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The Effect of Sales Growth, Company Size, and Leverage on Tax Avoidance

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Abstract

Low tax revenue ratios and large corporate tax losses highlight persistent tax avoidance in Indonesia's manufacturing sector. This study examines the empirical effects of sales growth, company size, and leverage on tax avoidance, proxied by the Effective Tax Rate (ETR). Using a quantitative panel data regression approach, the sample comprises 50 manufacturing firms listed on the Indonesia Stock Exchange (IDX) from 2021 to 2025, yielding 250 firm-year observations. Data were analysed in EViews 13 using the Random Effects Model (REM), confirmed by Chow, Hausman, and Lagrange Multiplier tests. These variables significantly affect tax avoidance. Individually, sales growth has a significant negative effect on ETR, indicating that higher sales growth increases tax avoidance as expanding firms maximise deductible expenses. Leverage has a positive and significant effect on ETR, suggesting that debt financing provides interest tax shields, reducing reliance on aggressive tax sheltering while complying with thin capitalisation regulations. In contrast, company size has no significant effect on tax avoidance because political scrutiny of countervailing costs offsets its impact. The practical implication is that corporate management should handle debt structures prudently to avoid fiscal corrections, and tax authorities should focus risk-based monitoring efforts on high-growth firms.

Keywords

Company Size, Effective Tax Rate, Leverage, Random Effect Model, Sales Growth, Tax Avoidance.

1. Introduction

Taxation is a key source of government revenue and plays a fundamental role in Indonesia's economic development by financing public infrastructure, healthcare, social programs, and fiscal independence. In contrast, corporations generally view tax liabilities as operational cash outflows that reduce profitability (Saragih, 2024). This divergence creates structural tension between tax authorities and corporate taxpayers, encouraging managers to pursue tax management strategies to reduce tax burdens. Within the legal framework, tax reduction can be distinguished between lawful tax avoidance, which uses exemptions, incentives, and legal ambiguities without violating tax provisions, and unlawful tax evasion, which involves fraudulent reporting, income concealment, or illegal accounting manipulation. Therefore, corporate tax avoidance remains an important issue for fiscal authorities and corporate stakeholders (OECD, 2021).

The importance of this issue is reflected in Indonesia's tax revenue performance. From 2021 to 2025, the national tax-to-GDP ratio fluctuated, rising to 11.6% in 2021 before declining to 10.1% in 2022 and then rising to 10.9% in 2023, 11.8% in 2024, and 12.0% in 2025. Despite this improvement, Indonesia's tax ratio remains below the OECD average of 33.9% and the ASEAN average of 19.5%. The persistent gap indicates that Indonesia's tax revenue capacity remains relatively limited, while tax planning practices may represent one of the factors requiring greater regulatory attention. More broadly, the Tax Justice Network highlights the fiscal implications of corporate tax avoidance, estimating substantial losses in corporate tax revenue associated with international tax abuse and profit-shifting practices (Tax Justice Network, 2025).

The manufacturing sector is particularly relevant because it represents one of the largest contributors to Indonesia's tax revenue. Official APBN Kita reports indicate that manufacturing contributed 22.48% of total tax revenue in 2021, rising to 24.61% in 2022 and 26.90% in 2023, then to 25.20% in 2024 and a projected 24.60% in 2025. The sector's extensive production activities, inventory cycles, cross-border transactions, and debt-equity structures also create opportunities for complex tax planning. Consequently, manufacturing companies provide an important setting for examining factors associated with corporate tax avoidance (Ministry of Finance of the Republic of Indonesia, 2025).

Several corporate characteristics may explain differences in tax avoidance. Sales growth reflects the expansion of corporate revenue and may increase taxable income, creating incentives for managers to manage deductible expenses and preserve profit margins. Previous studies provide inconsistent evidence, with Ratnawati and Utomo (2022) and Hasna et al. (2023) finding that sales growth significantly increases tax avoidance, whereas Septiani and Nugraha (2022) report no significant effect. Company size may also influence tax avoidance because larger firms possess greater resources and more sophisticated tax-planning capabilities. Fauzan et al. (2019) and Kalbuana et al. (2023) find a significant relationship between firm size and tax avoidance, while Sormin (2020) and Latifatul et al. (2023) find no significant effect. Similarly, leverage may affect tax avoidance because deductible interest expenses can reduce taxable income. Lukito and Oktaviani (2022) and Ajizah and Ridwan (2026) report a significant effect, whereas Apriani and Sunarto (2022) find no significant relationship.

Real-world controversies further demonstrate the relevance of these variables. Tax Justice Network in 2019 reported that British American Tobacco, through PT Bentoel Internasional Investama Tbk, used cross-border intercompany loans, royalties, software licensing, and technical service payments involving its UK parent, resulting in estimated tax revenue losses of up to US\$14 million annually between 2013 and 2016. In another case, Indonesian Supreme Court Ruling Number

2831/B/PK/PJK/2018 documented a tax dispute involving PT Toyota Motor Manufacturing Indonesia concerning transfer-pricing adjustments and interest deductions. These cases illustrate how financing arrangements, international transactions, and business expansion can intersect with corporate tax management.

The research gap therefore lies in the inconsistent empirical findings regarding sales growth, company size, and leverage, particularly within manufacturing firms and the post-pandemic period. Earlier research predominantly examined the 2014–2016 period. This study's novelty lies in its examination of 50 manufacturing firms listed on the IDX over 2021–2025, a period encompassing post-pandemic recovery, global supply-chain adjustments, and the implementation of the Harmonisation of Tax Regulations Law (*Undang-Undang Harmonisasi Peraturan Perpajakan/UU HPP* Number 7 of 2021). By analyzing 50 manufacturing firms on the IDX over 250 firm-year observations, this study aims to examine and verify the empirical effects of sales growth, company size, and leverage on tax avoidance (proxied by the Effective Tax Rate/ETR), providing actionable recommendations for corporate executives and fiscal regulators.

2. Literature Review and Hypothesis Development

2.1. Agency Theory and Political Cost Hypothesis in Tax Avoidance

This study is theoretically grounded in Agency Theory and the Political Cost Hypothesis. Agency Theory, pioneered by Jensen and Meckling (1976), conceptualises corporate organisation as a nexus of contractual agreements between company owners (principals) and executive managers (agents) who are delegated operational decision-making authority. Because agents have direct access to internal accounting information and day-to-day business operations, information asymmetry is inevitable. Managers, incentivised by short-term executive compensation bonuses, performance evaluations, and the mandate to report healthy net income after tax, are structurally driven to pursue corporate tax avoidance. By actively reducing effective tax liabilities, agents can retain corporate cash flows internally to buffer working capital requirements, or boost reported bottom-line profitability, satisfying shareholders while maximising managerial standing (Pohan, 2013; Paramita et al., 2023).

Complementing agency theory, the Political Cost Hypothesis provides a critical lens for understanding the constraints imposed on large corporate enterprises (Watts & Zimmerman, 1986). The hypothesis posits that large, highly visible firms face disproportionate political scrutiny, heightened media exposure, and targeted regulatory monitoring from public authorities, including the Directorate General of Taxes. While large entities possess sophisticated accounting infrastructure and extensive legal resources to exploit tax code ambiguities, the severe risk of formal tax audits, administrative penalty surcharges, and public reputational damage often acts as a countervailing force. Consequently, managers of politically visible corporations often choose more conservative tax compliance strategies, balancing tax-reduction incentives against the substantial costs of public controversy.

2.2. Concept of Corporate Tax Avoidance

Corporate tax avoidance is a proactive, deliberate tax-planning technique designed to legally minimize overall tax obligations by leveraging statutory exemptions, tax incentives, deductions, and ambiguous legislative gaps (grey areas) embedded in tax law. Gunadi (2020) explains that tax avoidance involves efforts to reduce tax liabilities through strategies that remain within the boundaries of applicable tax regulations. Unlike criminal tax evasion, which violates the law through deliberate underreporting of gross income, concealment of transactions, or fictitious expense claims, tax avoidance operates within formal statutory boundaries, even if certain strategies may run counter to the broader legislative intent of fiscal

statutes. In practice, tax avoidance may involve legitimate tax planning, the strategic timing of transactions, and the utilization of available deductions or incentives to reduce a company's tax burden.

In academic accounting literature, tax avoidance is commonly operationalized through the Effective Tax Rate (ETR), formulated as the ratio of Total Income Tax Expense to Pre-Tax Accounting Income. Hanlon and Heitzman (2010) describe ETR as an important measure of firms' tax burdens, while Rani et al. (2018) use ETR as an indicator in examining corporate tax avoidance. The ETR functions as an inverse proxy: a lower ETR indicates that an enterprise pays a smaller proportion of its pre-tax income in taxes, thereby reflecting a higher level of tax avoidance. This measure enables researchers to quantitatively compare firms' relative tax burdens across different periods and corporate characteristics.

2.3. The Effect of Sales Growth and Company Size on Tax Avoidance

Sales growth reflects the rate of annual top-line revenue expansion and serves as a primary indicator of market demand and corporate operational expansion. Weston and Brigham (1991) explain that sales growth reflects changes in company revenue and indicates business expansion. When corporations experience substantial sales growth, pre-tax operating earnings may increase, consequently enlarging the taxable income base. Faced with this growing fiscal burden, corporate managers are motivated, under Agency Theory, to engage in active tax planning by maximizing deductible operating expenses, such as marketing, logistics, and discretionary accruals, to protect net margins (Sitanggang & Leusiana, 2023). Rapidly growing manufacturing firms also require substantial liquidity to finance raw material inventories and production capacity, making tax savings an efficient source of internal financing. Empirical studies support the relationship between sales growth and tax avoidance, indicating that rapid revenue growth may encourage greater tax avoidance, as reflected by lower ETRs (Baroroh & Apriyanti, 2020; Ratnawati & Utomo, 2022; Safitri & Oktris, 2023; Hasna et al., 2023).

Company size represents the total resource capacity and scale of corporate operations and is conventionally measured through total assets. Sawir (2012) describes company size in terms of the scale of resources a firm controls. Operationally, large enterprises have greater financial resources, diversified business lines, and access to professional tax and accounting advisory teams that can execute complex tax-planning structures (Riyanto, 2010). Furthermore, larger manufacturing firms typically manage expansive fixed-asset bases, enabling them to utilize substantial tax-deductible depreciation and amortization allowances that reduce taxable profits. Although the Political Cost Hypothesis suggests that regulatory scrutiny may constrain aggressive tax planning, empirical findings indicate that the greater planning capacity of large firms can enable them to maintain lower effective tax burdens than smaller firms (Turyatini, 2017; Fauzan et al., 2019; Eguavoen et al., 2022; Kalbuana et al., 2023).

H1: Sales growth has a significant positive effect on tax avoidance.

H2: Company size has a significant positive effect on tax avoidance.

2.4. The Effect of Leverage on Tax Avoidance

Leverage indicates the extent to which a corporate entity finances its total operational assets through interest-bearing debt rather than equity capital (Kasmir, 2017). Under Article 6, Paragraph 1, Letter a of the Indonesian Income Tax Law (*Undang-Undang Pajak Penghasilan/UU PPh* Number 36 of 2008), interest expenses incurred in business operations are recognized as deductible expenses from gross taxable income. Consequently, debt financing generates an interest tax shield that can reduce taxable income and the resulting tax liability (Paramita et al., 2023).

However, the use of leverage is subject to regulatory and market constraints. Minister of Finance Regulation Number 169/PMK.010/2015 establishes thin capitalization provisions by limiting the debt-to-equity ratio to 4:1 for tax-deductibility purposes, while commercial lenders may impose debt covenants that monitor corporate cash flows and financial compliance. These conditions make leverage an important factor in determining firms' effective tax burdens (Lukito & Oktaviani, 2022; Faradilla & Bhilawa, 2022).

From the perspective of Agency Theory, managers may strategically use debt financing to reduce taxable income through deductible interest expenses while maintaining corporate profitability. This tax-saving mechanism can provide firms with greater flexibility in managing their financial resources and may encourage tax planning. Empirical evidence supports this relationship. Tamam and Tarmidi (2025) found that leverage has a significant positive effect on tax avoidance, indicating that higher debt levels can increase firms' opportunities to benefit from interest deductions. Similarly, Antari and Setiawan (2020) reported a significant positive effect of leverage on tax avoidance. Pattiasina et al. (2021), Malinda and Pradana (2022), and Puspitasari et al. (2022) also documented positive relationships between leverage and tax avoidance. Therefore, leverage is expected to be significantly associated with tax avoidance because debt financing affects firms' taxable income through deductible interest expenses and consequently influences their effective tax burden.

H3: Leverage has a significant effect on tax avoidance.

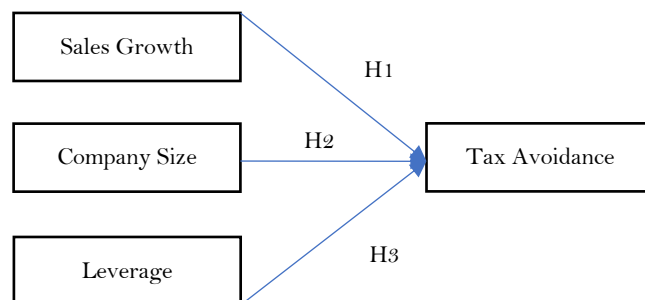


Figure 1. Research Framework

Figure 1 illustrates the research framework examining the effects of sales growth, company size, and leverage on tax avoidance. The framework proposes that sales growth affects tax avoidance as stated in H1, company size affects tax avoidance as stated in H2, and leverage affects tax avoidance as stated in H3. Thus, tax avoidance is the dependent variable, while sales growth, company size, and leverage are the independent variables.

3. Methods

This research employs a quantitative methodology using a balanced panel data regression design. A quantitative approach was selected because the study aims to objectively examine the relationships between sales growth, company size, leverage, and tax avoidance using numerical financial data and statistical analysis. Panel data are used because the study combines cross-sectional observations of manufacturing firms with time-series observations across five consecutive years, allowing the analysis to account for differences among firms and changes over time. The target population encompasses all manufacturing companies listed on the Indonesia Stock Exchange (IDX) throughout the 2021–2025 observation period. Purposive sampling was applied because the study requires firms that meet specific financial and

reporting conditions relevant to the measurement of the research variables. The selection criteria included manufacturing entities listed continuously on the IDX during 2021–2025, publishing complete annual financial reports denominated in Indonesian Rupiah (IDR), and maintaining positive pre-tax earnings to avoid distortions in Effective Tax Rate (ETR) calculations. Applying these criteria yielded a final sample of 50 manufacturing firms observed over five consecutive years, generating 250 balanced firm-year observations.

The operationalisation and measurement of the research variables are structured as follows. Tax avoidance serves as the dependent variable (Y) and is operationalised through the ETR, calculated by dividing total income tax expense by pre-tax accounting income (Rani et al., 2018; Baroroh & Apriyanti, 2020). A lower ETR indicates a relatively lower tax burden and therefore reflects greater tax avoidance. The independent variables comprise three fundamental metrics. First, sales growth (X1) is measured as the percentage change in net sales from the preceding period relative to the base-year sales, capturing the extent of corporate revenue expansion (Afrianti & Uzliawat, 2022; Hasna et al., 2023). Second, company size (X2) is operationalised through the natural logarithm of total corporate assets to reduce scale disparities and improve the comparability of firms with substantially different asset levels (Sawir, 2012; Kalbuana et al., 2023). Third, leverage (X3) is measured using the debt-to-equity ratio by comparing total liabilities with total shareholders' equity, thereby capturing the extent to which corporate operations are financed through debt relative to equity (Kasmir, 2017; Paramita et al., 2023).

The empirical analysis uses panel regression because the data contain repeated observations for the same firms over multiple years. Panel specification tests determine the appropriate regression model, while hypothesis tests assess the statistical significance of each independent variable in explaining tax avoidance. The analysis also considers the estimated coefficients to identify the direction and magnitude of the relationships between the variables. All econometric estimations, panel specification testing, and empirical hypothesis evaluations are performed using EViews version 13. This analytical procedure provides a systematic basis for evaluating the proposed relationships while utilizing the temporal and cross-sectional dimensions of the balanced panel dataset.

4. Results

Descriptive statistical analysis mapped the distribution, central tendencies, and variability of all research variables across 250 balanced panel observations from 50 manufacturing firms between 2021 and 2025. This analysis provides an initial overview of the characteristics of the dataset's characteristics before further econometric analysis. The descriptive statistics include the minimum, maximum, mean, and standard deviation values for each variable, allowing the study to identify the range of observations and the extent of variation among the sampled firms. Table 1 presents the comprehensive descriptive summary of the dependent and independent variables examined in this study.

Table 1. Descriptive Statistics

Measurement	Tax Avoidance	Sales Growth	Company Size	Leverage
Mean	0.2437	0.1376	29.1844	0.7695
Median	0.2307	0.0951	29.4852	0.6190
Maximum	0.9823	1.4438	33.0154	2.9098
Minimum	0.0175	-0.5170	24.3516	0.0460
Std. Dev.	0.0909	0.2118	1.8618	0.5521

Based on Table 1, the dependent variable ETR recorded a minimum value of 0.0175 (1.76%) and a maximum of 0.9823 (98.23%). The mean ETR of 0.2437

(24.38%) and median of 0.2307 (23.07%) demonstrate that sample manufacturing firms generally maintained fiscal compliance close to Indonesia's statutory 22% corporate tax rate. The standard deviation of 0.0909 indicates a relatively stable distribution of ETR across the observations. However, the considerable difference between the minimum and maximum values reflects variation in firms' effective tax burdens. Sales growth spanned from -0.5170 to 1.4438, with a positive mean of 0.1376 (13.77%) and median of 0.0951 (9.52%). These values indicate that manufacturing firms generally experienced positive revenue expansion during the observation period. However, the negative minimum value shows that some firms continued to experience sales contractions following the pandemic period.

Company size ranged from 24.3516 to 33.0154, with a mean of 29.1844 and a standard deviation of 1.8618, reflecting considerable variation in the asset scale of the sampled manufacturing firms while generally representing medium-to-large enterprises. The relatively moderate standard deviation also indicates that company size did not vary excessively across the observations. Meanwhile, leverage ranged between 0.0460 and 2.9098, with a mean of 0.7695 (76.96%). The average leverage indicates that firms generally maintained borrowing structures below 100% of equity, suggesting that debt financing was, on average, lower than shareholders' equity. Nevertheless, the maximum value of 2.9098 indicates that some firms relied substantially more on debt financing than the average firm in the sample.

Table 2. Panel Model Specification and Selection Tests

Test	Statistical Metric	p-value	Decision
Chow Test	Cross-section F = 4.4234	0.0000	FEM
Hausman Test	Chi-Sq. Statistic = 5.3368	0.1487	REM
Lagrange Multiplier Test	Breusch-Pagan = 74.3595	0.0000	REM

The panel data estimator was selected using three standard econometric specification tests, as summarized in Table 2. The Chow test produced a Cross-section F statistic of 4.4234 with a probability of 0.0000 ($p < 0.05$), indicating that the null hypothesis of the Common Effect Model (CEM) is rejected. Therefore, the Fixed Effect Model (FEM) is preferred to CEM because firm-specific effects are statistically significant. The Hausman test subsequently generated a Chi-square statistic of 5.3368 with a probability of 0.1487 ($p > 0.05$).

This result indicates that the null hypothesis is not rejected, suggesting that the Random Effect Model (REM) is more appropriate than FEM because the individual effects are not systematically correlated with the explanatory variables. The Breusch-Pagan Lagrange Multiplier test yielded a statistic of 74.3595 with a probability of 0.0000 ($p < 0.05$), rejecting the null hypothesis that CEM is adequate and further supporting the use of REM. Taken together, the sequential specification tests consistently establish REM as the appropriate final estimator for the panel regression analysis and subsequent hypothesis testing.

Regarding classical assumptions, the Generalised Least Squares (GLS) framework utilised by REM intrinsically compensates for potential heteroskedasticity and serial cross-sectional correlation. For residual normality, although formal Jarque-Bera testing yielded a significant value (J-B = 4931.527, $p < 0.05$) attributable to extreme operational ratios, asymptotic normality is satisfied under the Central Limit Theorem given the large sample size ($N = 250 > 30$) (Gujarati, 2004; Ghozali, 2018). In the multicollinearity evaluation, all pairwise correlation coefficients among independent variables remained well below the 0.80 ceiling (the maximum correlation was 0.164736 between X1 and X3), confirming no multicollinearity.

Table 3. Random Effect Model Estimation and Goodness-of-Fit

Indicator	Value	Interpretation
F-statistic Probability	0.0082	Significant ($p < 0.05$)
R-squared	0.0466	4.66%
Unexplained Variance	95.34%	Explained by factors outside the model

Table 3 displays the parameter estimates under the confirmed Random Effect Model. The F-statistic probability of 0.0082 ($p < 0.05$) indicates that sales growth, company size, and leverage jointly have a statistically significant relationship with ETR, confirming the statistical significance of the estimated panel regression model. The coefficient of determination (R-squared) is 0.0466 (4.66%), indicating that sales growth, company size, and leverage collectively explain 4.66% of the variation in ETR. Meanwhile, the remaining 95.34% of the variation in ETR is attributable to other factors that are not included in the model. This relatively low explanatory proportion suggests that ETR is influenced by various additional firm-specific, financial, operational, and tax-related factors beyond the three independent variables examined in this study. Nevertheless, the significant F-statistic indicates that the independent variables jointly explain variation in ETR among the observed manufacturing firms during 2021–2025.

Table 4. Hypothesis Test Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.	Conclusion
Constant (C)	0.2142	0.0937	2.2862	0.0230	-
Sales Growth	-0.0620	0.0236	-2.6303	0.0090	H1 Accepted
Company Size	0.0002	0.0031	0.0870	0.9307	H2 Rejected
Leverage	0.0389	0.0142	2.7407	0.0065	H3 Accepted

The constant term has a positive coefficient of 0.2142 ($p=0.0230 < 0.05$), indicating that when all explanatory variables are zero, the baseline corporate effective tax rate is 21.43%. For the first independent variable, sales growth, the coefficient is -0.0620, with a t-statistic of -2.6303 and a p-value of 0.0090 ($p < 0.05$). Because the probability falls below the 5% significance level, we accept H1, confirming that sales acceleration significantly reduces the effective tax rate (elevating tax avoidance). Conversely, company size yields a coefficient of 0.000276 ($t = 0.0870$) alongside a p-value of 0.9307 ($p > 0.05$). Because this value far exceeds 0.05, we reject H2, showing that asset size has no statistically meaningful impact on corporate tax avoidance. Leverage shows a positive coefficient of 0.0389, a t-statistic of 2.7407, and a p-value of 0.0065 ($p < 0.05$). Because the p-value is below the 5% alpha threshold, H3 is accepted, supporting the conclusion that greater reliance on debt financing significantly increases the effective tax rate.

5. Discussion

The empirical findings confirm that sales growth has a significant negative effect on ETR, indicating that higher sales growth is associated with a lower effective tax burden and, consequently, greater tax avoidance. This finding suggests that manufacturing firms with stronger revenue growth may face higher tax obligations while also needing more liquidity to support production, inventory, distribution, and marketing activities. Under these conditions, managers may utilize available tax-planning opportunities and deductible expenses to maintain profitability and internal cash flows. From the perspective of Agency Theory, managers may pursue strategies that improve after-tax earnings and support organizational performance (Jensen & Meckling, 1976). This finding is consistent with Hasna et al. (2023), who found that sales growth significantly affects tax avoidance, and Baroroh and Apriyanti (2020), who identified sales as a determinant of tax avoidance. Afrianti and Uzliawat (2022)

also demonstrated the relevance of sales growth in explaining tax avoidance. However, the finding differs from Septiani and Nugraha (2022) and Safitri and Oktris (2023), who reported that sales growth had no significant effect. These differences may reflect variations in industry characteristics, observation periods, and research models.

In contrast, company size does not have a significant effect on ETR, indicating that differences in asset scale do not systematically explain variations in the effective tax burden among the sampled manufacturing firms. Although larger companies generally possess greater financial resources, more sophisticated accounting systems, and stronger tax-planning capabilities, these advantages may be offset by greater regulatory visibility and compliance requirements. This condition can be explained through the Political Cost Hypothesis, which suggests that highly visible firms may face greater scrutiny from regulators and stakeholders. The finding is consistent with Asih and Darmawati (2022), who reported an insignificant effect of company size on tax avoidance. However, it differs from Fauzan et al. (2019), Eguavoen et al. (2022), and Kalbuana et al. (2023), who found significant relationships between company size and tax avoidance. These differences suggest that company size alone may not fully explain tax-avoidance behaviour and that its influence may depend on industry characteristics, regulatory conditions, and other firm-specific factors.

Regarding leverage, the results show a significant positive effect on ETR, indicating that greater leverage is associated with a higher effective tax burden and lower tax avoidance. Although debt financing provides an interest tax shield through deductible interest expenses, highly leveraged firms may also face stronger creditor monitoring and greater financial compliance requirements. Thus, the tax benefits generated by interest deductions do not necessarily encourage firms to adopt more aggressive tax-avoidance strategies. This finding differs from Fauzan et al. (2019), Antari and Setiawan (2020), Pattiasina et al. (2021), Malinda and Pradana (2022), and Tamam and Tarmidi (2025), who reported significant relationships between leverage and tax avoidance. However, the result is comparable in terms of the absence of a reinforcing tax-avoidance effect with Apriani and Sunarto (2022), who found that leverage did not significantly affect tax avoidance. These differences may reflect variations in measurement, sample characteristics, industry context, and observation periods.

These findings have practical implications for corporate managers and tax authorities. Managers should consider sales growth and leverage in tax planning while maintaining compliance with applicable tax regulations. Meanwhile, tax authorities should strengthen monitoring of rapidly growing and highly leveraged manufacturing firms, particularly by examining deductible expenses and debt-related tax benefits. The insignificant effect of company size also suggests that tax supervision should not rely solely on firm scale but should consider broader financial and operational characteristics.

6. Conclusion

This study examined the empirical determinants of corporate tax avoidance across 50 manufacturing companies listed on the Indonesia Stock Exchange during the 2021–2025 period ($N = 250$). Panel data regression utilising the REM confirms that sales growth significantly drives corporate tax avoidance by reducing effective tax rates, as expanding firms utilise deductible operating charges to protect cash liquidity. Leverage has a significant positive impact on effective tax rates, showing that legitimate interest tax shields reduce reliance on aggressive tax sheltering. At the same time, debt covenants and thin capitalisation constraints reinforce corporate compliance. Conversely, company size has no significant effect because

countervailing regulatory scrutiny under the political cost hypothesis offsets its influence.

These findings validate the concurrent relevance of Agency Theory and the Political Cost Hypothesis within an emerging market context. Corporate management is advised to maintain prudent debt structures within statutory 4:1 DER thresholds. At the same time, tax authorities are encouraged to utilise digital compliance integration (Coretax System) to intensify risk-based oversight on high-growth manufacturing firms. This study has several limitations: reliance on commercial accounting-based ETR, a sample limited to manufacturing firms, and a 4.66% R-squared indicating that broader macroeconomic and corporate governance factors drive the remaining fiscal variance. Future research should consider alternative metrics such as Cash ETR and Book-Tax Differences (BTD), incorporate corporate governance proxies (audit committee, independent commissioners), and expand sectoral coverage across the capital market.

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