

TAXATION STUDIES | RESEARCH ARTICLE

Determinants of Tax Avoidance in Indonesian Conventional Banks Listed on the IDX

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DOI<https://doi.org/10.52970/grts.v6i1.2120>**ABSTRACT**

This study investigates the determinants of tax avoidance in conventional commercial banks listed on the Indonesia Stock Exchange (IDX) during 2016–2024. Tax avoidance poses significant challenges to fiscal sustainability in emerging economies, particularly within highly regulated sectors such as banking. While prior studies primarily focus on general corporate characteristics, limited research integrates banking-specific prudential indicators into tax behavior analysis. Addressing this gap, this study examines the effects of profitability, leverage, firm size, audit quality, fixed asset intensity, and Capital Adequacy Ratio (CAR) on tax avoidance. Using purposive sampling, 24 banks were selected, generating 216 firm-year observations. Tax avoidance is proxied by Cash Effective Tax Rate (CETR), where a higher CETR reflects lower tax avoidance. Employing panel data regression analysis based on secondary financial statement data, the results reveal that leverage (DER), firm size, audit quality, fixed asset intensity, and CAR significantly influence tax avoidance, while profitability (ROA) shows no significant effect. Leverage, firm size, audit quality, and CAR negatively affect CETR, indicating higher tax avoidance, whereas fixed asset intensity positively affects CETR, indicating lower tax avoidance. These findings contribute to agency theory by incorporating regulatory capital considerations into corporate tax behavior analysis and provide practical implications for regulators in strengthening governance and tax compliance within the banking sector.

Keywords: Tax Avoidance, CETR, Profitability, Leverage, CAR.**JEL Code:** H26, H25, G21, G32, M41

I. Introduction

Tax revenue constitutes the primary source of state financing in Indonesia, contributing between 75% and 83% of total government revenue during 2016–2024. Nevertheless, Indonesia's tax ratio remains below the ASEAN average, indicating that the country has not fully optimized its tax potential. One of the contributing factors to this condition is tax avoidance, which refers to legal tax planning strategies aimed at minimizing tax liabilities by exploiting regulatory gaps (Hanlon & Heitzman, 2010). Although tax avoidance does not formally violate tax regulations, it may reduce state revenue and affect fiscal sustainability (Desai & Dharmapala, 2006). The banking sector is particularly relevant in this context due to its strategic role in financial intermediation and economic stability. Banks possess complex financial structures and engage in various cross-border transactions, which may create opportunities for sophisticated tax planning. However,



empirical findings regarding the determinants of tax avoidance remain inconsistent across studies, especially concerning financial performance and governance characteristics.

Prior studies have examined the influence of profitability, leverage, firm size, audit quality, and asset structure on tax avoidance, yet the results remain mixed. For instance, profitability has been found to have positive, negative, or insignificant effects on tax avoidance in different empirical contexts (Dyrenge et al., 2008); (Chen et al., 2010); and (Ardiyanti & Puspitasari, 2025). Similarly, leverage may reduce taxable income through interest deductibility, but its relationship with tax avoidance behavior varies across firms and industries. In the banking sector, regulatory factors such as Capital Adequacy Ratio (CAR) play a crucial role in maintaining financial stability, yet limited research integrates this prudential indicator into tax avoidance analysis. Grounded in agency theory, which explains conflicts of interest between principals and agents (Jensen & Meckling, 1976), tax avoidance may arise as a managerial strategy to balance profit maximization and regulatory constraints (Ardiyanti & Puspitasari, 2025). Therefore, this study addresses the following research question: Do profitability, leverage, firm size, audit quality, fixed asset intensity, and Capital Adequacy Ratio significantly influence tax avoidance in conventional commercial banks listed on the Indonesia Stock Exchange during 2016–2024?

Based on the identified research gap, this study aims to analyze the determinants of tax avoidance in Indonesian conventional banks by integrating financial characteristics and prudential regulatory indicators. Agency theory provides the theoretical foundation by explaining how managerial decisions regarding tax planning may reflect agency conflicts between shareholders, management, and the government as tax authority (Jensen & Meckling, 1976). Conceptually, profitability and leverage represent financial incentives, firm size and audit quality reflect governance mechanisms, fixed asset intensity relates to depreciation-based tax planning, and CAR captures regulatory capital considerations specific to banking institutions. By examining these variables simultaneously, this study seeks to provide a more comprehensive understanding of tax avoidance behavior within the Indonesian banking sector. The findings are expected to contribute to the development of taxation and corporate governance literature, as well as provide practical insights for regulators in strengthening tax compliance and supervision in the banking industry.

II. Literature Review and Hypothesis Development

2.1 Agency Theory

Agency theory explains the contractual relationship between principals and agents, where shareholders delegate authority to management to operate the company (Jensen & Meckling, 1976). Differences in interests and information asymmetry may encourage managers to take actions that benefit the company or themselves, including tax planning strategies. In the taxation context, tax avoidance is viewed as a legal effort to minimize tax liabilities by exploiting regulatory gaps (Hanlon & Heitzman, 2010). Firms with higher profitability tend to face greater tax burdens, which may motivate managers to reduce taxable income. Leverage can also be used as a tax-saving strategy because interest expenses reduce taxable income. Larger firms generally have more resources and expertise to conduct tax planning. In addition, firms with higher fixed asset intensity may benefit from depreciation expenses that lower taxable income. In the banking sector, Capital Adequacy Ratio (CAR) reflects regulatory capital strength, which may influence managerial decisions related to tax management. Based on agency theory and prior empirical evidence, this study proposes that profitability, leverage, firm size, audit quality, fixed asset intensity, and CAR influence tax avoidance in conventional banks (Dyrenge et al., 2008).

2.2 Tax Avoidance

Tax avoidance is defined as a legal effort to minimize tax liabilities without violating applicable tax regulations (Mardiasmo, 2013). Corporate taxpayers generally engage in tax planning strategies to improve

tax efficiency in order to enhance profitability and strengthen cash flow. Although such practices do not directly violate legal provisions, tax avoidance remains a concern because it may reduce government revenue and narrow the tax base, thereby affecting the government's fiscal capacity to finance national development. From a theoretical perspective, tax avoidance can be explained through agency theory, which views the relationship between shareholders (principals) and management (agents) as a contractual arrangement that may give rise to conflicts of interest (Jensen & Meckling, 1976). Differences in interests and information asymmetry between the two parties may encourage managers to make strategic decisions, including tax-related policies, to maximize corporate and personal benefits. In this context, management may exploit regulatory gaps to reduce tax burdens as part of a profit-maximization strategy, even though such actions may generate fiscal and reputational risks in the future (Rahmayani et al., 2021). Therefore, based on agency theory, firm characteristics such as profitability, leverage, firm size, fixed asset intensity, audit quality, and Capital Adequacy Ratio (CAR) are expected to influence a company's tendency to engage in tax avoidance, particularly in the banking sector, which plays a significant role in contributing to state tax revenue.

Cash Effective Tax Rate (CETR) measures tax payments based on the actual cash outflows made by the company rather than on accrued tax expenses that may be deferred or temporary in nature. Therefore, CETR is considered more appropriate in capturing short-term tax avoidance practices compared to other measures, such as the Effective Tax Rate (ETR), which is based on an accrual approach (Dyrenge et al., 2008). This measure is particularly relevant for the banking sector, where financial transactions are complex and accrual-based accounting adjustments may obscure the actual cash tax burden, making CETR a more reliable indicator of real tax payment behavior (Ardiyanti & Puspitasari, 2025). The use of Cash Effective Tax Rate (CETR) as a proxy for tax avoidance represents a negative measurement approach, meaning that a higher CETR indicates lower tax avoidance, whereas a lower CETR reflects higher tax avoidance (Pratama, 2023).

2.3 Profitability

Profitability reflects a company's ability to generate earnings from its operational activities and, in this study, is proxied by Return on Assets (ROA), which measures net income relative to total assets. ROA indicates the effectiveness of a firm in utilizing its assets to generate profit, particularly in the banking sector where assets generally consist of property, trading assets, loans extended to customers, and placements with the central bank (Novriyanti & Warga Dalam, 2020). From an accounting perspective, assets represent economic resources expected to provide future benefits, while expenses reduce those benefits within a specific period. Higher ROA indicates greater efficiency in generating profit relative to the resources employed. In the taxation context, expenses function as deductions in calculating taxable income, thereby affecting tax liabilities. Based on agency theory, higher profitability may create incentives for managers to optimize after-tax income, yet firms with strong financial performance may also demonstrate higher tax compliance to maintain reputation and reduce regulatory scrutiny (Hanlon & Heitzman, 2010; Jensen & Meckling, 1976). Empirical studies by Ayu & Kartika (2019), Ariska et al., (2020), and (Robin et al., 2021) found that profitability has a negative and significant effect on tax avoidance, indicating that more profitable firms tend to engage less in aggressive tax strategies. In the context of this study, a higher ROA is expected to increase CETR, which implies lower tax avoidance, as CETR represents a negative proxy of tax avoidance. Therefore, the first hypothesis is formulated as follows:

H1: Profitability has a negative and significant effect on tax avoidance.

2.4 Leverage

Leverage represents the extent to which a company's assets are financed through debt, indicating the proportion of external financing relative to equity (Robin et al., 2021). It reflects the company's reliance on borrowed funds in supporting its operational activities (Fahmi, 2012). In this study, leverage is proxied by the Debt to Equity Ratio (DER), which measures the firm's ability to fulfill its obligations arising from debt using shareholders' equity (G. A. P. Ayu & Kartika, 2019). From a taxation perspective, greater reliance on debt

increases interest expenses, which are deductible in the calculation of taxable income. Consequently, higher interest expenses reduce taxable profit and ultimately lower corporate tax liabilities. Based on agency theory, managers may utilize debt strategically to optimize after-tax earnings, especially when debt financing provides tax shields that benefit shareholders (Hanlon & Heitzman, 2010; Jensen & Meckling, 1976). Given that Cash Effective Tax Rate (CETR) is a negative proxy for tax avoidance, a higher level of leverage is expected to reduce CETR, indicating higher tax avoidance. Empirical studies by Dewianawati & Setiawan, (2021), Robin et al., (2021), and Fajarwati & Ramadhanti, (2021) found that leverage has a positive and significant effect on tax avoidance. Therefore, the second hypothesis is formulated as follows:

H2: Leverage has a positive and significant effect on tax avoidance.

2.5 Firm Size

Firm size is considered one of the factors influencing tax avoidance practices and, in this study, is proxied by total assets. Larger firms generally possess greater assets, broader operational networks, and more qualified human resources, enabling them to engage in more sophisticated tax planning strategies. In the banking sector, larger total assets often support business expansion, including the establishment of domestic and overseas branches, which may increase transactions with affiliated entities. Such conditions create opportunities for tax planning schemes, including thin capitalization, profit shifting to lower-tax jurisdictions, cost shifting, and the utilization of branch profit tax strategies. In addition, firms may reduce taxable income through deductible employee income tax expenses, depreciation, and amortization of assets in accordance with tax regulations. Consequently, larger firms are expected to exhibit lower Cash Effective Tax Rate (CETR), indicating higher tax avoidance. However, based on political cost theory, large firms are also subject to greater public scrutiny and regulatory pressure, which may constrain aggressive tax behavior (Robin et al., 2021). From an agency theory perspective, managers of larger firms may exploit available resources and information advantages to optimize tax outcomes (Jensen & Meckling, 1976). Empirical studies by Rahmayani et al., (2021), Sulaeman, (2021), and S. A. D. Ayu, (2019) found that firm size has a positive and significant effect on tax avoidance. Therefore, the third hypothesis is formulated as follows:

H3: Firm size has a positive and significant effect on tax avoidance.

2.6 Audit Quality

Audit quality refers to the probability that an auditor will detect and report material misstatements or violations in a client's financial statements through the audit process (Windayani, 2018). As an essential component of corporate governance, audit quality functions as a monitoring mechanism to oversee managerial actions and reduce the likelihood of fraud and accounting manipulation (Suryani, 2021). Within the framework of agency theory, independent auditors play a crucial role in mitigating information asymmetry and potential conflicts of interest between principals (shareholders) and agents (management) (Jensen & Meckling, 1976). High audit quality is expected to enhance transparency and ensure compliance with accounting and tax regulations, thereby limiting aggressive tax avoidance practices (Hanlon & Heitzman, 2010). Firms audited by high-quality auditors are more likely to adhere to regulatory standards and avoid tax strategies that could increase legal and reputational risks. Empirical evidence from Windayani, (2018) shows that audit quality has a negative and significant effect on tax avoidance. Accordingly, higher audit quality is expected to increase Cash Effective Tax Rate (CETR), indicating lower tax avoidance. Therefore, the fourth hypothesis is formulated as follows:

H4: Audit quality has a negative effect on tax avoidance.

2.7 Fixed Asset Intensity

Fixed asset intensity reflects the proportion of a company's total assets allocated to fixed assets and is commonly measured by the ratio of fixed assets to total assets (Fajarwati & Ramadhanti, 2021; Kalbuana et al., 2020). This ratio indicates the dominance of fixed assets within the firm's asset structure and is closely associated with depreciation expenses arising from asset ownership. Higher investment in fixed assets generates greater depreciation expenses, which reduce taxable income and subsequently lower corporate tax liabilities. From a taxation perspective, depreciation serves as a deductible expense that directly influences the calculation of taxable income. Therefore, an increase in depreciation expense results in a lower Cash Effective Tax Rate (CETR), indicating higher tax avoidance. In line with agency theory, managers may utilize depreciation policies strategically to optimize after-tax income within the limits of tax regulations (Hanlon & Heitzman, 2010; Jensen & Meckling, 1976). Empirical evidence by Hafizh & Africa, (2022) shows that fixed asset intensity has a positive and significant effect on tax avoidance. Accordingly, firms with higher fixed asset intensity are expected to exhibit greater tax avoidance behavior. Therefore, the fifth hypothesis is formulated as follows:

H5: Fixed asset intensity has a positive effect on tax avoidance.

2.8 Capital Adequacy Ratio (CAR)

Capital Adequacy Ratio (CAR) measures the adequacy of a bank's capital in supporting its risk-weighted assets (Pratiwi, 2015). According to international standards established by the Bank for International Settlements (BIS) under the Basel Accord, banks are required to maintain a minimum CAR of 8 percent to ensure financial stability (Supervision, 2011). A higher CAR reflects stronger capital resilience and a more stable financial condition, enabling banks to absorb operational and financial risks more effectively. From an agency theory perspective, financially stable banks with strong capital positions may experience lower financial pressure and greater reputational concerns, which can influence managerial decisions, including tax policies (Hanlon & Heitzman, 2010; Jensen & Meckling, 1976). Banks with high CAR are generally expected to adopt more prudent strategies and avoid aggressive tax avoidance practices to maintain regulatory compliance and institutional credibility. Empirical evidence from Zhang, (2019) indicates that CAR has a negative effect on tax avoidance. Given that Cash Effective Tax Rate (CETR) is a negative proxy for tax avoidance, a higher CAR is expected to increase CETR, indicating lower tax avoidance. Therefore, the sixth hypothesis is formulated as follows:

H6: Capital Adequacy Ratio (CAR) has a negative effect on tax avoidance.

III. Research Method

This study employs secondary data derived from the annual financial statements of conventional commercial banks listed on the Indonesia Stock Exchange (IDX) during the 2016–2024 period. Data collection was conducted using documentation techniques by accessing the official IDX website (www.idx.co.id) and the respective official websites of the banks. The sampling technique used in this study was purposive sampling (Sugiyono, 2013), with the following criteria:

- a. Conventional commercial banks listed on the Indonesia Stock Exchange (IDX) during the 2016–2024 period.
- b. Banks that consistently published annual financial statements throughout the 2016–2024 period.
- c. Banks that provided complete financial data required for all research variables during the observation period.

The data collected from a total population of 46 companies but Based on these criteria, 24 banks were selected, resulting in 216 firm-year observations. The data were analyzed using a quantitative approach with multiple linear regression to examine the effects of profitability, leverage, firm size, audit quality, fixed asset intensity, and Capital Adequacy Ratio (CAR) on tax avoidance.

- a. Tax avoidance is measured using the Cash Effective Tax Rate (CETR), calculated as the ratio of cash tax paid to pre-tax income. CETR is a negative proxy of tax avoidance, meaning that a higher CETR indicates lower tax avoidance, while a lower CETR indicates higher tax avoidance (Pratama, 2023).
- b. Profitability is measured using Return on Assets (ROA), calculated as net income divided by total assets.
- c. Leverage is measured using the Debt to Equity Ratio (DER), calculated as total liabilities divided by total equity.
- d. Firm size is proxied by the natural logarithm of total assets. Audit quality is measured using a dummy variable, where a value of 1 indicates that the financial statements are audited by a Big Four audit firm, and 0 otherwise.
- e. Fixed asset intensity is measured as the ratio of fixed assets to total assets.
- f. Capital Adequacy Ratio (CAR) is calculated as total capital divided by risk-weighted assets, reflecting the bank's capital strength in accordance with regulatory standards.

Descriptive statistical analysis was conducted to summarize and describe the characteristics of the data using mean, minimum, maximum, and standard deviation values. Classical assumption tests were performed to ensure the feasibility of the regression model, including multicollinearity tests to assess correlations among independent variables, autocorrelation tests to detect relationships among residuals, heteroscedasticity tests to examine the variance consistency of error terms, and normality tests to evaluate data distribution. Subsequently, multiple linear regression analysis was employed to determine the influence of the independent variables on tax avoidance. The F-test was used to assess the simultaneous effect of all independent variables, while the coefficient of determination (R^2) was used to measure the explanatory power of the model (Ghozali, 2016). Hypothesis testing was conducted using t-tests to evaluate the partial effect of each independent variable. If the p-value ≤ 0.05 , H_0 is rejected and H_a is accepted; if the p-value > 0.05 , H_0 is accepted and H_a is rejected. All statistical analyses were performed using IBM SPSS 25 software (Ghozali, 2016).

IV. Results and Discussion

4.1. Descriptive Statistics Result

Table 1. Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Median	Std. Deviation
CETR (Y)	216	-4.88	394.12	30.05	23.73	31.89
Profitability (ROA) (X1)	216	-18.08	3.28	0.74	0.75	1.92
Leverage (DER) (X2)	216	0.81	15.39	5.74	5.50	2.21
Firm Size (X3)	216	14.58	21.61	18.36	18.45	1.65
Audit Quality (X4)	216	0.00	1.00	0.64	1.00	0.48
Fixed Asset Intensity (X5)	216	0.47	8.01	2.39	2.02	1.63
CAR (X6)	216	10.52	85.24	24.43	22.46	10.89

Based on 216 firm-year observations of conventional commercial banks during 2016–2024, the descriptive statistics reflect key structural characteristics of the banking industry. The average CETR of 30.05 with a median of 23.73 and a relatively high standard deviation (31.89) indicates substantial variation in tax management practices, likely influenced by deferred tax adjustments, fiscal corrections, or performance

pressures during crisis periods. Profitability (ROA) records a mean of 0.74%, consistent with the banking sector's generally modest yet stable return profile, while the proximity between mean and median suggests a relatively balanced distribution despite several extreme values. The average leverage (DER) of 5.74 reflects the inherently high-leverage nature of banking institutions, where intermediation activities rely heavily on third-party funds but remain subject to prudential supervision. Firm size shows limited dispersion, indicating a relatively homogeneous sample of medium to large banks, and the dominance of Big Four auditors (median = 1.00) underscores the importance of reporting credibility in a highly regulated environment. Fixed asset intensity remains moderate, consistent with banks' asset structures being concentrated in financial assets rather than physical capital. Importantly, the average Capital Adequacy Ratio (CAR) of 24.43% is substantially above the minimum regulatory requirements set by the Financial Services Authority (OJK), which generally mandates a minimum CAR of 8% in line with Basel III standards, with additional capital buffers depending on risk profile and systemic importance. This high average CAR indicates strong capitalization and resilience, suggesting that the sampled banks maintained capital levels well above the Basel and OJK thresholds throughout the observation period. Overall, the findings portray a prudentially regulated and well-capitalized banking sector, in which regulatory capital requirements and structural financial characteristics fundamentally shape corporate financial and tax management behavior.

4.2. Classical Assumption

Table 2. Results of Classical Assumption Tests

Test Type	Method	Result	Criteria	Conclusion
Normality	Kolmogorov-Smirnov	Asymp. Sig = 0.343	Sig > 0.05	Normally Distributed
Heteroscedasticity	Glejser Test	All Sig > 0.05	Sig > 0.05	No Heteroscedasticity
Autocorrelation	Durbin-Watson	DW = 2.195	Value \approx 2	No Autocorrelation
Multicollinearity	VIF & Tolerance	VIF < 10; Tolerance > 0.10	VIF < 10; Tolerance > 0.10	No Multicollinearity

The results of the classical assumption tests indicate that the regression model satisfies all required statistical assumptions. The normality test using the Kolmogorov–Smirnov method produced an Asymp. Sig value of 0.343, which exceeds the 0.05 significance threshold, confirming that the residuals are normally distributed. The heteroscedasticity test conducted through the Glejser method shows that all independent variables have significance values greater than 0.05, indicating the absence of heteroscedasticity and suggesting that the variance of the residuals is constant across observations. Furthermore, the Durbin–Watson statistic of 2.195 demonstrates that there is no autocorrelation problem, as the value is close to 2, implying independence of residuals. The multicollinearity test results also reveal that all variables have Variance Inflation Factor (VIF) values below 10 and Tolerance values above 0.10, confirming that there is no strong correlation among independent variables. Overall, these findings demonstrate that the regression model is statistically robust and appropriate for further hypothesis testing and interpretation of the relationships between profitability, leverage, firm size, audit quality, fixed asset intensity, Capital Adequacy Ratio (CAR), and tax avoidance.

4.3. Data Analysis Techniques

a. Multiple Linear Regression Analysis

Based on the results of the data processing using multiple linear regression analysis, the estimated parameters summarizing the relationship between the independent variables and the Cash Effective Tax Rate (CETR) are presented in Table 3. These statistical test results include the regression coefficients (B), significance levels (Sig.), and collinearity statistics to validate the strength of the influence and the feasibility of the research model. Through these data, the extent to which factors such as profitability, leverage, firm size, audit quality,

fixed asset intensity, and Capital Adequacy Ratio (CAR) partially contribute to determining corporate tax avoidance behavior can be analyzed.

Table 3. Regression Test Results

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	71.578	2.770		25.843	.000		
	Lag_ Profitability	.242	.134	.217	1.810	.072	.121	8.254
	Lag_ Leverage	-.289	.128	-.272	-2.265	.025	.120	8.317
	Ln_ Firm size	-1.749	.125	-.827	-13.979	.000	.496	2.016
	Audit quality	-4.710	.841	-.248	-5.599	.000	.885	1.129
	Ln_ Fixed asset intensity	1.134	.464	.151	2.444	.016	.452	2.212
	Capital Adequacy Ratio (CAR)	-.274	.035	-.367	-7.887	.000	.800	1.250

a. Dependent Variable: CETR

Multiple linear regression analysis was utilized to assess the extent to which the independent variables simultaneously and partially influence the dependent variable (tax avoidance) (Ghozali, 2016). This model facilitates the examination of five independent variables: profitability, leverage, liquidity, capital intensity, and corporate social responsibility (CSR).

The resulting regression equation is as follows:

$$\text{Tax Avoidance} = 71.578 + 0.242\text{Lag}_\text{(Profitability)} - 0.289\text{Lag}_\text{(Leverage)} - 1.749\text{Ln}_\text{ Firm Size} - 4.710\text{Audit quality} + 1.134\text{Ln}_\text{ Fixed asset intensity} - 0.274\text{Capital Adequacy Ratio (CAR)} + e$$

Constant (71.578). If all independent variables are equal to zero, the estimated value of the dependent variable is 71.578. Based on the results presented in Table 4.3, the regression analysis shows that:

- 1) The Profitability (Lag_ROA) variable has a coefficient of 0.242 with a significance level of 0.072 (> 0.05), indicating that Lag_ROA has a positive but statistically insignificant effect on CETR.
 - 2) The Leverage (Lag_DER) variable shows a coefficient of -0.289 with a significance value of 0.025 (< 0.05), suggesting that Lag_DER has a negative and statistically significant effect on CETR. This implies that an increase in Lag_DER tends to reduce CETR.
 - 3) The Firm Size (Ln Firm Size) has a coefficient of -1.749 with a significance level of 0.000, demonstrating a negative and statistically significant effect on CETR.
 - 4) The Audit Quality variable has a coefficient of -4.710 with a significance value of 0.000, confirming that it has a negative and statistically significant effect on CETR.
 - 5) The natural logarithm of Fixed Asset Intensity (Ln Fixed Asset Intensity) shows a coefficient of 1.134 with a significance level of 0.016 (< 0.05), indicating a positive and statistically significant effect on CETR.
 - 6) The Capital Adequacy Ratio (CAR) variable has a coefficient of -0.274 with a significance value of 0.000, revealing a negative and statistically significant effect on CETR.
- Overall, most of the independent variables in the model have a statistically significant influence on CETR, except for Lag_ROA, which is not statistically significant.

b. R² Test ResultsTable 4. R² Test Results

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.863a	.745	.734	4.77567	2.195

The coefficient of determination test is performed to evaluate the extent to which the regression model is able to explain variations in the dependent variable. Based on the results presented in Table 4, the following findings were obtained:

- 1) The results of the coefficient of determination test indicate that the R Square value is 0.745, implying that 74.5% of the variation in CETR can be explained by the independent variables included in the model, while the remaining 25.5% is influenced by other factors outside the research model.
- 2) The Adjusted R Square value of 0.734 suggests that after adjusting for the number of independent variables, the model remains capable of explaining 73.4% of the variation in CETR.
- 3) Furthermore, the Model Summary table shows an R value of 0.863, reflecting the degree of correlation between all independent variables (Lag_ROA, Lag_DER, Ln Firm Size, Audit Quality, Ln Fixed Asset Intensity, and CAR) and the dependent variable, CETR.
- 4) The R value falls within the interval of 0.80–1.00, the simultaneous relationship between the independent variables and CETR is categorized as very strong, indicating that changes in the independent variables are highly associated with changes in CETR within the proposed research model.

c. F Text Result

Table 5. Results of the F-test

ANOVAa						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9779.722	6	1629.954	71.467	.000b
	Residual	3352.633	147	22.807		
	Total	13132.355	153			

Based on the results of the F-test (simultaneous test) presented in Table 5, the calculated F-value is 71.467 with a significance level of 0.000. Since the significance value is less than 0.05, it can be concluded that the independent variables—Lag_ROA, Lag_DER, Ln Firm Size, Audit Quality, Ln Fixed Asset Intensity, and Capital Adequacy Ratio (CAR)—simultaneously have a significant effect on CETR.

d. Hypothesis Test Results

Table 6. Partial t-Test Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	71.578	2.770		25.843	.000
	Lag_Profitability	.242	.134	.217	1.810	.072
	Lag_Leverage	-.289	.128	-.272	-2.265	.025
	Ln_Firm size	-1.749	.125	-.827	-13.979	.000
	Audit quality	-4.710	.841	-.248	-5.599	.000
	Ln_Fixed asset intensity	1.134	.464	.151	2.444	.016

Capital Adequacy Ratio (CAR)	-.274	.035	-.367	-7.887	.000
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The t-test is employed to assess the partial effect of each independent variable on the dependent variable. Based on the results presented in Table 6, the following conclusions can be drawn:

- 1) Profitability variable has a coefficient of 0.242 with a significance level of 0.072 (> 0.05), indicating that it does not have a statistically significant effect on CETR. The positive coefficient suggests that an increase in ROA tends to increase CETR or reduce the level of tax avoidance; however, this relationship is not statistically significant.
- 2) Leverage has a coefficient of -0.289 with a significance value of 0.025 (< 0.05), indicating that it has a statistically significant effect on CETR. The negative coefficient sign implies that an increase in DER leads to a decrease in CETR, which means that the level of tax avoidance increases.
- 3) Firm size has a coefficient of -1.749 with a significance value of 0.000, indicating a statistically significant effect on CETR. The negative coefficient suggests that larger firms tend to have lower CETR, implying a higher level of tax avoidance.
- 4) Audit quality has a coefficient of -4.710 with a significance value of 0.000, indicating that it has a statistically significant effect on CETR. The negative coefficient suggests that higher audit quality is associated with a decrease in CETR, which implies an increase in tax avoidance.
- 5) The fixed asset intensity variable shows a coefficient of 1.134 with a significance level of 0.016 (< 0.05), indicating that it has a statistically significant effect on CETR. The positive coefficient suggests that higher fixed asset intensity leads to an increase in CETR, which implies a lower level of tax avoidance.
- 6) Capital Adequacy Ratio (CAR) has a coefficient of -0.274 with a significance value of 0.000, indicating that it has a statistically significant effect on CETR. The negative coefficient implies that an increase in CAR leads to a decrease in CETR, which means that the level of tax avoidance increases.

4.4. Discussion

Overall, the results of the hypothesis testing indicate that profitability is the only variable that does not show a statistically significant effect, whereas the remaining five variables significantly influence CETR. These findings indicate that the determinants of tax avoidance in the banking sector cannot be fully explained by the theoretical approaches commonly applied to non-financial sectors. Therefore, this study underscores the presence of distinctive structural and institutional characteristics within the banking industry that influence tax behavior in a different manner.

a. Effect of Profitability on Tax Avoidance

The regression coefficient of ROA of 0.242 indicates that a one-unit increase in ROA is associated with an increase of 0.242 points in CETR, which economically suggests a tendency toward lower levels of tax avoidance, given that a higher CETR reflects greater tax compliance. However, the significance value of 0.072 (> 0.05) indicates that this relationship is not statistically significant, implying that profitability cannot be considered a primary determinant of variations in tax avoidance practices within the banking sector. The relatively small magnitude of the coefficient further suggests that changes in profitability exert only a limited impact on tax compliance compared to more structural variables, such as firm size and audit quality. From an agency theory perspective, higher profitability may theoretically incentivize management to engage in tax planning strategies to minimize tax burdens, as increased earnings lead to higher tax liabilities. Nevertheless, this relationship may weaken in the presence of strong monitoring mechanisms and stringent disclosure requirements, particularly in the highly regulated banking industry. The implementation of domestic tax regulations, the Automatic Exchange of Information (AEOI) framework, and the global Base Erosion and Profit Shifting (BEPS) initiative have significantly narrowed opportunities for aggressive tax avoidance practices. Moreover, the study period, which encompasses the pre-pandemic, pandemic, and post-pandemic phases,

reflects heightened governmental oversight of the banking industry, particularly through financial system stability policies and strengthened risk reporting requirements. During the pandemic, regulatory focus on banking resilience and transparency likely enhanced fiscal compliance, thereby reducing the direct influence of profitability on tax avoidance strategies. This explains why, although the direction of the ROA coefficient is theoretically consistent with tax compliance concepts, its empirical effect is not statistically significant

b. Effect of Leverage on Tax Avoidance

The regression coefficient of DER of -0.289 indicates that a one-unit increase in leverage reduces CETR by 0.289 points, implying a higher level of tax avoidance, and the significance value of 0.025 (< 0.05) confirms that this relationship is statistically significant. This finding suggests that capital structure is an important structural determinant of tax avoidance in the banking sector. Theoretically, debt financing generates interest expenses that are deductible from taxable income, thereby creating a tax shield benefit and enhancing tax efficiency. Although domestic regulations, such as the thin capitalization rule under PMK 169/PMK.010/2015, limit the debt-to-equity ratio, firms can still legally utilize debt within regulatory thresholds to optimize their tax burden. At the international level, the Base Erosion and Profit Shifting (BEPS) initiative aims to curb excessive base erosion through intra-group financing schemes but does not eliminate the tax advantages of legitimate commercial interest expenses. During the pandemic period, increased liquidity needs due to credit restructuring programs and economic stimulus measures encouraged greater reliance on external financing, further strengthening the role of leverage in shaping corporate tax management strategies both before and after the crisis. Therefore, DER remains a significant factor influencing tax avoidance, as leverage functions as a key instrument in corporate tax optimization.

c. Effect of Firm Size on Tax Avoidance

The regression coefficient of firm size (-1.749) indicates a substantial economic effect, where a one-unit increase in the natural logarithm of firm size reduces CETR by 1.749 points, implying a significant increase in tax avoidance. The magnitude of this coefficient suggests that firm size is one of the most dominant variables in explaining variations in tax avoidance practices within the banking sector, and the significance value of 0.000 confirms that this relationship is highly statistically significant. From a theoretical perspective, larger firms possess stronger financial resources, greater access to professional expertise and tax consultants, and enhanced capacity to design more sophisticated tax planning strategies compared to smaller firms. In the banking industry, larger size is often associated with cross-border operations, higher intra-group transactions, and more complex organizational structures, creating opportunities for tax optimization through mechanisms such as cost shifting, transfer pricing, and profit shifting within the regulatory framework, including BEPS. Although large banks are subject to stricter regulatory oversight, their superior technological capacity, internal control systems, and human capital enable them to conduct efficient tax planning within domestic and international regulatory boundaries. Across the pre-pandemic, pandemic, and post-pandemic periods, larger banks also demonstrated stronger regulatory adaptability, reinforcing the consistent and significant influence of firm size on tax avoidance.

d. Effect of Quality Audit on Tax Avoidance

The regression coefficient of audit quality (-4.710) indicates a very strong economic effect, showing that firms audited by Big Four audit firms have CETR values approximately 4.710 points lower, implying a relatively higher level of tax avoidance compared to firms audited by non-Big Four auditors. The significance value of 0.000 confirms that this relationship is highly statistically significant, positioning audit quality as one of the most influential variables in the model. From an agency theory perspective, audit quality functions as an external monitoring mechanism aimed at reducing information asymmetry between principals and agents by enhancing the credibility of financial reporting. However, auditors primarily ensure the fairness of financial statements and compliance with accounting standards and tax regulations, rather than restricting tax planning strategies that remain within legal boundaries. Firms engaging high-quality auditors typically

possess more robust reporting systems, comprehensive tax documentation, and more structured tax planning processes, enabling them to implement lawful tax planning more effectively. In the context of increasing global transparency through the Automatic Exchange of Information (AEOI) and the Base Erosion and Profit Shifting (BEPS) initiatives, companies are required to maintain more detailed and sophisticated tax reporting systems. Consequently, firms audited by high-quality auditors may have greater capacity to manage both compliance and tax efficiency simultaneously, which explains the negative relationship between audit quality and CETR, or its association with higher levels of tax avoidance in this study.

e. Effect of Fixed asset intensity on Tax Avoidance

The regression coefficient of 1.134 indicates that a one-unit increase in the natural logarithm of fixed asset intensity increases CETR by 1.134 points, implying a lower level of tax avoidance. The magnitude of this coefficient suggests that a firm's asset structure exerts a meaningful economic influence in limiting the flexibility of tax policy decisions, while the significance value of 0.016 (< 0.05) confirms that the relationship is statistically significant. Theoretically, fixed assets generate depreciation expenses that are tax-deductible under prevailing tax regulations, allowing firms with higher proportions of fixed assets to obtain legal tax benefits without resorting to aggressive tax avoidance strategies. Moreover, detailed domestic tax rules governing depreciation methods and useful lives restrict opportunities for asset-based manipulation, leading firms with higher fixed asset intensity to exhibit more stable levels of tax compliance. During the pandemic period, fixed asset investment in the banking sector remained relatively stable and largely consisted of productive assets with clear fiscal treatment. As a result, firms with higher fixed asset intensity consistently reported higher CETR values both before and after the pandemic, supporting the conclusion that fixed asset intensity plays a significant role in reducing tax avoidance practices in this study.

f. Effect of Capital Adequacy Ratio (CAR) on Tax Avoidance

The regression coefficient of Capital Adequacy Ratio (CAR) of -0.274 indicates that a one-unit increase in CAR reduces CETR by 0.274 points, implying a higher level of tax avoidance, and the significance value of 0.000 confirms that this relationship is highly statistically significant. Although the magnitude of the coefficient is smaller than that of firm size or audit quality, the result demonstrates that bank capital strength exerts a meaningful economic influence on corporate tax management policies. Theoretically, CAR reflects a bank's capital adequacy and its capacity to manage risk and maintain financial stability in accordance with Basel Accord standards and national banking regulations. Banks with stronger capital positions tend to possess greater financial flexibility in determining financing structures, investment strategies, and lawful tax planning policies to enhance financial efficiency. During the pandemic, regulators emphasized capital strengthening to safeguard financial system stability, enabling banks with higher CAR to design long-term financial strategies, including tax optimization. In the post-pandemic period, this capital flexibility continued to provide room for structured and legal tax planning, which explains why CAR remains a significant determinant of tax avoidance in this study.

V. Conclusion

This study examines the determinants of tax avoidance among conventional commercial banks listed on the Indonesia Stock Exchange during the 2016–2024 period. The findings indicate that profitability (ROA) has a negative but statistically insignificant effect on tax avoidance, suggesting that earnings performance is not the primary driver of tax planning behavior in the banking sector. In contrast, leverage (DER), firm size, audit quality, and Capital Adequacy Ratio (CAR) exhibit positive and statistically significant effects on tax avoidance, while fixed asset intensity shows a negative and significant effect. These results imply that tax avoidance practices in the banking industry are more strongly influenced by structural and governance-related factors than by profitability alone, highlighting the importance of capital structure, organizational scale, audit characteristics, asset composition, and capital strength in shaping corporate tax strategies.

From a theoretical perspective, the results reinforce the relevance of agency theory in explaining tax avoidance behavior within a highly regulated industry. The findings demonstrate that corporate tax decisions are not solely determined by profit incentives but are significantly shaped by structural characteristics and external monitoring mechanisms, including tax regulations, banking supervision, and global transparency initiatives such as AEOI and BEPS. The significant roles of leverage, firm size, audit quality, and CAR suggest that organizational capacity and financial structure provide firms with varying degrees of flexibility in conducting lawful tax planning. Thus, this study contributes to the corporate tax planning literature by emphasizing that tax avoidance in the banking sector is better explained by structural strength and regulatory environment than by financial performance alone.

From a managerial perspective, the findings suggest that banking institutions should integrate tax management strategies with prudent capital structure decisions, asset allocation policies, and strong governance practices to ensure that tax planning remains efficient yet compliant with regulatory standards. For investors, structural indicators such as leverage, capital adequacy, firm size, and audit quality may serve as important signals in assessing tax risk exposure and long-term financial sustainability. For policymakers, the results underline the importance of coordinated oversight between tax authorities and banking regulators to ensure that tax planning activities remain within legal boundaries while supporting financial system stability and optimizing state revenue.

References

- Ardiyanti, E., & Puspitasari, E. (2025). The Effect of Profitability , Leverage , Liquidity , Capital Intensity , and Corporate Social Responsibility in Tax Avoidance. 5(7), 49–63. <https://goldenratio.id/index.php/grts/article/view/1528>
- Ariska, M., Fahru, M., & Kusuma, I. W. (2020). Leverage, ukuran perusahaan, dan profitabilitas terhadap tax avoidance. *Jurnal Revenue*, 1(1), 133–142. <https://doi.org/10.46306/rev.v1i1>
- Ayu, G. A. P., & Kartika, A. (2019). Faktor-faktor yang mempengaruhi tax avoidance. *Dinamika Akuntansi, Keuangan Dan Perbankan*, 8(1), 64–78.
- Ayu, S. A. D. (2019). Faktor-faktor yang mempengaruhi tax avoidance pada perusahaan manufaktur. *Fakultas Ekonomi dan Bisnis, Universitas Indonesia*.
- Chen, S., Chen, X., Cheng, Q., & Shevlin, T. (2010). Are family firms more tax aggressive than non-family firms? *Journal of Financial Economics*, 95(1), 41–61. <https://doi.org/10.1016/j.jfineco.2009.02.003>
- Desai, M. A., & Dharmapala, D. (2006). Corporate tax avoidance and high-powered incentives. *Journal of Financial Economics*, 79(1), 145–179. <https://doi.org/10.1016/j.jfineco.2005.02.002>
- Dewianawati, S., & Setiawan, D. (2021). Capital intensity dan penghindaran pajak. *Jurnal Akuntansi Dan Auditing Indonesia*, 25(2), 123–138.
- Dyreng, S. D., Hanlon, M., & Maydew, E. L. (2008). Long-run corporate tax avoidance. *The Accounting Review*, 83(1), 61–82. <https://doi.org/10.2308/accr.2008.83.1.61>
- Fahmi, I. (2012). *Pengantar manajemen keuangan*. Alfabeta.
- Fajarwati, N., & Ramadhanti, W. (2021). Determinan tax avoidance pada perusahaan publik. *Jurnal Akuntansi Dan Pajak*, 22(1), 45–59.
- Ghozali, I. (2016). *Aplikasi analisis multivariate dengan program IBM SPSS*. Badan Penerbit Universitas Diponegoro.
- Hafizh, M. T., & Africa, L. A. (2022). Pengaruh intensitas aset tetap, pertumbuhan penjualan, kepemilikan institusional dan komite audit terhadap tax avoidance. *Journal of Accounting and Financial Issue*, 1–14.
- Hanlon, M., & Heitzman, S. (2010). A review of tax research. In *Journal of Accounting and Economics*. <https://doi.org/10.1016/j.jacceco.2010.09.002>

- 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/https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/https://doi.org/10.1016/0304-405X(76)90026-X)
- Kalbuana, N., Solihin, S., Saptono, A., Yohana, Y., & Yanti, D. (2020). Capital intensity dan tax avoidance. *Jurnal Akuntansi Dan Keuangan*, 22(2), 89–102.
- Mardiasmo. (2013). *Perpajakan*. Andi.
- Novriyanti, I., & Warga Dalam, W. W. (2020). Faktor-faktor yang mempengaruhi penghindaran pajak. *Journal of Applied Accounting and Taxation*, 5(1), 24–35.
- Pratama, Y. P. (2023). Pengaruh leverage, profitabilitas, dan good governance terhadap penghindaran pajak. In *Pajak.go.id*.
- Pratiwi, R. (2015). Capital adequacy ratio dan kinerja bank. *Jurnal Perbankan*, 7(1), 33–47.
- Rahmayani, S., Riyadi, R., & Ginanjar, Y. (2021). Determinan tax avoidance. *Jurnal Akuntansi Dan Keuangan*, 23(1), 65–80.
- Robin, R., Anggara, A., Tandrean, E., & Afezan, A. (2021). Leverage dan tax avoidance. *Jurnal Akuntansi Bisnis*, 15(2), 120–134.
- Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.
- Sulaeman, R. (2021). Pengaruh profitabilitas, leverage, dan ukuran perusahaan terhadap penghindaran pajak (tax avoidance). *Syntax Idea*, 3(2), 354–367.
- Supervision, B. C. on B. (2011). *Basel III: A global regulatory framework for more resilient banks and banking systems*. Bank for International Settlements.
- Suryani, S. (2021). Corporate governance dan tax avoidance. *Jurnal Akuntansi Dan Auditing*, 18(1), 34–48.
- Windayani, L. (2018). Analisis faktor-faktor potensial yang mempengaruhi penghindaran pajak. Program Pascasarjana Fakultas Ekonomi Program Studi Magister Akuntansi Universitas Islam Indonesia.
- Zhang, Y. (2019). An empirical analysis of the factors affecting the tax burden of China's banking industry. *Technology and Investment*, 10, 27–44. <https://doi.org/10.4236/ti.2019.102002>