



The Effects of Profitability and Leverage on Tax Avoidance: Testing Independent Directors as a Moderating Variable in Food and Beverage Companies Listed on the Indonesia Stock Exchange

Gloria Priscilla Simorangkir^{1*}, Juaniva Sidharta², Melinda Malau³

¹⁻³ Universitas Kristen Indonesia, Indonesia

email: gloriaprisilla97@gmail.com¹

Article Info :

Received:
26-07-2026
Revised:
10-08-2026
Accepted:
20-08-2026

Abstract

Tax avoidance remains an important issue in corporate taxation because differences between statutory tax rates and firms' effective tax burdens may reflect variations in financial and governance characteristics. This study examines the effects of profitability and leverage on tax avoidance and evaluates the moderating role of independent commissioners in food and beverage companies listed on the Indonesia Stock Exchange during 2021–2025. A quantitative explanatory approach was employed using secondary data obtained from annual reports and financial statements. Purposive sampling resulted in 46 companies and 230 firm-year observations. Tax avoidance was measured using the Effective Tax Rate (ETR), profitability using Return on Assets (ROA), leverage using the Debt-to-Equity Ratio (DER), and independent commissioners using their proportion of the total board of commissioners. Panel data regression using the Fixed Effect Model was selected based on the Chow and Hausman tests, while Moderated Regression Analysis was applied to examine the interaction effects. The results show that profitability has a negative and significant effect on ETR, indicating that higher profitability is associated with greater tax avoidance. Leverage also has a negative and significant effect on ETR, consistent with the tax-shield mechanism associated with debt financing. Independent commissioners do not significantly moderate the effects of either profitability or leverage on tax avoidance. The findings indicate that financial characteristics have a more direct relationship with ETR-based tax avoidance than the quantitative proportion of independent commissioners.

Keywords: *Effective Tax Rate, Independent Commissioner, Leverage, Profitability, Tax Avoidance.*



©2026 Authors.. This work is licensed under a Creative Commons Attribution-Non Commercial 4.0 International License.
(<https://creativecommons.org/licenses/by-nc/4.0/>)

INTRODUCTION

Taxation constitutes a fundamental source of government revenue and plays a central role in financing public expenditure, infrastructure, and national development, while for corporations tax payments represent an economic outflow that directly reduces earnings available to shareholders and may therefore influence managerial financial decisions. The tension between the state's interest in securing tax revenue and firms' interest in preserving after-tax returns has become increasingly relevant as corporations operate within complex regulatory environments that provide various opportunities for tax planning. Tax avoidance refers to corporate efforts to reduce tax liabilities through the utilization of provisions, gaps, or ambiguities within applicable tax regulations while remaining formally within the boundaries of legality (Ibrahim et al., 2021). Although tax avoidance is distinct from illegal tax evasion, extensive tax minimization may raise concerns regarding corporate transparency, fiscal responsibility, and the quality of managerial decision-making. From an accounting perspective, the Effective Tax Rate (ETR), calculated by comparing income tax expense with pre-tax income, is frequently employed to identify differences between firms' effective tax burdens and statutory tax rates (Putri & Halmawati, 2023). The persistence of relatively low ETRs consequently provides an important empirical basis for examining the financial and governance conditions under which companies engage in tax avoidance.

The phenomenon of tax avoidance is also observable among companies in the food and beverage industry listed on the Indonesia Stock Exchange, where differences in profitability, capital structures, and corporate governance create heterogeneous incentives for tax management. Based on the financial data examined in this study, a substantial proportion of sampled companies recorded ETR values below the 22% statutory corporate income tax rate during 2021–2025, indicating that their

effective tax burdens were frequently lower than the prevailing statutory benchmark. The following data illustrate this condition across selected companies.

Table 1. Effective Tax Rate of STTP, TAPG, MYOR, and DSFI, 2021–2025

Code	Company Name	2021	2022	2023	2024	2025	Average
STTP	Siantar Top Tbk.	19.29%	17.47%	16.76%	12.90%	16.95%	16.67%
TAPG	Triputra Agro Persada Tbk.	15.66%	16.28%	14.42%	17.48%	17.51%	16.27%
MYOR	Mayora Indah Tbk.	21.85%	21.39%	20.74%	20.96%	19.54%	20.89%
DSFI	Dharma Samudera Fishing Industries Tbk.	20.20%	17.01%	22.43%	21.82%	21.70%	20.63%

Source: Authors' calculations based on the financial statements of the respective companies (2021–2025)

The figures indicate that STTP experienced the most substantial decline in ETR, from 19.29% in 2021 to 12.90% in 2024, while TAPG maintained an ETR within approximately 14–17% throughout the observation period, suggesting persistent differences from the statutory rate. MYOR similarly recorded ETR values below 22% in all five years and an average of 20.89%, demonstrating that relatively low effective tax burdens are not confined to smaller firms but can also occur among large companies with substantial operating capacity. DSFI displayed greater annual variation, including an ETR of 22.43% in 2023, yet its five-year average remained below the statutory benchmark at 20.63%. Empirical research on Indonesian firms has established that profitability, leverage, firm size, and capital intensity can interact in determining tax avoidance, indicating that differences in effective tax burdens require analysis of multiple corporate characteristics rather than reliance on a single explanatory factor (Irianto et al., 2017). At the full sample level, 32 of the 46 companies satisfying the research criteria, equivalent to approximately 70%, recorded average ETRs below 22% during 2021–2025, reinforcing the relevance of examining the determinants and governance conditions associated with tax avoidance in the food and beverage sector.

Profitability represents one of the most important financial characteristics potentially associated with tax avoidance because firms generating greater earnings generally face a larger taxable income base and consequently stronger economic incentives to manage tax expenditures. In this study, profitability is measured using Return on Assets (ROA), which reflects the capacity of management to generate earnings from the assets controlled by the company and provides an indication of the effectiveness of resource utilization (Kasmir, 2021). From an economic perspective, high profitability may increase the potential benefits of tax planning because reductions in tax expenditure can preserve a larger portion of earnings for reinvestment or distribution. Earlier Indonesian evidence has reported a positive relationship between profitability and tax avoidance, suggesting that greater earnings can create stronger incentives for managerial tax minimization (Praditasari & Setiawan, 2017). More recent evidence, however, presents a less uniform pattern, with studies identifying significant, negative, or insignificant relationships depending on the characteristics of the firms and industries examined (Oktrivina, 2022). Research on Indonesian listed firms has similarly shown that profitability may influence tax avoidance while the magnitude and direction of the relationship remain sensitive to other corporate characteristics and governance conditions (Hendayana et al., 2024). These contrasting findings indicate that profitability alone does not sufficiently explain corporate tax behavior and create a need to examine whether governance mechanisms alter the way profitability-related incentives are translated into tax avoidance decisions.

Leverage provides a second financial dimension because the use of debt affects both the firm's financial structure and its tax position through the deductibility of interest expenses. In this study, leverage is proxied by the Debt-to-Equity Ratio (DER), which represents the proportion of corporate financing derived from debt relative to shareholders' equity and consequently reflects the degree of dependence on external financing. Debt financing can generate a tax shield because deductible interest expenses reduce taxable income, potentially lowering the firm's effective tax burden without requiring

additional tax avoidance strategies (Widodo & Wulandari, 2021). Empirical evidence, however, remains inconsistent, as some studies report that leverage significantly affects tax avoidance while other studies find that its effect is statistically insignificant. Research on Indonesian mining companies, for example, identified leverage as one of the corporate characteristics associated with tax avoidance, illustrating the potential importance of debt-related tax incentives (Rahmawati et al., 2018). Conversely, evidence from other Indonesian corporate samples has found no significant effect of leverage, suggesting that the existence of interest-based tax shields does not necessarily lead managers to undertake additional tax avoidance activities (Mukin & Oktari, 2019). More recent evidence from industrial-sector companies likewise indicates that the relationship between leverage and tax avoidance cannot be interpreted independently from corporate governance and other firm-level characteristics (Mellena & Irwan, 2024).

The unresolved relationships between financial characteristics and tax avoidance create an important role for corporate governance, particularly mechanisms designed to constrain managerial discretion in financially consequential decisions. Independent commissioners constitute a key internal governance mechanism because their formal independence from management is intended to strengthen objective oversight of corporate policies, financial reporting, and compliance-related decisions. From an agency perspective, independent oversight can reduce opportunities for managerial actions that prioritize private interests when managers possess greater information and decision-making authority than external stakeholders (Gindis, 2020). In the taxation context, independent commissioners may scrutinize tax planning policies and assess whether strategies designed to reduce tax liabilities remain consistent with corporate accountability and regulatory expectations (Rani & Darminto, 2021). Recent evidence also suggests that independent commissioners can be relevant to corporate tax avoidance, although their presence does not necessarily guarantee that governance arrangements will effectively constrain tax-related managerial behavior (Nurwulan & Novatiani, 2026). Signaling theory further suggests that the existence of independent governance structures can convey information concerning corporate commitment to transparency and accountability, although the informational value of such structures depends on whether formal arrangements are accompanied by substantive monitoring (Connelly et al., 2025). The limited and inconsistent evidence concerning the moderating function of independent commissioners, including findings that they may fail to moderate the relationship between profitability and tax avoidance, leaves an important conceptual question concerning whether board independence actually changes the strength of financial incentives underlying corporate tax behavior (Liani, 2024).

The present study addresses this unresolved issue by positioning profitability and leverage as financial determinants of tax avoidance while examining independent commissioners as a moderating mechanism that may alter the strength of these relationships. Rather than treating financial characteristics as isolated predictors, the research considers tax avoidance as a corporate decision emerging from the interaction between economic incentives and internal governance arrangements. The food and beverage sector is selected because the observed ETR patterns indicate substantial variation in effective tax burdens, while differences in profitability and financing structures provide an appropriate context for examining heterogeneous tax-related incentives. The 2021–2025 observation period also extends the empirical evidence toward recent financial conditions and enables the analysis to capture contemporary patterns of corporate tax behavior among companies listed on the Indonesia Stock Exchange. The study therefore aims to examine the effects of profitability and leverage on tax avoidance and to test whether independent commissioners moderate the relationships between these financial variables and tax avoidance in food and beverage companies listed on the Indonesia Stock Exchange. Theoretically, the study contributes to the literature by integrating firm-level financial incentives with corporate governance in explaining variations in tax avoidance rather than examining profitability, leverage, and board independence as entirely separate determinants. Methodologically, the study contributes sector-specific and recent multi-year evidence through a moderation framework, providing a more precise basis for assessing whether independent oversight changes the relationship between corporate financial conditions and tax avoidance.

RESEARCH METHODS

This study is an empirical quantitative study employing an explanatory research design to examine the effects of profitability and leverage on tax avoidance and the moderating role of

independent commissioners. The population consists of food and beverage companies listed on the Indonesia Stock Exchange (IDX) during 2021–2025, with samples selected using purposive sampling based on the availability of complete financial statements and annual reports throughout the observation period, resulting in 46 companies and 230 firm-year observations. Secondary data were obtained from financial statements and annual reports published through the official IDX website and the respective companies' official websites, providing documented accounting information for the measurement of the research variables (Napitupulu et al., 2021). Tax avoidance is measured using the Effective Tax Rate (ETR), profitability using Return on Assets (ROA), leverage using the Debt to Equity Ratio (DER), and independent commissioners using the proportion of independent commissioners to the total number of commissioners. ROA is calculated as net income divided by total assets, while DER is calculated as total debt divided by total equity to represent asset-based profitability and the company's debt financing structure (Kasmir, 2021). ETR is calculated as income tax expense divided by pre-tax income, whereas the independent commissioner ratio represents the proportion of independent oversight within the company's board structure (Rani & Darminto, 2021).

Table 2. Operational Definitions of Variables

Variable	Indicator	Measurement	Scale
Tax Avoidance (Y)	Effective Tax Rate (ETR)	$ETR = \text{Income Tax Expense} / \text{Pre-Tax Income}$	Ratio
Profitability (X1)	Return on Assets (ROA)	$ROA = \text{Net Income} / \text{Total Assets}$	Ratio
Leverage (X2)	Debt to Equity Ratio (DER)	$DER = \text{Total Debt} / \text{Total Equity}$	Ratio
Independent Commissioners (Z)	Independent Commissioner Ratio (KI)	$KI = \text{Number of Independent Commissioners} / \text{Total Number of Commissioners}$	Ratio

Data analysis is conducted using panel data regression with EViews because the dataset combines cross-sectional observations across companies with observations over multiple years. Panel model selection is performed using the Chow test, Hausman test, and Lagrange Multiplier test to determine the appropriate specification among the *Common Effect Model*, *Fixed Effect Model*, and *Random Effect Model* (Napitupulu et al., 2021). Classical assumption testing includes normality, multicollinearity, heteroscedasticity, and autocorrelation tests to assess the statistical adequacy of the regression model before hypothesis testing (Savitri et al., 2021). The direct effects of profitability and leverage on tax avoidance are evaluated using the *t*-test, while the explanatory capacity of the model is assessed using the *Adjusted R*². The moderating role of independent commissioners is examined using *Moderated Regression Analysis* (MRA) by incorporating the interaction terms ROA×KI and DER×KI into the regression model (Liani, 2024). The empirical model is specified as $ETR = \alpha + \beta_1 ROA + \beta_2 DER + \beta_3 KI + \beta_4 (ROA \times KI) + \beta_5 (DER \times KI) + \varepsilon$, where β_4 captures the moderating effect of independent commissioners on the profitability–tax avoidance relationship and β_5 captures their moderating effect on the leverage–tax avoidance relationship (Rani & Darminto, 2021).

Theoretical Framework and Hypotheses

The research model places *profitability* and *leverage* as independent variables that are expected to influence *tax avoidance*, while independent commissioners function as a moderating variable. The model distinguishes the direct relationships proposed in H1 and H2 from the moderating relationships proposed in H3 and H4, while providing a conceptual structure for examining whether independent oversight changes the relationship between corporate financial characteristics and tax avoidance.

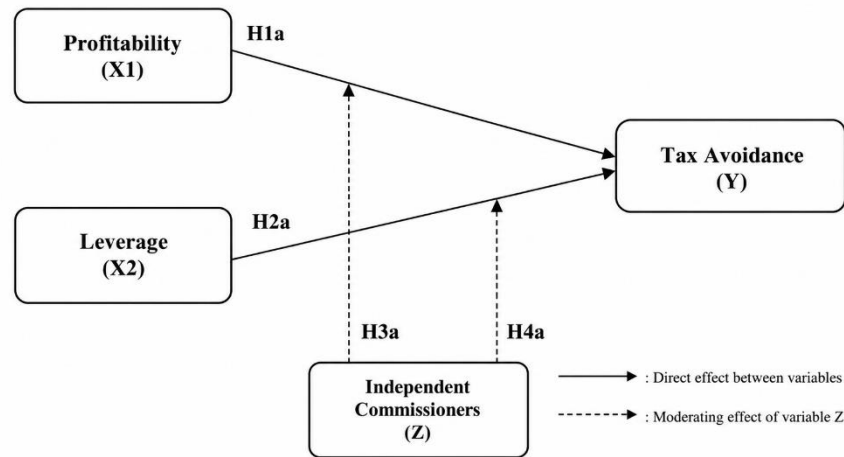


Figure 1. Theoretical Framework

H1: Profitability has an effect on Tax Avoidance

Profitability indicates the company's ability to generate earnings from its assets and operational activities. Higher profitability may increase tax liabilities and create incentives for management to reduce the tax burden through tax avoidance strategies (Putri & Halmawati, 2023). Empirical findings remain inconsistent, as profitability has been found to increase tax avoidance in some studies but to reduce it in others.

H2: Leverage has an effect on Tax Avoidance

Leverage reflects the extent to which a company uses debt to finance its activities, with interest expenses potentially generating a tax shield that reduces taxable income (Rani et al., 2021). Previous studies have reported both significant negative and positive relationships between leverage and ETR or CETR, indicating differences in the relationship between debt financing and tax avoidance (Prabowo & Sahlan, 2021). These inconsistent findings provide a basis for reassessing the relationship between leverage and tax avoidance.

H3: Independent Commissioners moderate the effect of Profitability on Tax Avoidance

Independent commissioners are expected to strengthen managerial oversight and constrain opportunistic tax-related decisions arising from corporate financial incentives. Previous evidence indicates that independent commissioners can moderate the relationship between profitability and tax avoidance, although other research has found no moderating effect (Liani, 2024). The inconsistent evidence suggests that the moderating role of independent commissioners in this relationship requires further empirical examination.

H4: Independent Commissioners moderate the effect of Leverage on Tax Avoidance

Independent commissioners may influence how managers utilize debt-related tax benefits by strengthening oversight of financing and tax decisions. Previous research has found evidence that independent commissioners moderate the relationship between leverage and tax avoidance, although the consistency of this role across different corporate settings remains uncertain (Rani et al., 2021). This provides a basis for testing whether independent commissioners alter the relationship between leverage and tax avoidance.

RESULTS AND DISCUSSION

Descriptive Statistics and Characteristics of the Sample

The descriptive analysis provides an initial assessment of the distribution and variation of tax avoidance, profitability, leverage, and independent commissioners across the 230 firm-year observations covering 46 food and beverage companies listed on the Indonesia Stock Exchange during 2021–2025. The analysis considers the minimum, maximum, mean, and standard deviation of each variable to identify the central tendency and degree of cross-sectional variation within the sample.

Because the DER distribution contained an extreme observation, the DER variable was winsorized at the 1st and 99th percentiles before the subsequent regression analysis. The extreme observation originated from CBUT in 2021, which recorded a DER of approximately 21 times and had the potential to exert disproportionate influence on coefficient estimation. Winsorization was applied to reduce the influence of extreme values while retaining the observation in the dataset, allowing the analysis to preserve the balanced firm-year structure. This treatment is relevant in accounting research because highly dispersed financial ratios can affect the stability and interpretability of regression estimates when extreme observations are retained without adjustment (Napitupulu et al., 2021).

Table 3. Descriptive Statistics Test Results

Statistic	ROA	DER	ETR	KI
Mean	0.093634	0.882734	0.226064	0.401889
Median	0.079328	0.725096	0.217433	0.375000
Maximum	0.342825	4.793558	0.432987	0.666667
Minimum	0.003122	0.072131	0.010392	0.200000
Std. Dev.	0.064152	0.845742	0.057339	0.087361
Observations	230	230	230	230

Source: Authors' calculations using EViews 13 (2026)

As shown in Table 3, ETR has a mean of 0.226064, equivalent to approximately 22.61%, with a minimum of 0.010392 and a maximum of 0.432987. The mean ETR is close to the prevailing 22% corporate income tax rate during the observation period, indicating that the aggregate effective tax burden of the sampled companies was broadly aligned with the statutory benchmark. However, the substantial distance between the minimum and maximum values indicates considerable heterogeneity in firms' effective tax burdens, with some observations reporting an ETR far below the statutory rate. Such low ETR observations are relevant to the tax avoidance framework because a lower effective tax burden relative to the statutory rate may indicate greater utilization of tax planning opportunities. Previous evidence from Indonesian companies similarly identifies profitability, leverage, and governance characteristics as factors associated with variation in corporate tax avoidance (Ibrahim et al., 2021). The relatively high standard deviation of 0.057339 further indicates that the ETR distribution was not concentrated narrowly around its mean, suggesting that differences in corporate tax positions remain economically meaningful across firms. This dispersion provides an appropriate empirical basis for examining whether internal financial characteristics explain variations in effective tax burdens.

The ROA results in Table 3 show a mean of 0.093634, indicating that the sampled companies generated an average return of approximately 9.36% from their assets during the observation period. The minimum ROA of 0.003122 and maximum of 0.342825 demonstrate substantial differences in the ability of individual firms to convert asset resources into accounting earnings. A standard deviation of 0.064152, which is relatively large compared with the mean, indicates that profitability varied considerably across the food and beverage companies. This variation is analytically important because profitability determines both the magnitude of taxable income and the potential economic benefit associated with reducing the tax burden. Companies with stronger profitability may face greater tax exposure while simultaneously possessing greater financial resources to undertake tax planning, creating an observable relationship between operating performance and effective taxation (Putri & Halmawati, 2023). The descriptive pattern is consistent with prior evidence showing that profitability constitutes an important explanatory factor in studies of corporate tax avoidance in Indonesia (Hendayana et al., 2024). The wide profitability range therefore supports the use of ROA as a continuous explanatory variable rather than treating profitability as a homogeneous characteristic across the sampled firms.

The distribution of DER also reveals substantial differences in financing structures after the treatment of extreme observations, with a mean of 0.882734, a minimum of 0.072131, and a maximum of 4.793558. The mean indicates that the sampled companies maintained debt financing equivalent to approximately 88.27% of their equity, although the dispersion shown by the standard deviation of 0.845742 demonstrates that this financing intensity differed considerably across firms. The relatively broad range suggests that some companies relied predominantly on equity financing, whereas others

operated with considerably greater debt exposure. Such variation is particularly relevant to tax avoidance because interest payments associated with debt financing may reduce taxable income when the relevant expenses qualify as deductible costs. Prior research identifies leverage as an important determinant of tax avoidance, although the direction and magnitude of the relationship may vary according to corporate characteristics and institutional settings (Widodo & Wulandari, 2021). The presence of both low- and high-leverage firms allows the panel regression to assess whether differences in debt dependence correspond systematically with differences in ETR. The winsorized maximum of 4.793558 also indicates that the adjustment reduced the potential influence of extreme leverage without eliminating the substantial heterogeneity necessary for empirical estimation.

Independent commissioners have a mean proportion of 0.401889, indicating that independent commissioners accounted for approximately 40.19% of the total commissioners across the observed companies. The minimum value of 0.200000 and maximum value of 0.666667 indicate that the governance structure varied considerably, although most observations were concentrated around a proportion close to 40%. This variation is relevant because the formal presence of independent commissioners does not necessarily imply identical monitoring intensity across firms, particularly when their numerical representation differs. In corporate governance research, independent commissioners are generally expected to strengthen monitoring mechanisms and constrain managerial actions that may conflict with shareholder interests (Rani & Darminto, 2021). The mean proportion above the 30% regulatory threshold indicates that the sampled companies, on average, maintained a level of independent representation exceeding the minimum governance requirement. However, the descriptive evidence alone cannot establish whether this representation actually changes managerial tax-related decisions, which requires direct testing through the interaction terms specified in the moderation model. The relatively modest standard deviation of 0.087361 suggests that independent commissioner representation was less dispersed than profitability and leverage, potentially limiting the extent to which differences in board independence can generate statistically detectable moderating effects.

The combined descriptive pattern demonstrates that the sampled food and beverage companies exhibit meaningful heterogeneity in their tax burden, operating profitability, financing structure, and board independence. ETR varies from a very low effective tax burden to a substantially higher level, while ROA and DER display similarly broad ranges that reflect differences in operational performance and capital structure. The proximity of the mean ETR to the statutory corporate tax rate does not imply uniform tax behavior because the minimum ETR indicates that certain firm-year observations operated with substantially lower effective tax burdens. At the same time, the average ROA of 9.36% and DER of 0.88 provide sufficient variation to examine whether financial performance and debt dependence are systematically associated with ETR. The average independent commissioner proportion of 40.19% establishes a governance context in which independent oversight is formally present but varies across observations. These characteristics collectively support the subsequent panel regression analysis by demonstrating sufficient cross-sectional and temporal variation in the variables required to test the proposed direct and moderating relationships.

Panel Data Model Selection and Diagnostic Tests

The panel regression analysis begins by identifying the estimation model that most appropriately captures the characteristics of the 46 food and beverage companies observed over the 2021–2025 period. The selection process considers whether the individual characteristics of firms should be treated as common across observations or incorporated as firm-specific effects. The Chow test is first applied to determine whether the Common Effect Model (CEM) or Fixed Effect Model (FEM) provides a more appropriate specification. The resulting Cross-section F statistic of 7.658654 with a probability value of 0.0000 indicates that the null hypothesis of the CEM is rejected at the 5% significance level. This result suggests that unobserved firm-specific characteristics are sufficiently different across companies to warrant the inclusion of individual effects. Panel model selection of this type is important because ignoring meaningful cross-sectional heterogeneity can lead to an inappropriate representation of relationships among financial variables.

The Hausman test is subsequently employed to determine whether the individual effects are correlated with the explanatory variables and whether FEM or Random Effect Model (REM) should be retained. The test produces a Chi-Square statistic of 24.823399 and a probability value of 0.0002, which is below the 0.05 threshold. The result leads to rejection of the null hypothesis supporting REM and

indicates that FEM is more appropriate for the dataset. This finding means that firm-specific characteristics that remain relatively stable over the observation period should be controlled rather than assumed to be uncorrelated with profitability, leverage, and independent commissioners. The FEM specification consequently becomes the basis for the subsequent regression and diagnostic procedures. Model selection through sequential panel-data testing provides a more defensible empirical structure because the estimation method is determined from the observed characteristics of the dataset rather than imposed in advance.

Table 4. Panel Data Model Selection Test Results

No.	Test	Statistic	Probability	Decision
1	Chow Test	Cross-section F = 7.658654	0.0000	Fixed Effect Model
2	Hausman Test	Chi-Square = 24.823399	0.0002	Fixed Effect Model

Source: Data processed by authors using EViews 13 (2026)

Table 4 confirms that both model-selection procedures converge on the Fixed Effect Model. The Chow test establishes that firm-specific effects are relevant when comparing CEM and FEM, while the Hausman test further indicates that these effects should be treated as fixed rather than random. The consistency of the two tests strengthens the basis for using FEM in examining tax avoidance across the sampled companies. Firm heterogeneity is particularly relevant in the food and beverage sector because differences in operating structure, asset composition, financing practices, and corporate governance may persist across several years. Such characteristics can influence both financial ratios and tax-related decisions even when they are not directly included as observable explanatory variables. The selected model therefore allows the analysis to focus more closely on within-firm relationships while controlling for time-invariant firm-specific characteristics.

After selecting FEM, diagnostic testing is conducted to evaluate whether the regression estimates satisfy the principal assumptions required for reliable interpretation. The Jarque–Bera test produces a statistic of 239.4435 with a probability value of 0.0000, indicating that the residuals do not follow a normal distribution at the 5% significance level. The non-normality of residuals does not automatically invalidate the coefficient estimates in a panel dataset containing 230 firm-year observations, particularly when inference relies on sufficiently large samples. The central limit principle provides a statistical basis for treating sampling distributions of estimators as increasingly well behaved as the number of observations increases. The relatively large number of firm-year observations therefore provides some support for maintaining the FEM estimation despite the normality-test result.

The multicollinearity test shows that the pairwise correlations among the principal explanatory variables, namely ROA, DER, and KI, remain below 0.85. This indicates that the independent variables do not exhibit a correlation level that would ordinarily signal serious multicollinearity in the main-effect specification. The interaction terms ROA×KI and DER×KI display substantially higher correlations of 0.950 and 0.953, respectively, but these values are expected because the interaction variables are mathematically constructed from the corresponding main variables. Interaction-term correlations should consequently be interpreted in the context of the moderation model rather than treated as equivalent to correlations among independently measured predictors. The Glejser test also reports probability values above 0.05 for the explanatory variables, indicating that the model does not show evidence of heteroscedasticity. These results suggest that differences in residual variance across observations do not constitute a prominent diagnostic problem in the selected specification.

The final diagnostic concerns autocorrelation, which is assessed using the Durbin–Watson statistic. The model produces a Durbin–Watson value of 2.194661, which falls between the upper-bound value of 1.6176 and its corresponding upper complement of 2.3824. This position indicates that the residuals do not exhibit evidence of positive or negative autocorrelation under the applied decision rule. The absence of detected autocorrelation is relevant because the dataset combines observations across firms and years, creating the possibility that unexplained components of the model could be related over time. Taken together with the multicollinearity and heteroscedasticity results, the diagnostic evidence provides support for proceeding with the FEM estimation for hypothesis testing. The remaining non-normality of residuals should be recognized as a diagnostic characteristic of the dataset

rather than interpreted as evidence that the substantive relationships among profitability, leverage, independent commissioners, and tax avoidance are necessarily invalid.

Effects of Profitability and Leverage on Tax Avoidance

The hypothesis testing results indicate that profitability has a statistically significant negative effect on the effective tax rate (ETR). The coefficient of ROA is -0.440 with a t-statistic of -5.893 and a probability value of 0.0000 , which is below the 5% significance level. The negative coefficient indicates that an increase in profitability is associated with a decline in ETR, meaning that more profitable firms tend to exhibit a lower effective tax burden relative to their pre-tax income. Since a lower ETR is commonly interpreted as an indication of greater tax avoidance, the result provides empirical support for H1. Higher profitability may provide firms with greater financial capacity to design and implement tax planning strategies that reduce the proportion of earnings ultimately paid as corporate income tax. Putri and Halmawati (2023) similarly demonstrate that profitability is associated with tax avoidance, indicating that corporate financial performance can become an important factor in tax-related managerial decisions.

The relationship between profitability and tax avoidance can also be interpreted through the managerial incentives embedded in agency relationships. Managers are responsible for converting corporate resources into financial outcomes, while shareholders expect the resulting performance to maximize after-tax returns. A higher level of profitability consequently increases the amount of income exposed to taxation and may strengthen managerial incentives to manage the tax burden through strategies that remain within the applicable regulatory framework. Positive accounting theory provides a complementary explanation because managers may select accounting and tax-related policies according to their expected economic consequences, particularly when such decisions can improve reported or retained earnings. Watts and Zimmerman (1986) explain that managerial accounting choices can reflect economic incentives arising from the contractual and political environment surrounding firms. The empirical result is consistent with Irianto et al. (2017), Setyarini et al. (2023), Situmorang (2023), and Janatin and Pardi (2022), although differences in tax avoidance proxies and samples mean that the magnitude of the relationship cannot be assumed to be identical across studies

Table 5. Hypothesis Testing Results

Hypothesis	Variable	Coefficient	t-Statistic	Probability	Decision
H1	Profitability (ROA)	-0.4400	-5.893	0.0000	Accepted
H2	Leverage (DER)	-0.0540	-5.626	0.0000	Accepted
H3	$ROA \times KI$	-1.0637	-1.356	0.1768	Rejected
H4	$DER \times KI$	-0.0366	-0.838	0.4033	Rejected

Source: Data processed by authors using EViews 13 (2026)

Table 5 further shows that leverage also has a statistically significant negative effect on ETR. The DER coefficient of -0.054 , combined with a t-statistic of -5.626 and a probability value of 0.0000 , indicates a significant relationship between leverage and the effective tax burden. The negative coefficient means that firms with higher leverage tend to report lower ETR values, which, under the ETR proxy used in this research, indicates a higher degree of tax avoidance. The result suggests that financing decisions involving debt have an important relationship with firms' tax positions. Interest expenses associated with debt can generally constitute deductible expenses, creating a tax-shield effect that reduces taxable income and consequently lowers the effective tax rate. This mechanism is consistent with findings reported by Putri and Halmawati (2023), who identify leverage as one of the financial characteristics associated with corporate tax avoidance.

The leverage finding can be understood from the economic function of debt beyond its role as a source of external financing. When firms rely more heavily on debt, the associated interest expense can reduce the income base subject to corporate taxation, making debt financing economically relevant to tax planning. The resulting reduction in ETR does not necessarily imply that every highly leveraged firm deliberately pursues aggressive tax behavior, because part of the observed relationship can arise mechanically from the tax deductibility of financing costs. The result nevertheless indicates that leverage is statistically connected with lower effective tax burdens within the observed sample. This

finding is in line with Widodo and Wulandari (2021), who identify leverage as one of the corporate characteristics associated with tax avoidance. Similar evidence is also reported by Prabowo and Sahlan (2021), although the strength and direction of leverage effects can vary according to sectoral characteristics, observation periods, and the operationalization of tax avoidance.

The simultaneous significance of profitability and leverage indicates that both operating performance and financing structure are relevant dimensions in explaining variation in ETR among the sampled food and beverage companies. Profitability captures the extent to which firms generate earnings from their assets, whereas leverage reflects the extent to which corporate activities are financed through debt relative to equity. These variables can influence tax exposure through different mechanisms, with profitability increasing the amount of income potentially subject to taxation and leverage generating financing-related tax shields. The evidence therefore supports a financial-characteristics perspective in which tax avoidance is not isolated from broader corporate financial decisions. Ibrahim et al. (2021) similarly identify financial and firm-specific characteristics as important factors in explaining differences in tax avoidance practices among Indonesian companies. The findings also correspond with Hendayana et al. (2024), who report that profitability and leverage are relevant in explaining tax avoidance among firms in the LQ45 index, although the institutional and sectoral contexts differ.

The negative relationship between profitability and ETR also deserves consideration because profitability does not mechanically determine tax avoidance in every corporate setting. A profitable company may have stronger incentives and greater resources for tax planning, but it may simultaneously face greater scrutiny from tax authorities, investors, and other stakeholders. The observed coefficient therefore reflects an empirical association within the sampled food and beverage firms rather than a universal rule that higher profitability inevitably produces tax avoidance. Bratakusuma (2019), for example, reports an insignificant relationship between profitability and tax avoidance, demonstrating that differences in industry characteristics and corporate tax strategies can produce different empirical outcomes. Octaviani and Trishananto (2022) likewise find that profitability does not significantly affect tax avoidance in their property and real estate sample, reinforcing the importance of considering sector-specific institutional and financial conditions when interpreting profitability effects.

The leverage result similarly suggests that corporate financing structure forms part of the economic environment within which tax decisions are made. Firms with greater debt exposure may obtain larger interest-related tax benefits, but the actual tax effect remains dependent on the composition of debt, the level of interest expense, profitability, and applicable tax rules. The significant coefficient observed in the present sample indicates that the association between leverage and ETR is sufficiently strong to support H2, while not establishing that debt is adopted solely for tax-reduction purposes. Praditasari and Setiawan (2017) emphasize the relevance of leverage alongside governance and profitability in examining tax avoidance, while Sudibyo (2022) also documents the importance of leverage in explaining tax avoidance. The consistency of these findings across several Indonesian studies strengthens the relevance of leverage as a financial variable in tax-avoidance analysis, while differences in empirical results across studies indicate that its interpretation should remain sensitive to sector, period, and measurement differences.

Moderating Role of Independent Commissioners

The moderation analysis examines whether independent commissioners alter the relationship between profitability and tax avoidance. As reported in Table 5, the interaction between ROA and KI has a coefficient of -1.0637 , a t -statistic of -1.356 , and a probability value of 0.1768 . Because the probability value exceeds the 5% significance level, the interaction term is statistically insignificant and H3 is rejected. The negative coefficient therefore does not provide sufficient evidence that a higher proportion of independent commissioners systematically changes the relationship between profitability and ETR. Although independent commissioners are formally positioned to provide oversight, their numerical representation alone does not establish that they actively influence tax-related managerial decisions. This result indicates that the monitoring role of independent commissioners may depend more on the substantive quality of governance than on board composition alone.

The absence of moderation suggests that the relationship between profitability and tax avoidance operates relatively independently of the proportion of independent commissioners in the sampled firms. More profitable companies may possess greater resources and stronger incentives to

manage their tax burden, while independent commissioners may not have sufficient involvement in operational tax planning to materially alter this relationship. Agency theory emphasizes that effective monitoring requires mechanisms capable of constraining managerial discretion rather than merely satisfying formal governance arrangements. Gindis (2020) notes that the agency perspective is fundamentally concerned with the organizational relationship between decision-making authority and mechanisms for controlling managerial behavior. In this context, a formal increase in independent representation does not necessarily translate into stronger intervention in detailed financial and tax decisions. The finding is consistent with Liani (2024), who also reports that independent commissioners do not significantly moderate the relationship between profitability and tax avoidance.

The descriptive evidence provides additional context for interpreting the insignificant interaction effect. The average proportion of independent commissioners in the sample is 40.19%, indicating that the observed firms generally maintain a level of independent representation above the minimum proportion specified within the applicable governance framework. The relatively moderate dispersion, reflected by a standard deviation of 0.087361, also indicates that the proportion of independent commissioners does not vary extremely across the sampled observations. A relatively standardized board composition can limit the ability of a proportion-based measure to capture meaningful differences in monitoring intensity. Nurwulan and Novatiani (2026) demonstrate that the relationship between independent commissioners and tax avoidance should be considered alongside other governance mechanisms rather than interpreted solely from board composition. The present result similarly suggests that the presence of independent commissioners should not automatically be interpreted as evidence of stronger intervention in corporate tax strategies.

The insignificant ROA×KI coefficient may also reflect the organizational level at which tax planning decisions are formulated and implemented. Tax planning frequently involves finance, accounting, and executive management functions that possess direct access to financial information and operational transactions. Independent commissioners generally exercise oversight and supervision rather than managing these activities on a day-to-day basis. Their ability to influence a specific tax strategy may consequently depend on the quality of information received, the frequency of oversight, and their authority to challenge managerial decisions. Anggraeni and Badjuri (2025) emphasize the relevance of independent commissioners in the governance framework surrounding tax avoidance, while also showing that governance effects can vary depending on the broader organizational context. The insignificant interaction observed here indicates that board independence, when measured only through its proportion, does not sufficiently capture these qualitative dimensions of oversight.

The result also differs from several studies that identify a moderating role for corporate governance in the relationship between financial characteristics and tax avoidance. Octaviani and Trishananto (2022), for example, report a governance moderation effect in their analysis of property and real estate companies, while Rani and Darminto (2021) identify a moderating role for independent commissioners in the manufacturing sector. These differences may arise from variations in industry structure, governance practices, tax exposure, and the measurement of both tax avoidance and board independence. Food and beverage companies may face operational and working-capital characteristics that shape profitability and tax planning differently from property, real estate, or other manufacturing firms. Setyarini et al. (2023) likewise show that profitability, leverage, and governance variables can produce differentiated relationships with tax avoidance across corporate settings. The conflicting evidence across studies indicates that the moderating function of independent commissioners is context-dependent rather than consistently observable across sectors.

The second moderation test evaluates whether independent commissioners alter the relationship between leverage and tax avoidance. Table 5 shows that the DER×KI interaction has a coefficient of -0.0366 , a t-statistic of -0.838 , and a probability value of 0.4033 , which is substantially above the 5% significance level. H4 is therefore rejected because the interaction does not provide statistical evidence that independent commissioners change the relationship between leverage and ETR. The result means that the negative relationship between leverage and ETR identified in the direct-effect analysis is not significantly strengthened or weakened by variations in the proportion of independent commissioners. One possible interpretation is that the tax-shield implications of debt financing arise primarily from the economic characteristics of financing decisions rather than from governance intervention. Rani and Darminto (2021) provide evidence that governance characteristics can be relevant to tax avoidance, but

the present findings indicate that such effects are not consistently sufficient to moderate leverage-related tax outcomes.

The insignificant $DER \times KI$ relationship is also consistent with the possibility that debt financing decisions are embedded in longer-term corporate financial strategies. Debt may be selected to finance expansion, working capital, asset acquisition, or other business requirements, while the associated interest deductibility produces a tax effect as part of the financing structure. Independent commissioners may monitor the appropriateness of these financing decisions without necessarily changing the tax consequences generated by the debt itself. Anggraeni and Badjuri (2025) underline the importance of examining independent commissioners within a broader governance structure when evaluating tax avoidance. The evidence from the present sample indicates that increasing the proportion of independent commissioners alone does not materially alter the relationship between leverage and the ETR-based measure of tax avoidance. This finding contrasts with Liani (2024) and some governance-based studies, reinforcing the importance of distinguishing formal board independence from the substantive effectiveness of oversight mechanisms.

CONCLUSION

Profitability, as measured by ROA, has a significant negative effect on ETR among food and beverage companies listed on the Indonesia Stock Exchange during 2021–2025, supporting H1 and indicating that higher profitability is associated with a lower effective tax burden. The ROA coefficient of -0.440489 with a probability value of 0.0000 confirms the significance of this relationship and indicates that higher profitability is associated with ETR levels that signal greater tax avoidance. Leverage, measured by DER, also has a significant negative effect on ETR, with a coefficient of -0.054391 and a probability value of 0.0000 , supporting H2 and indicating an association between greater debt reliance and lower effective tax burdens. Independent commissioners do not significantly moderate the relationship between profitability and tax avoidance, as shown by the $ROA \times KI$ coefficient of -1.063713 and probability value of 0.1768 , resulting in the rejection of H3. Independent commissioners also do not significantly moderate the relationship between leverage and tax avoidance, with a $DER \times KI$ coefficient of -0.036551 and probability value of 0.4033 , resulting in the rejection of H4. Overall, the findings indicate that profitability and leverage are directly associated with ETR-based tax avoidance, whereas the quantitative proportion of independent commissioners does not significantly alter these relationships.

The findings have practical implications for corporate management, investors, creditors, and regulators in understanding the financial and governance dimensions of corporate tax behavior. For management, the significant relationships between profitability, leverage, and ETR highlight the importance of managing tax efficiency within applicable regulations while considering potential legal, financial, and reputational consequences. Investors and creditors may consider profitability, leverage, and ETR as complementary indicators when evaluating corporate financial characteristics and potential tax-compliance risks, although ETR should not be treated as a direct measure of aggressive tax behavior. For regulators and governance practitioners, the insignificant moderation effects indicate that the proportion of independent commissioners alone may not adequately represent the substantive effectiveness of tax-related oversight. The use of ETR as a proxy also limits the ability to distinguish legitimate tax planning from more aggressive tax practices, while the focus on food and beverage companies during 2021–2025 restricts the generalizability of the findings to other sectors and periods. These limitations suggest that the observed relationships should be interpreted within the specific sectoral and temporal context of the research.

Future research should employ alternative tax-avoidance measures, such as Book Tax Difference (BTD) and Cash Effective Tax Rate (Cash ETR), alongside conventional ETR to capture different dimensions of corporate tax behavior. The sample can also be expanded to other industrial sectors or developed through cross-sector comparisons to examine whether the identified relationships remain consistent across different business environments. Extending the observation period would provide a broader temporal perspective and allow researchers to examine the stability of the relationships under different economic conditions. Future studies can further examine corporate governance mechanisms such as audit committees, institutional ownership, and managerial ownership to provide a more comprehensive explanation of tax-avoidance behavior. Measuring independent commissioners through characteristics such as competence, independence, expertise, and monitoring

involvement could also provide a more substantive assessment than board proportion alone. These extensions may strengthen the external validity and explanatory capacity of future research on the interaction between corporate financial characteristics, governance mechanisms, and tax avoidance.

REFERENCES

- Anggraeni, S. A., & Badjuri, A. (2025). The influence of leverage and independent commissioners on tax avoidance with firm size as a moderating variable. *Taxation Studies*, 5(2), 76–86. <https://doi.org/10.52970/grts.v5i2.1610>
- Bratakusuma, S. (2019). Pengaruh profitabilitas dan leverage terhadap tax avoidance pada perusahaan manufaktur sektor real estate and property yang terdaftar di BEI periode 2016–2019. *Jurnal Akuntansi Dan Bisnis Krisnadwipayana*, 8(2), 266–286. <https://doi.org/10.35137/jabk.v8i2.374>
- Connelly, B. L., Certo, S. T., Reutzel, C. R., DesJardine, M. R., & Zhou, Y. S. (2025). Signaling theory: State of the theory and its future. *Journal of Management*, 51(1), 24–61. <https://doi.org/10.1177/01492063241268459>
- Gindis, D. (2020). On the origins, meaning and influence of Jensen and Meckling's definition of the firm. *Oxford Economic Papers*, 72(4), 966–984. <https://doi.org/10.1093/oeq/gpaa012>
- Hendayana, Y., Ramdhany, M. A., Pranowo, A. S., Rachmat, A. H., & Herdiana, E. (2024). Exploring impact of profitability, leverage and capital intensity on avoidance of tax, moderated by size of firm in LQ45 companies. *Cogent Business & Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2371062>
- Ibrahim, R., T, S., & Rusydi, M. K. (2021). The influence factors of tax avoidance in Indonesia. *International Journal of Research in Business and Social Science*, 10(5), 1–10. <https://doi.org/10.20525/ijrbs.v10i5.1295>
- Irianto, B. S., Sudibyo, Y. A., & Wafirli, A. (2017). The influence of profitability, leverage, firm size and capital intensity towards tax avoidance. *International Journal of Accounting and Taxation*, 5(2), 33–41. <https://doi.org/10.15640/ijat.v5n2a3>
- Janatin, A. N., & Pardi. (2022). Pengaruh profitabilitas, sales growth, dan good corporate governance terhadap tax avoidance. *Prosiding SENKIM*, 2(1), 210–224. <https://journal.unilak.ac.id/index.php/senkim/article/view/11306>
- Kasmir. (2021). *Analisis laporan keuangan* (Edisi revisi). Rajawali Pers.
- Liani, C. (2024). *Analisis pengaruh profitabilitas, capital intensity, dan leverage terhadap tax avoidance dengan komisaris independen sebagai variabel moderasi (Studi empiris pada perusahaan manufaktur sektor energi yang terdaftar di BEI tahun 2020–2022)*. Kwik Kian Gie.
- Malau, M. (2020). The size of the company is moderating earning aggressiveness and return on asset on the leverage. *Jurnal Akuntansi Berkelanjutan Indonesia*, 3(3), 283–292. <https://doi.org/10.32493/JABI.v3i3.y2020.p283-292>
- Mellenia, C., & Irwan. (2024). Pengaruh leverage, good corporate governance (GCG), dan likuiditas terhadap tax avoidance pada perusahaan sektor industrial di Indonesia yang terdaftar di Bursa Efek Indonesia pada tahun 2019–2022. *Global Accounting: Jurnal Akuntansi*, 3(2). <https://jurnal.ubd.ac.id/index.php/ga>
- Mukin, A. U., & Oktari, Y. (2019). Effect of Company Size, Profitability, and Leverage on Tax Avoidance. *eCo-Fin*, 1(2), 63–75. <https://doi.org/10.32877/ef.v1i2.123>
- Napitupulu, R. B., Simanjuntak, T. P., Hutabarat, L., Damanik, H., Harianja, H., Sirait, R. T. M., & Tobing, C. E. R. (2021). *Penelitian bisnis: Teknik dan analisis data dengan SPSS-STATA-EVIEWS*. Madinaitera.
- Nur, N. S., Suciyanti, V. N., Winarti, A., Azmi, Z., Akuntansi, P. S., & Ekonomi, F. (2024). Pemanfaatan teori signal dalam bidang akuntansi: Literatur review. *Economics, Business and Management Science Journal*, 4(2), 55–65. <https://doi.org/10.34007/ebmsj.v4i2.564>
- Nurwulan, I., & Novatiani, R. A. (2026). Pengaruh kepemilikan institusional, dewan komisaris independen dan komite audit terhadap tax avoidance. *Akurasi: Jurnal Riset Akuntansi dan Keuangan*, 8(1), 19–32. <https://doi.org/10.36407/akurasi.v8i1.1741>
- Octaviani, A., & Trishananto, Y. (2022). Pengaruh return on asset dan leverage terhadap tax avoidance dengan corporate governance sebagai variabel pemoderasi pada perusahaan properti dan real

- estate di BEI. *Global Financial Accounting Journal*, 6(1), 62. <https://doi.org/10.37253/gfa.v6i1.6521>
- Oktrivina, A. (2022). Profitability, leverage, firm size, and tax avoidance model relationship: A case of the manufacturing sector. *Jurnal Riset Manajemen dan Bisnis*, 7(2), 81–90. <https://doi.org/10.36407/jrmb.v7i2.399>
- Paulus, H., Tarmidi, D., Oktris, L., & Daito, A. (2025). Agency theory perspective on managers' dual role and tax avoidance determinants. *Jurnal Aset (Akuntansi Riset)*, 17(2), 225–236. <https://doi.org/10.17509/jaset.v17i2.91392>
- Prabowo, A. A., & Sahlan, R. N. (2021). Pengaruh profitabilitas, leverage, dan capital intensity terhadap penghindaran pajak dengan ukuran perusahaan sebagai variabel moderating. *Media Akuntansi Perpajakan*, 6(2), 55–74. <https://doi.org/10.52447/map.v6i2.5126>
- Praditasari, N. K. A., & Setiawan, P. E. (2017). Pengaruh good corporate governance, ukuran perusahaan, leverage dan profitabilitas pada tax avoidance. *E-Jurnal Akuntansi*, 2017(1), 1229–1258.
- Pranadipta, R., & Natsir, K. (2023). Financial, non-financial, and macro-economic factors that affect the first day profit rate when conducting initial public offering. *International Journal of Application on Economics and Business*, 1(2), 276–289. <https://doi.org/10.24912/ijaeb.v1i2.276-289>
- Putri, W. A., & Halmawati, H. (2023). Pengaruh profitabilitas, leverage, dan tata kelola perusahaan terhadap tax avoidance. *Jurnal Eksplorasi Akuntansi*, 5(1), 176–192. <https://jea.ppij.unp.ac.id/index.php/jea/article/view/701>
- Rahmawati, A. A., Masitoh, E., & Wijayanti, A. (2018). Effect of profitability, leverage and characteristics of corporate governance in tax avoidance mining company listed in BEI. *The 2nd International Conference on Technology, Education, and Social Science 2018*, 2, 525–532. <https://ejurnal.unisri.ac.id/index.php/proiectss/article/view/2248>
- Rani, A. M., & Darminto, D. P. (2021). Determinan penghindaran pajak dengan komisaris independen sebagai moderasi pada perusahaan manufaktur sektor industri barang konsumsi. *JRAP (Jurnal Riset Akuntansi dan Perpajakan)*, 8(2), 261. <https://doi.org/10.35838/jrap.2021.008.02.21>
- Savitri, C., Faddila, S. P., Irmawartini, Iswari, H. R., Anam, C., Syah, S., Mulyani, S. R., Sihombing, P. R., Kismawadi, E. R., Pujiyanto, A., Mulyati, A., Astuti, Y., Adinugroho, W. C., Imanuddin, R., Kristia, Nuraini, A., & Siregar, M. T. (2021). *Statistik multivariat dalam riset*. Widina Bhakti Persada Bandung.
- Setyarini, Y., Chandra, E. P., Beauty, V., & Novita, V. (2023). Pengaruh Profitabilitas, Good Corporate Governance, dan Leverage terhadap Tax Avoidance. *Jurnal Akuntansi Terapan Dan Bisnis*, 3(2), 91-100. <https://doi.org/10.25047/asersi.v3i2.4442>
- Sianturi, Y., Malau, M., & Hutapea, G. (2021). Pengaruh pengungkapan tanggung jawab sosial, rasio intensitas modal dan rasio intensitas persediaan terhadap penghindaran pajak. *Jurnal Informasi, Perpajakan, Akuntansi, dan Keuangan Publik*, 16(2), 265–282. <https://doi.org/10.25105/jipak.v16i2.9317>
- Situmorang, R. Y. (2023). *Pengaruh profitabilitas, ukuran perusahaan dan pertumbuhan penjualan terhadap penghindaran pajak (Pada sektor infrastruktur, utilitas dan transportasi yang terdaftar di Bursa Efek Indonesia periode 2018 sampai dengan 2021)*. Universitas Kristen Indonesia. <http://repository.uki.ac.id/eprint/14271>
- Sudibyo, H. H. (2022). Pengaruh profitabilitas, leverage, dan pertumbuhan penjualan terhadap penghindaran pajak. *Jurnal Akuntansi dan Manajemen Bisnis*, 2(1), 75–85. <https://doi.org/10.56127/jaman.v2i1.211>
- Susilowati, E., Fadilah, A. K. W., Putri, S. Y., Andayani, S., & Kirana, N. W. I. (2024). Maximizing firm value: Analyzing profitability and leverage with tax avoidance interventions. *Journal of Accounting and Strategic Finance*, 7(1), 114–132. <https://doi.org/10.33005/jasf.v7i1.450>
- Swanson, R. A., & Chermack, T. J. (2013). *Theory building in applied disciplines* (1st ed.). Berrett-Koehler.
- Tambunan, M. E., & Samaria, A. (2025). Determinants of tax aggressivity in food and beverage sub-sector companies on the Indonesian Stock Exchange. *Jurnal Ilmiah Manajemen Kesatuan*, 13(2), 1127–1138. <https://doi.org/10.37641/jimkes.v13i2.3169>
- Watts, R. L., & Zimmerman, J. L. (1986). *Positive accounting theory*. Prentice-Hall.

- Widiiswa, R. A. N., & Baskoro, R. (2020). Good corporate governance dan tax avoidance pada perusahaan multinasional dalam moderasi peningkatan tax audit coverage ratio. *Scientax (Jurnal Kajian Ilmiah Perpajakan Indonesia)*, 2(1), 57–75. <https://doi.org/10.52869/st.v2i1.55>
- Widodo, S. W., & Wulandari, S. (2021). Pengaruh profitabilitas, leverage, capital intensity, sales growth dan ukuran perusahaan terhadap penghindaran pajak. *Simak*, 19(1), 152–173. <https://doi.org/10.35129/simak.v19i01.174>