangements that exploit ambiguities in tax laws or differences between accounting and tax reporting standards. While tax avoidance is generally legal, it generates significant non-tax costs, including reputational exposure, regulatory risk, and governance concerns, particularly when the strategies employed are perceived as aggressive or contrary to the spirit of the law (Wenwu et al., 2023).

Several motivations help explain why companies may choose to pursue tax avoidance rather than simply complying with the statutory tax rate. First, tax avoidance can be understood as a means of improving tax efficiency and maximizing after-tax profits, since every unit of tax paid directly reduces the residual earnings available for reinvestment or distribution to shareholders (Desai & Dharmapala, 2006). Second, from an Agency Theory perspective, managers may be motivated to pursue tax avoidance because of managerial incentives tied to reported after-tax performance; when compensation or career evaluation is linked to net income or earnings per share, managers have a personal stake in minimizing the tax expense that erodes these figures (Wenwu et al., 2023). Third, tax avoidance may also be shaped by shareholder expectations, particularly in a market environment where investors reward firms that deliver higher after-tax returns and where a comparatively low tax burden can be read as evidence of efficient financial management. Finally, and importantly, tax avoidance is generally pursued through legal tax planning strategies, such as taking advantage of statutory incentives, accelerated depreciation, or financing structures that are explicitly permitted under tax regulations, rather than through outright tax evasion. These motivations collectively provide the conceptual bridge between the phenomenon described here and the theoretical frameworks, namely Agency Theory and Positive Accounting Theory, that are developed further in Chapter II to explain the corporate characteristics examined in this study.

For researchers, accurately measuring corporate tax avoidance presents a methodological challenge because it cannot be directly observed. Instead, the literature has developed a range of proxies to approximate tax avoidance behavior, with the Effective Tax Rate (ETR) and Book-Tax Difference (BTD) being two of the most widely adopted measures in empirical accounting research (Delgado et al., 2023). The ETR captures the proportion of pre-tax accounting income that a company pays as corporate income tax, where lower values generally indicate a higher degree of tax avoidance. The BTD, in contrast, measures the gap between accounting income as reported under financial reporting standards and taxable income as reported to tax authorities, scaled by total assets. Larger BTD values suggest that companies are employing strategies that create divergences between their financial and tax reporting, which is a common characteristic of tax planning activities. Although both proxies are well-established in the literature, they capture different dimensions of tax avoidance behavior and may therefore yield different empirical conclusions when applied to the same dataset; this measurement sensitivity has been documented in previous studies and represents an important methodological concern that motivates the dual-proxy approach adopted in this research (Delgado et al., 2023). Both ETR and BTD are employed in this study not to compare them against each other, but to provide a more comprehensive assessment of corporate tax avoidance by capturing complementary aspects of companies' tax planning activities.

Three corporate characteristics, profitability, leverage, and capital intensity, are examined as the primary explanatory variables in this study. Profitability, measured by Return on Assets (ROA), is relevant because companies generating higher earnings face larger nominal tax obligations and thus possess stronger incentives to implement strategies that reduce their taxable income (Wijayanti & Wafiroh, 2025). Within the energy and basic materials sectors, profitability surged during the commodity boom years of 2021 and 2022, creating precisely the conditions under which tax avoidance incentives would be expected to intensify. From an Agency Theory perspective, managers under pressure to deliver strong after-tax returns to shareholders may be motivated to explore available tax planning opportunities rather than allow a disproportionate share of pre-tax profits to be transferred to the government as tax payments (Desai & Dharmapala, 2006). Leverage, measured by the Debt-to-Equity Ratio (DER), is examined because debt financing generates interest expenses that are generally deductible for corporate income tax purposes, thereby providing companies with a legitimate tax shield through their capital structure decisions (Wibowo & Sari, 2024). Companies in the energy and basic materials sectors are inherently capital-intensive and frequently rely on substantial debt financing to fund exploration, extraction, and production activities, making leverage a particularly relevant variable in this context. Capital intensity, measured as the ratio of fixed assets to total assets, is examined because companies with larger proportions of depreciable fixed assets possess the opportunity to create significant timing differences between their accounting depreciation charges and their tax depreciation deductions. Such differences directly contribute to BTD and may reduce the effective tax burden when accelerated depreciation methods are permitted under applicable tax regulations.

Previous empirical studies examining the relationships between these corporate characteristics and tax avoidance have produced inconsistent findings, even among studies conducted within closely related sectors and overlapping observation periods. For instance, a study of mining companies listed on the Indonesia Stock Exchange (IDX) during 2019–2023 found that capital intensity had a significant effect on tax avoidance, while profitability and leverage did not (Wijayanti & Wafiroh, 2025). In contrast, a study of energy sector companies listed on the IDX during 2021–2023 found that profitability had no significant effect on tax avoidance, whereas debt-related financing measures showed a significant positive association with tax avoidance (Wibowo & Sari, 2024). These contrasting results, obtained from firms operating in closely related industries over overlapping periods, illustrate that the determinants of corporate tax avoidance are sensitive to differences in sample composition, proxy selection, institutional environments, and industry context. Accordingly, further empirical investigation is necessary to build a more complete understanding of these relationships, particularly within underexamined industry contexts.

Having established the concept, underlying motivations, and firm-level determinants associated with corporate tax avoidance, attention now turns to a sector in which these dynamics are especially salient: Indonesia's Energy and Basic Materials industries. Among the various sectors of the Indonesian economy, Energy and Basic Materials companies occupy a uniquely important fiscal position. These industries, spanning coal mining, oil and gas, mineral extraction, petrochemicals, cement, steel, and other commodity-based manufacturing, serve as foundational pillars of Indonesia's export earnings and industrial output, with the mining and quarrying sector's contribution to national GDP rising from approximately 7.18 percent in 2016 to more than 12 percent by the end of 2022 before settling at around 10.5 percent in 2023 (Ministry of Energy and Mineral Resources [ESDM], 2024). During periods of elevated commodity prices, companies operating in these sectors generate exceptional profits, which in principle should translate into proportionally higher tax payments. Yet empirical patterns of tax revenue from these sectors have repeatedly diverged from what economic fundamentals would predict, raising concerns about the extent to which corporate tax avoidance practices may be contributing to this gap.

The post-pandemic period from 2021 to 2025 provides a particularly revealing setting for studying this phenomenon. Following the economic disruptions of 2020, global commodity markets rebounded sharply; the World Bank (2021) reported that energy prices alone rose by more than 80 percent in 2021 compared with the previous year and were expected to remain elevated into 2022. Indonesia's energy and basic materials sectors benefited directly from this surge in international demand for coal, nickel, bauxite, and other raw materials, translating into historically high revenues and profitability for companies operating in these industries. Theoretically, this substantial increase in corporate profitability should also be reflected in a proportional increase in corporate income tax revenue, since higher pre-tax earnings would ordinarily generate a correspondingly higher tax base. Indonesia's Ministry of Finance reported a pattern broadly consistent with this expectation in the short run: tax revenue from the mining sector grew by 60.5 percent in 2021 and then surged further to 113.6 percent year-on-year in 2022, considerably outpacing the 34.3 percent growth recorded for overall national tax revenue in the same year (CNBC Indonesia, 2023). However, this proportional relationship did not persist once commodity prices began to normalize. As global commodity prices declined during 2023, tax remittances from the mining sector decelerated sharply and eventually swung into outright contraction, falling by more than 39 percent on a gross basis in the first quarter of 2024 alone and by as much as 63.8 percent on a net basis by April 2024 relative to the same period in the previous year (Bisnis.com, 2024; DDTC News, 2024). By contrast, the sector's contribution to national GDP remained comparatively stable over the same period, moving only from around 12 percent of GDP at the end of 2022 to approximately 10.5 percent in 2023 (ESDM, 2024). This disproportion, a contraction in tax remittances far steeper than the actual movement in economic output, suggests that factors beyond ordinary business cycles, including strategic tax planning behavior, may have played a meaningful role in shaping corporate tax payments during the post-pandemic normalization phase.

Beyond aggregate sectoral trends, specific cases involving large Indonesian energy companies further illustrate the tax planning dynamics at work within these industries. Allegations regarding transfer pricing arrangements, offshore profit shifting, and the strategic use of fiscal loss compensation have periodically attracted attention from tax authorities and civil society organizations alike. These cases demonstrate that companies in the energy and basic materials sectors possess the financial sophistication, organizational complexity, and operational scope necessary to implement a wide range of tax reduction strategies (Wibowo & Sari, 2024). Taken together, these macro-level anomalies and firm-level indicators provide a compelling motivation to examine the determinants of corporate tax avoidance specifically within Indonesian Energy and Basic Materials companies during the post-pandemic observation period.

In addition to the mixed findings on profitability, leverage, and capital intensity discussed above, two further gaps specific to the Indonesian context motivate this study. First, the existing literature on corporate tax avoidance in Indonesia has focused primarily on manufacturing companies, broad cross-sector samples, or governance-related determinants; a recent systematic review of Indonesian tax avoidance research covering 66 articles published in Sintaaccredited journals between 2015 and 2025 found that governance-related variables account for as much as 87.6 percent of the proxies used across sampled studies, leaving considerably less attention paid to firm-specific financial characteristics within specific industry contexts such as Energy and Basic Materials (Andrianto et al., 2025). These sectors possess distinctive operational characteristics, including high capital intensity, exposure to commodity price cycles, complex organizational structures, and significant state ownership, that differentiate their tax planning dynamics from those of manufacturing or service-sector firms. Examining these sectors separately is therefore important for developing a more nuanced understanding of tax avoidance behavior in Indonesia. Second, much of the available empirical evidence is derived from datasets covering periods prior to 2021, meaning that research findings may not adequately reflect corporate tax planning behavior under the unique economic conditions of the post-pandemic recovery, the commodity supercycle, and the subsequent normalization phase. This study addresses both gaps by focusing specifically on Indonesian Energy and Basic Materials companies over the 2021-2025 period, thereby providing empirical evidence that is both sector-specific and temporally current.

Table 1.1 Research Uniqueness

No.	Research Aspect	Previous Studies	This Study
1	Tax avoidance measurement	Most studies employ only one proxy (ETR or BTD).	This study employs both ETR and BTD separately to provide a more comprehensive assessment of tax avoidance.
2	Research object	Previous Indonesian studies mostly focus on manufacturing firms or mixed industrial sectors.	This study specifically examines Energy and Basic Materials companies listed on the Indonesia Stock Exchange.
3	Observation period	Many previous studies use data prior to 2021.	This study uses panel data covering 2021–2025, representing the post-pandemic period.
4	Research setting	Most studies examine general listed companies.	This study focuses on industries characterized by high capital intensity, commodity exposure, and strategic importance to Indonesia's economy.

No.	Research Aspect	Previous Studies	This Study
5	Empirical model	Most studies estimate tax avoidance using a single model.	This study estimates two separate panel regression models using ETR and BTD as alternative proxies.

Table 1.1 summarizes the main research novelties of this study compared with previous literature. The novelty lies in the simultaneous use of two tax avoidance proxies (ETR and BTD), the focus on Energy and Basic Materials companies, the use of recent post-pandemic data (2021-2025), and the implementation of two separate panel regression models to provide a more comprehensive assessment of corporate tax avoidance.

Based on the considerations presented above, this study examines the influence of profitability, leverage, and capital intensity on corporate tax avoidance among Energy and Basic Materials companies listed on the Indonesia Stock Exchange during the 2021-2025 period. Tax avoidance is measured using both ETR and BTD, while revenue growth, firm size, and State-Owned Enterprise (SOE) status are incorporated as control variables. The study is grounded in Agency Theory and Positive Accounting Theory, which together provide the conceptual basis for explaining managerial decisions regarding tax planning. By addressing the identified empirical, sectoral, and temporal gaps, this research is expected to contribute to the existing literature and provide evidence relevant to academics, corporate practitioners, investors, and tax policymakers.

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1.2 Research Questions

Based on the background discussed in the preceding section, this study formulates the following research questions to guide the empirical analysis. Tax avoidance in this study is measured using two alternative proxies, namely ETR and BTD, while revenue growth, firm size, and SOE status are incorporated as control variables.

1. Does profitability (ROA) have a significant effect on corporate tax avoidance, as measured by ETR and BTD, among Energy and Basic Materials companies listed on the Indonesia Stock Exchange during the 2021-2025 period?
2. Does leverage (DER) have a significant effect on corporate tax avoidance, as measured by ETR and BTD, among Energy and Basic Materials companies listed on the Indonesia Stock Exchange during the 2021-2025 period?
3. Does capital intensity have a significant effect on corporate tax avoidance, as measured by ETR and BTD, among Energy and Basic Materials companies listed on the Indonesia Stock Exchange during the 2021-2025 period?
4. Is there a significant difference in the empirical results obtained when corporate tax avoidance is measured using ETR compared with BTD, among Energy and Basic Materials companies listed on the Indonesia Stock Exchange during the 2021-2025 period?

1.3 Research Objectives

In line with the research questions formulated above, this study pursues the following objectives:

1. To examine the effect of profitability (ROA) on corporate tax avoidance among Energy and Basic Materials companies listed on the Indonesia Stock Exchange during the 2021-2025 period.
2. To investigate the empirical relationship between leverage (DER) and corporate tax avoidance among Energy and Basic Materials companies listed on the Indonesia Stock Exchange during the 2021-2025 period.
3. To examine the effect of capital intensity on corporate tax avoidance among Energy and Basic Materials companies listed on the Indonesia Stock Exchange during the 2021-2025 period.

4. To provide empirical evidence regarding the differences in results obtained when corporate tax avoidance is measured using ETR compared with BTD.

1.4 Research Significance

This study is expected to provide benefits from both a theoretical and a practical perspective.

1.4.1 Theoretical Significance

From a theoretical standpoint, this study is expected to contribute to the existing literature on corporate taxation and accounting research in several ways. First, by examining profitability, leverage, and capital intensity as determinants of tax avoidance within the Energy and Basic Materials sectors of Indonesia, this study provides additional empirical evidence that enriches the existing body of research on corporate tax planning behavior, particularly within an emerging market context characterized by commodity dependency and capital-intensive operations.

Second, the simultaneous application of two complementary tax avoidance proxies, ETR and BTD, contributes to the methodological discussion in the tax avoidance literature by demonstrating how different measurement approaches capture different dimensions of corporate tax planning. The findings offer insight into why prior studies have produced inconsistent results and underscore the importance of proxy selection in tax avoidance research. This contribution is particularly relevant for future researchers who seek a more robust and comprehensive approach to measuring corporate tax avoidance. Third, this study enriches the theoretical understanding of corporate tax behavior through the lenses of Agency Theory and Positive Accounting Theory. By situating the empirical analysis within these established theoretical frameworks, the study provides a more structured explanation of the managerial motivations underlying tax avoidance decisions and contributes to the broader discussion of how contractual relationships, information asymmetry, and economic incentives shape corporate taxation practices in emerging markets.

1.4.2 Practical Significance

From a practical standpoint, the findings of this study are expected to be relevant for several groups of stakeholders. For the Directorate General of Taxes (Direktorat Jenderal Pajak), the study provides empirical evidence regarding the corporate characteristics most closely associated with tax avoidance behavior in the Energy and Basic Materials sectors. These findings may assist tax authorities in developing more targeted audit strategies, designing risk-based compliance frameworks, and formulating policies aimed at improving corporate tax transparency and reducing aggressive tax planning among capital-intensive companies. For investors and financial analysts, the study provides insights into how corporate financial characteristics, particularly profitability and capital intensity, influence tax planning practices. Understanding the link between these characteristics and tax avoidance may assist investors in assessing the quality of corporate financial reporting, evaluating reputational and regulatory risks associated with aggressive tax planning, and making more informed investment decisions.

For corporate management in the Energy and Basic Materials sectors, the findings highlight the relationship between operational and financing decisions and corporate tax outcomes. This understanding may be valuable for finance and taxation teams seeking to balance legitimate tax planning objectives with the requirements of regulatory compliance, financial reporting integrity, and long-term corporate sustainability. Finally, for future researchers, this study provides a recent empirical foundation for examining corporate tax avoidance in Indonesia, particularly within capital-intensive industries over the post-pandemic period. The methodological approach of combining two tax avoidance proxies within a panel data framework also offers a useful reference for scholars seeking to conduct more comprehensive analyses of corporate tax planning behavior in similar research contexts.