

The Effect of Capital Intensity and Leverage on Tax Planning with Transfer Pricing as an Intervening Variable

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Article History

Received: 21-05-2026

Revised: 30-05-2026

Published: 30-06-2026

Keywords: Capital Intensity, Leverage, Tax Planning, Transfer Pricing, Tax Planning, Indonesia Stock Exchange

ABSTRACT

Tax revenue is a major source of state revenue, but tax planning practices by companies remain a challenge in optimizing tax revenue in Indonesia. Companies tend to utilize various strategies, such as capital intensity, leverage, and transfer pricing, to legally reduce their tax burden. This study aims to analyze the effect of capital intensity and leverage on tax planning, with transfer pricing as an intervening variable, in food and beverage manufacturing companies listed on the Indonesia Stock Exchange for the 2021–2024 period. This study employed quantitative methods with a descriptive and associative approach. The sampling technique used purposive sampling with secondary data in the form of the companies' annual financial reports. Data analysis was performed using multiple linear regression analysis, classical assumption tests, t-tests, F-tests, coefficients of determination, and path analysis using SPSS version 27. The results showed that capital intensity and leverage had a significant negative effect on tax planning. Capital intensity and leverage also had a significant positive effect on transfer pricing. Furthermore, transfer pricing was able to mediate the effect of capital intensity and leverage on tax planning. Simultaneously, capital intensity and leverage significantly influence transfer pricing, while capital intensity, leverage, and transfer pricing jointly significantly influence tax planning. This research shows that corporate asset structure and funding policies can influence tax planning practices both directly and through transfer pricing mechanisms.

INTRODUCTION

Taxes are a primary source of state revenue and play a crucial role in financing national development. However, optimizing tax revenues still faces challenges, one of which is the practice of tax planning by companies to legally minimize their tax burden. Globally, the Organisation for Economic Co-operation and Development (OECD) has highlighted tax avoidance practices through transfer pricing, which lead to base erosion and profit shifting

(BEPS). In Indonesia, the food and beverage manufacturing subsector is one sector with the potential for tax planning due to its high production activity, significant fixed asset requirements, and complex related-party transactions.

Tax planning is a company's strategy for effectively managing tax obligations in accordance with applicable regulations. This practice can be implemented through leverage management, capital intensity, and transfer pricing. Based on agency theory, management, as an agent, has an interest in increasing company profits and cost efficiency, including tax costs, thus encouraging the use of certain tax strategies. Furthermore, positive accounting theory explains that companies tend to choose policies that provide economic benefits, including in managing capital structure and allocating profits among affiliated entities.

One factor influencing tax planning is capital intensity, which is the proportion of a company's investment in fixed assets. High fixed assets result in depreciation expenses that can reduce taxable profit, thus encouraging companies to engage in tax planning. Research by Yino and Ngadiman (2025) and Pamungkas and Nurdiniah (2025) indicates that capital intensity influences tax avoidance. However, other studies have found different results, resulting in empirical inconsistencies.

Furthermore, leverage is also a crucial factor in tax planning. High debt usage increases interest expenses and can be used as a tax shield. Research by Wulandari and Ernandi (2025) and Febriani et al. (2026) indicates that leverage influences tax planning, while research by Wiguna and Sinarwati (2025) found insignificant results. These differences indicate that the effect of leverage on tax planning requires further study.

Transfer pricing is also a concern in modern tax practice. Transfer pricing is a policy of setting prices for transactions between companies with special relationships. This practice is often used by multinational corporations to shift profits to countries with lower tax rates. Several studies have shown that transfer pricing influences tax planning, but the results are mixed, making the relationship between these variables a matter of academic debate.

Based on previous research, most studies only examine the direct effect of capital intensity and leverage on tax planning. Research using transfer pricing as an intervening variable is still limited, particularly in manufacturing companies in the food and beverage subsector listed on the Indonesia Stock Exchange for the 2021–2024 period. Therefore, this study aims to analyze the effect of capital intensity and leverage on tax planning, using transfer pricing as an intervening variable. This research is expected to provide empirical contributions to the development of tax literature and provide consideration for regulators and companies in formulating more effective tax and financial policies.

RESEARCH METHODS

This study uses a quantitative approach with a causal associative research type that aims to analyze the effect of capital intensity and leverage on tax planning with transfer pricing as an intervening variable in food and beverage subsector manufacturing companies listed on the Indonesia Stock Exchange for the 2021–2024 period. The quantitative approach was chosen because this study focuses on testing the relationship between variables using numerical data analyzed statistically to produce objective and measurable conclusions. According to Rahmawati et al. (2023), a quantitative approach in tax research is used to test the empirical relationship between a company's financial variables through systematic statistical models.

This study also uses explanatory research because it aims to explain the causal relationship between capital intensity, leverage, transfer pricing, and tax planning based on empirical phenomena occurring in manufacturing companies in Indonesia. The objects of this study are food and beverage subsector manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2021–2024 period.

The food and beverage subsector was selected because it significantly contributes to national industrial growth and has complex operational characteristics, particularly related to the use of fixed assets, funding structures, and related party transactions that have the potential to trigger transfer pricing and tax planning practices. The study population consisted of all manufacturing companies in the food and beverage subsector listed on the Indonesia Stock Exchange during the observation period. The sampling technique used purposive sampling with the criteria of companies that published complete annual financial reports, were not delisted during the study period, and had data that met the research variable requirements. According to Hidayat and Nurhayati (2024), purposive sampling is widely used in accounting and taxation research because it is able to produce samples that are relevant to the research objectives and the required data characteristics. The data used in this study are secondary data in the form of company annual financial reports obtained from the official website of the Indonesia Stock Exchange and the official websites of each company.

The use of secondary data is considered more effective because company financial reports provide quantitative information that can be used to measure research variables objectively and consistently. According to Wibowo et al. (2023), financial reports are the primary source in tax research because they contain information related to asset structure, company financing, related party transactions, and company tax obligations. Capital intensity is measured using the ratio of total fixed assets to total company assets. Leverage is measured using the Debt to Equity Ratio (DER), while transfer pricing is measured using the ratio of related party receivables to total company receivables. Tax planning is measured using the Effective Tax Rate (ETR).

The use of these indicators refers to previous research which states that financial ratios are able to describe tax management practices and company financial strategies empirically (Yino & Ngadiman, 2025).

The data analysis technique in this study used descriptive statistical analysis and inferential analysis with the help of the IBM SPSS Statistics application version 27. Descriptive statistical analysis was used to provide an overview of the characteristics of the research data through the minimum, maximum, average (mean), and standard deviation values of each research variable. Next, classical assumption tests were conducted consisting of normality tests, multicollinearity tests, heteroscedasticity tests, and autocorrelation tests to ensure the regression model met the BLUE (Best Linear Unbiased Estimator) assumptions. According to Ghazali et al. (2022), classical assumption testing is necessary for valid, reliable, and unbiased regression estimation results. Hypothesis testing was conducted using multiple

linear regression analysis to determine the direct effect of capital intensity and leverage on transfer pricing and tax planning. In addition, this study also used path analysis to examine the indirect effect through transfer pricing as an intervening variable. Path analysis was used because it can explain the causal relationship between variables simultaneously, both direct and indirect effects.

According to Kurniawan et al. (2024), the use of path analysis in tax research provides more comprehensive results in explaining the mechanisms of relationships between variables involving mediating variables. Hypothesis testing is conducted through partial tests (t-test), simultaneous tests (F-test), and the coefficient of determination (R^2) to determine the research model's ability to explain the dependent variable.

In this study, capital intensity and leverage are positioned as independent variables, tax planning as the dependent variable, and transfer pricing as the intervening variable. The research model is based on agency theory, which explains the conflict of interest between management and shareholders in corporate decision-making, including tax strategies. Management, as an agent, tends to implement various strategies to improve corporate efficiency, including through tax planning and transfer pricing. Furthermore, positive accounting theory explains that companies will choose accounting policies that maximize their economic interests, including minimizing tax burdens. According to Sysmantia and Evana (2023), leverage and transfer pricing are instruments frequently used by companies in tax planning practices to optimize after-tax profits. Therefore, the research method used is expected to provide valid empirical results in explaining the effect of capital intensity and leverage on tax planning through transfer pricing in manufacturing companies in the food and beverage subsector in Indonesia.

RESULTS AND DISCUSSION

Descriptive Statistical Test Results

The variables used in this study consist of Capital Intensity (CI), *Leverage* (DER), *Tax Planning* (CETR), and *Transfer Pricing* (PI), where all three variables are tested using descriptive statistics. The data used in this study are data from Food and Beverage Subsector Companies Listed on the Indonesia Stock Exchange for the 2021-2024 period. Data processing was carried out using IBM SPSS 27 *software*. The following table shows the results of the descriptive statistical data processing in this study:

Table 1
Results of Descriptive Statistical Tests

Descriptive Statistics					
	N	Mini mum	Maxi mum	Mean	Standard Deviation
Capital Intensity	124	,1067	,7032	,368233	,1498947
Leverage	124	,0720	2,9046	1.146362	,7763269
Transfer Pricing	124	,0002	,8725	,341509	,2994176
Tax Planning	124	,1010	,3476	,205591	,0674665
Valid N (listwise)	124				

Source: SPSS version 27 output results

Based on table 1 above, it can be seen that the results of the descriptive statistical test show that the independent variable Capital Intensity (X_1), has a minimum value of 0.1067 and a maximum value of 0.7032 with an average value of 0.368233 and a standard deviation value of 0.1498947. The independent variable *Leverage* (X_2), has a minimum value of 0.0720 and a maximum value of 2.9046 with an average value of 1.146362 and a deviation value of 0.7763269. Furthermore, the *Intervening variable*, namely, *Transfer Pricing*, has a minimum value of 0.0002 and a maximum value of 0.8725 with an average value of 0.341509 and a deviation value of 0.2994176. Then the dependent variable *Tax Planning* has a minimum value of 0.1010 and a maximum value of 0.3476 with an average value of 0.205591 with a deviation value of 0.0674665.

Classical Assumption Test

All data from two independent variables, one *intervening variable*, and one dependent variable were collected using quantitative data in ratio form. To obtain accurate research results, the study first conducted classical assumption tests. These tests included normality, multicollinearity, heteroscedasticity, and autocorrelation.

Data Normality Test Results

The normality test aims to determine whether the independent, dependent, and *intervening variables in the regression model* have a normal distribution. The *Kolmogorov-Smirnov* test compares the probability or significance value of the test results with a predetermined probability value of 0.05. If the significance value is greater than 0.05, the

regression model has a normal distribution; conversely, if the significance value is less than 0.05, the regression model is not normally distributed.

**Table 2 Results of
the Kolmogorov-Smirnov Classical Assumption Test
One-Sample Kolmogorov-Smirnov Test**

		Unstand ardized Residua l	
N		124	
Normal Parameters ^{a,b}	Mean	,000000 0	
	Standard Deviation	,266871 48	
Most Extreme Differences	Absolute	,064	
	Positive	,062	
	Negative	-,064	
Test Statistics		,064	
Asymp. Sig. (2-tailed) ^c		,200 ^d	
Monte Carlo Sig. (2-tailed) ^e	Sig.	,228	
	99% Confidence Interval	Lower Bound	,217
		Upper Bound	,239

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.
e. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 299883525.

Source: *Output results* of SPSS version 27

Based on table 2 above, it shows that the results of *the Kolmogorov-Smirnov test*, seen from the Asymp. Sig (2-tailed) value, have a value of 0.200, this figure is greater (>) than 0.05, so it can be concluded that the residual data is normally distributed.

Multicollinearity Test Results

The multicollinearity test aims to determine whether the regression model finds a correlation between independent variables. A good regression model should not have a correlation between independent variables. To detect the presence of multicollinearity, *the*

Tolerance and Variance Inflation Factor (VIF) values can be observed. If the Tolerance value is > 0.10 or the VIF value is < 10 , then multicollinearity does not occur. If the Tolerance value is < 0.10 or the VIF value is > 10 , then multicollinearity occurs in the regression model. The test was conducted using IBM SPSS version 27 in this study as follows:

Table 3
Multicollinearity Test Results

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
Capital Intensity	,893	1,120
Leverage	,893	1,120

a. Dependent Variable: Z_TP

Source: *Output results of SPSS version 27*

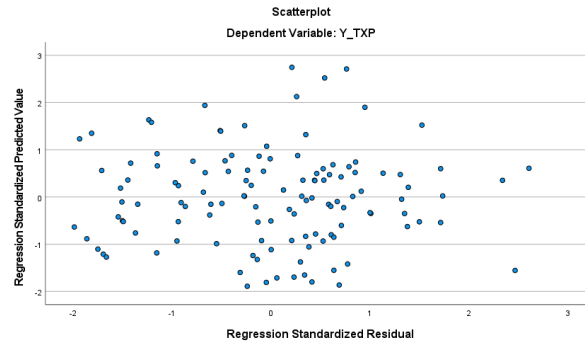
Based on Table 3, the results of the multicollinearity test show that the Capital Intensity and *Leverage variables* have a *Tolerance value* of 0.893 and a VIF value of 1.120, where the *Tolerance value* is greater ($>$) than 0.10 and the VIF value is less than ($<$) 10, so it can be concluded that there is no multicollinearity between the independent variables in the regression model. Therefore, the regression model used is appropriate because there is no strong relationship between the independent variables.

Heteroscedasticity Test Results

The Heteroscedasticity Test aims to test for unequal *variances in the regression model* from one observation's residuals to another. The Heteroscedasticity Test can be seen by observing the results of the *scatterplot test*. If the points in the image are spread out, do not form a specific pattern, and are spread above and below the number 0 on the Y-axis, then the variable can be declared not to have heteroscedasticity.

The results of the heteroscedasticity test in this study are as follows:

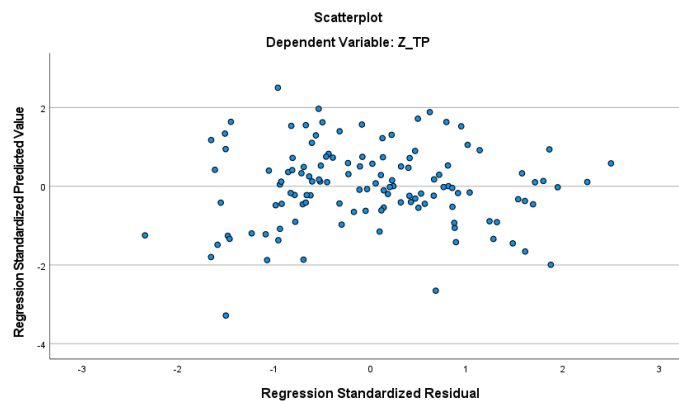
Table 4
Heteroscedasticity Test Results



Source: *Output results* of SPSS version 27

Based on table 4 regarding *the scatterplot results* , it can be seen that the points are spread randomly both above and below the number 0 on the Y axis. This shows that this model does not experience heteroscedasticity.

Table 5
Heteroscedasticity Test Results



Source: *Output results* of SPSS version 27

Based on table 5 regarding *the scatterplot results* , it can be seen that the points are spread randomly both above and below the number 0 on the Y axis. This shows that this model does not experience heteroscedasticity interference.

Autocorrelation Test Results

The purpose of autocorrelation is to test the linear regression model to determine whether there is a correlation between the confounding errors in the previous period *t*. If an autocorrelation *problem* arises, it means that there are consecutive observations over time that are related to each other. The autocorrelation test in this study uses the *Durbin-Watson (DW) method* to detect the presence or absence of autocorrelation problems, obtained by examining the *Durbin-Watson Test table*.

the Durbin - Watson test in this study are as follows:

Table 6
Autocorrelation Test Results

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate	Durbin-Watson
1	,453 ^a	,206	,192	,269068	2,077

a. Predictors: (Constant), X2_LV, X1_IM
b. Dependent Variable: Z_TP

Source: *Output results of SPSS version 27*

Based on table 6, the results of the *Durbin-Watson autocorrelation test* are 2.077. This value is compared with the *Durbin-Watson table* with a significance value of 5%, the number of sample data is 124 (n) and the number of independent variables is 3 (k), then the lower limit value or *lower board* (DL) is 1.6577 and the upper limit value or *upper board* (DU) is 1.7567. Then the *Durbin-Watson* value is obtained as follows:

$$\begin{aligned}
 &= dU < d < 4 - dU \\
 &= 1.7567 < 2.077 < (4 - 1.7567) \\
 &= 1.7567 < 2.077 < 2.2433
 \end{aligned}$$

From the results of these calculations, it can be concluded that in the study there was no positive or negative autocorrelation with the decision not to reject.

Table 7
Autocorrelation Test Results

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate	Durbin-Watson
1	,773 ^a	,597	,587	,043370	2,043

a. Predictors: (Constant), Z_TP, X2_LV, X1_IM
b. Dependent Variable: Y_TXP

Source: *Output results of SPSS version 27*

Based on table 7, the results of the *Durbin-Watson autocorrelation test* are 2.043. This value is compared with the *Durbin-Watson table* with a significance value of 5%, the number of sample data is 124 (n) and the number of independent variables is 3 (k), then the lower

limit value or *lower board* (DL) is 1.6577 and the upper limit value or *upper board* (DU) is 1.7567. Then the Durbin-Watson value is obtained as follows:

$$\begin{aligned}
 &= dU < d < 4 - dU \\
 &= 1.7567 < 2.043 < (4 - 1.7567) \\
 &= 1.7567 < 2.043 < 2.2433
 \end{aligned}$$

From the results of these calculations, it can be concluded that in the study there was no positive or negative autocorrelation with the decision not to reject.

Results of Multiple Linear Regression Analysis

Multiple linear regression analysis can be used to examine the influence in this study because the number of variables in this study is four variables, with two independent variables (Capital Intensity and *Leverage*) , one dependent variable (*Tax Planning*) , and one *intervening* variable (*Transfer Pricing*). The regression results are presented as follows:

Table 8
Multiple Linear Regression Test Results

		Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-,003	,067		-,049	,961		
	Capital Intensity	,711	,171	,356	4,153	,000	,893	1,120
	Leverage	,072	,033	,187	2,184	,031	,893	1,120

a. Dependent Variable: Z_TP

Source: *Output results* of SPSS version 27

Based on table 8 above, it can be concluded that the multiple linear regression equation is as follows:

$$Y = 0.003 + 0.711X_1 + 0.072X_2 + \epsilon$$

Based on the multiple linear regression equation above, it can be seen how much influence the two independent variables, namely Capital Intensity and *Leverage*, have on the dependent variable *Transfer Pricing*, as follows:

1. The constant value of 0.003 indicates that if the Capital Intensity value (X₁) is 0.711, it indicates that Capital Intensity has a positive influence on *Transfer Pricing* (Z). If Capital Intensity increases by one unit, it will increase *the Transfer Pricing value* by 0.711.
2. The constant value of 0.003 indicates that if the *Leverage value* (X₂) is 0.072, it indicates that *Leverage* has a positive influence on *Transfer Pricing* (Z). If *Leverage* increases by one unit, it will increase *the Transfer Pricing value* by 0.072.

Results of the Determination Coefficient Analysis

The coefficient of determination test is used to determine the extent of influence an independent variable has on a dependent variable. The coefficient of determination ranges from 0 to 1. If the *Adjusted R2* value is ¹, it means the independent variable provides almost all the information needed to predict the dependent variable. If the *Adjusted R2* value approaches 0, it means the independent variable is of limited use in explaining the dependent variable.

Table 9
Results of Determination Coefficient Analysis

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate	Durbin-Watson
1	,453 ^a	,206	,192	,269068	2,077

a. Predictors: (Constant), X2_LV, X1_IM

b. Dependent Variable: Z_TP

Source: *Output results of SPSS version 27*

Adjusted R Square value is 19.2%. This indicates that the Capital Intensity and Leverage variables are able to explain 19.2% of the variation in the Transfer Pricing variable, with the remainder influenced by other variables.

Table 10
Results of Determination Coefficient Analysis

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate	Durbin-Watson
1	,773 ^a	,597	,587	,0433703	2,043

a. Predictors: (Constant), Z_TP, X2_LV, X1_IM

b. Dependent Variable: Y_TXP

Source: *Output results of SPSS version 27*

Based on table 10 above, the value of *Adjusted R Square* is 58.7%, meaning that 58.7% shows that the Capital Intensity, Leverage, and Transfer Pricing variables are able to explain 58.7% of the variation in Tax Planning and the rest is influenced by other variables.

Path Analysis

Path analysis is the use of regression analysis to estimate causal relationships between variables (causal models) that have been previously established based on theory. The discussion of path analysis is as follows:

Table 11
Results of Capital Intensity Path Analysis

To conduct the Sobel test

Details can be found in Baron and Kenny (1986), Sobel (1982), Goodman (1960), and MacKinnon, Warsi, and Dwyer (1995). Insert the a , b , s_a , and s_b into the cells below and this program will calculate the critical ratio as a test of whether the indirect effect of the IV on the DV via the mediator is significantly different from zero.

Input:		Test statistic:	Std. Error:	p-value:
a	0.711	Sobel test: 3.23098222	0.01694438	0.00123366
b	0.077	Aroian test: 3.19458727	0.01713743	0.00140031
s_a	0.171	Goodman test: 3.26865011	0.01674912	0.00108062
s_b	0.015	Reset all	Calculate	

Source: *Output results of SPSS version 27*

Based on the Sobel test results in Table 11, a statistical value of 3.2309 was obtained with a significance value of 0.0012, which is less than 0.05. This indicates that there is an indirect effect between Capital Intensity and *Tax Planning* through *Transfer Pricing*. In this study, *the transfer pricing variable* is able to mediate the relationship between Capital Intensity and *Tax Planning*. Hypothesis Testing Results

Partial Hypothesis Test Results (t-Test)

The t-test is used to test hypotheses that determine the partial effect of an independent variable on a dependent variable. The decision-making guidelines for the t-statistical test are as follows:

- a. If the calculated t value $<$ t table then H_0 is accepted and H_a is rejected, meaning there is a significant partial influence between the independent variable and the dependent variable.
- b. If the calculated t value $>$ t table then H_0 is rejected and H_a is accepted, meaning that there is no significant partial influence between the independent variable and the dependent variable.

The guidelines for making decisions based on the results of the t-test based on the significance value (Sig.) are as follows:

- a. If the significance value (Sig.) $<$ 0.05 then H_0 is rejected, H_a is accepted.
- b. If the significance value (Sig.) $>$ 0.05 then H_0 is accepted, H_a is rejected.

Table 12
Results of Partial Hypothesis Testing (t-Test)

Model	Coefficients ^a						
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-,003	,067		-,049	,961	
	Capital Intensity	,711	,171	,356	4,153	,000	,893 1,120
	Leverage	,072	,033	,187	2,184	,031	,893 1,120

a. Dependent Variable: Z_TP

Source: *Output results* of SPSS version 27

To calculate the t_{table} with degrees of freedom $df = n - k$, where the value of n = number of data and k = number of variables, then $df = 124 - 4 = 120$, so the value obtained for the t_{table} is 1.97993.

Table 17 shows the influence of each dependent variable on the intervening variable. The partial test results are explained as follows:

1. Testing the Capital Intensity Variable on *Transfer Pricing*

The Capital Intensity variable (X_1) in the table above shows a calculated t value of $4.153 > 1.97993$ or a calculated t value $> t_{table}$ and a significant value of 0.000 which is smaller than 0.05, then H_0 is rejected and H_a is accepted, meaning that Capital Intensity has a significant positive effect on *Transfer Pricing*.

2. Testing the Leverage Variable on *Transfer Pricing*

The Capital Intensity variable (X_1) in the table above shows a calculated t value of $2.184 > 1.97993$ or a calculated t value $> t_{table}$ and a significant value of 0.031 which is smaller than 0.05, then H_0 is rejected and H_a is accepted, meaning that *Leverage* has a significant positive effect on *Transfer Pricing*.

Simultaneous Hypothesis Test Results (F Test)

Simultaneous hypothesis testing to determine whether the independent variables (*Independent*) together have a significant influence on the dependent variable (*Dependent*). The statistical test applied in this study is known as analysis of variance (ANOVA). If the probability is less than 0.05 then H_0 is rejected H_a is accepted,

The decision-making guidelines in the simultaneous significance test (F-Test) are as follows:

- a. If the significance value (Sig.) < 0.05 , then H_0 is rejected and H_a is accepted.
- b. If the significance value (Sig.) > 0.05 , then H_0 is accepted and H_a is rejected.

calculated F value with the F_{table} :

- a. calculated F value $> F_{table}$, then H_0 is rejected and H_a is accepted.
 b. calculated F value $< F_{table}$, then H_0 is accepted and H_a is rejected.

Table 13**Results of Simultaneous Hypothesis Test (F Test)**

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2,267	2	1,133	15,656	,000 ^b
	Residual	8,760	121	,072	6	
	Total	11,027	123			
a. Dependent Variable: Z_TP						
b. Predictors: (Constant), X2_LV, X1_IM						

Source: *Output results of SPSS version 27*

To obtain the F_{table} value, the F_{table} frequency distribution table was used with a significance level of 0.05, so the F_{table} value obtained was 2.680.

Based on table 13 above, it shows that the calculated F value is $15.656 > 2.680$ or the calculated F value $> F_{table}$ and the significant value of 0.000 is smaller than 0.05, so H_0 is rejected and H_a is accepted, meaning that Capital Intensity and *Leverage* simultaneously have a significant effect on *Transfer Pricing* .

DISCUSSION

The results of the study indicate that capital intensity has a significant negative effect on tax planning in food and beverage manufacturing companies listed on the Indonesia Stock Exchange for the 2021–2024 period. The higher the capital intensity, the lower the tax planning practices. This indicates that companies with substantial fixed assets have a higher level of transparency and oversight, thus being more cautious in implementing tax strategies.

The results of this study align with those of Yino and Ngadiman (2025), who stated that capital intensity influences corporate tax behavior through the management of depreciation expenses. Research by Septiana and Machdar (2024) also explains that companies with high fixed assets tend to have better tax compliance. Leverage has also been shown to have a significant negative effect on tax planning. This suggests that companies with high debt levels tend to avoid aggressive tax planning practices due to greater oversight from creditors and financial risks. From an agency theory perspective, creditors act as additional supervisors, limiting management's opportunistic actions in implementing tax avoidance strategies. These results support research by Wulandari and Ernandi (2025), who stated that leverage influences corporate tax policy through the use of interest expense as a deduction from taxable income.

This study also found that capital intensity and leverage have a significant positive effect

on transfer pricing. Companies with high fixed assets and debt levels tend to have greater transaction activity between related parties, thus opening up opportunities for transfer pricing practices. These results align with research by Ardeliani and Solikhah (2025), which states that companies with high capital intensity are more likely to engage in transfer pricing due to their more complex operational activities.

Furthermore, transfer pricing has been shown to mediate the relationship between capital intensity and leverage on tax planning. This finding suggests that companies utilize asset and financing structures not only directly for tax planning but also through related-party transaction mechanisms. According to Sysmantia and Evana (2023), transfer pricing is a strategy frequently used by companies to regulate profit distribution between entities within a business group, thereby reducing the company's tax burden.

Simultaneously, capital intensity, leverage, and transfer pricing significantly influence tax planning. These results indicate that asset management, funding structure, and related-party transactions play a significant role in determining corporate tax policy. This research implies that the government needs to increase oversight of companies with related-party transactions and high levels of leverage, as they have the potential to engage in tax planning through transfer pricing.

This study still has limitations due to its limited sample size of companies in the food and beverage subsector for the 2021–2024 period and limited research variables. Therefore, further research is recommended to include other variables such as profitability, corporate governance, and company size for more comprehensive results.

CONCLUSION AND SUGGESTIONS

Based on the research results, it can be concluded that capital intensity and leverage significantly influence tax planning in food and beverage manufacturing companies listed on the Indonesia Stock Exchange for the 2021–2024 period. Capital intensity and leverage also significantly influence transfer pricing. Furthermore, transfer pricing mediates the effect of capital intensity and leverage on tax planning. The results of this study indicate that asset structure and corporate funding management play a significant role in determining corporate tax policy, both directly and through related party transactions. Therefore, transfer pricing is one of the strategies used by companies to support tax planning practices.

This research implies that companies need to pay greater attention to asset management policies, debt utilization, and related party transactions to maintain compliance with tax compliance and good corporate governance principles. For the government and tax authorities, the results of this study can be used as a basis for increasing oversight of companies with high leverage and large affiliated transactions. Future research is recommended to expand the research object to other industrial sectors and add other variables such as profitability, corporate governance, company size, and political connections to obtain more comprehensive results regarding the factors influencing corporate tax planning.

BIBLIOGRAPHY

- Ardeliani, I., & Solikhah, B. (2025). Strategic Determinants of Transfer Pricing in Indonesian Non-Financial Firms. *E-Journal of Accounting*, 35(12). <https://doi.org/10.24843/EJA.2025.v35.i12.p16>
- Febriani, SD, Fauziyah, F., & Rahayu, P. (2026). The Effect of Leverage, Firm Size, and Transfer Pricing on Tax Planning in Energy Sector Companies Listed on the Indonesia Stock Exchange from 2022-2024. *Al-Kharaj: Journal of Islamic Economics and Business*, 8(2). <https://doi.org/10.24256/kharaj.v8i2.9877>
- Quantitative, Qualitative, and R&D Research Methods. Sugiyono. (2023). *Quantitative, Qualitative, and R&D Research Methods (3rd Edition)*. Bandung: Alfabeta.
- Ghozali, I. (2022). *Multivariate Analysis Application with IBM SPSS 27 Program*. Semarang: Diponegoro University Publishing Agency.
- Rahmawati, L., Hasanah, U., & Dewi, M. (2023). Quantitative Approach in Taxation Research: Empirical Evidence from Southeast Asia. *Asian Journal of Accounting Research*, 8(4), 312–326. <https://doi.org/10.1108/AJAR-11-2022-0412>
- Hidayat, R., & Nurhayati, S. (2024). Purposive Sampling Technique in Financial and Taxation Research: Evidence from Emerging Markets. *International Journal of Accounting and Finance Studies*, 9(1), 44–58. <https://doi.org/10.22158/ijafs.v9n1p44>
- Kurniawan, A., Prasetyo, B., & Lestari, D. (2024). Path Analysis Model in Corporate Tax Planning Research. *International Journal of Economics and Finance Studies*, 16(1), 55–69. <https://doi.org/10.34109/ijefs.202416104>
- Sysmantia, E., & Evana, E. (2023). Analysis of the Effect of Transfer Pricing, Leverage, Deferred Tax, and Advertising Expenses on Tax Planning in Indonesia with Company Size as a Control Variable. *Journal of Economic and Accounting Research*, 1(2), 195–221. <https://doi.org/10.54066/jrea-itb.v1i2.291>
- Wibowo, T., Pramesti, D., & Anggraeni, S. (2023). Financial Statement Utilization in Tax Avoidance Research in Indonesia. *Cogent Business and Management*, 10(1), 1–14. <https://doi.org/10.1080/23311975.2023.2281174>
- Yino, D., & Ngadiman. (2025). Transfer Pricing, Capital Intensity, and Leverage Projected to Influence Tax Avoidance. *Journal of Economics*, 30(1), 130–152. <https://doi.org/10.24912/je.v30i1.2941>
- Zahra, N., & Kurnia, R. (2022). Capital Intensity and Tax Planning Practices in Manufacturing Firms. *Journal of Contemporary Accounting*, 4(2), 88–101. <https://doi.org/10.20885/jca.vol4.iss2.art3>
- Zulkarnaen, M., & Handayani, S. (2022). The Influence of Capital Intensity and Leverage on Corporate Tax Aggressiveness. *Journal of Contemporary Accounting*, 4(3), 211–225. <https://doi.org/10.20885/jca.vol4.iss3.art5>

- Wahyudi, T., & Setiawan, H. (2025). Mediating Effect Analysis in Tax Avoidance Research Using Path Analysis. *Cogent Business and Management*, 12(1), 1–15. <https://doi.org/10.1080/23311975.2025.2478112>
- Ardeliani, I., & Solikhah, B. (2025). Strategic Determinants of Transfer Pricing in Indonesian Non-Financial Firms. *E-Journal of Accounting*, 35(12). <https://doi.org/10.24843/EJA.2025.v35.i12.p16>
- Gabriella, M., & Lin, C. (2024). Leverage and Transfer Pricing Strategy in Multinational Companies. *Journal of International Accounting Research*, 23(2), 88–104. <https://doi.org/10.2308/JIAR-2024-118>
- Septiana, AD, & Machdar, NM (2024). An Exposition of Transfer Pricing, Fixed Asset Intensity, and Capital Intensity on Tax Avoidance. *Tax Accounting and Digital Economic Policy*, 2(1), 17–26. <https://doi.org/10.61132/apke.v2i1.713>
- Sysmantia, E., & Evana, E. (2023). Analysis of the Effect of Transfer Pricing, Leverage, Deferred Tax, and Advertising Expenses on Tax Planning in Indonesia with Company Size as a Control Variable. *Journal of Economic and Accounting Research*, 1(2), 195–221. <https://doi.org/10.54066/jrea-itb.v1i2.291>
- Wiguna, MAK, & Sinarwati, NK (2025). The Effect of Profitability, Leverage, and Transfer Pricing on Tax Planning in IDXQ30 Companies in 2020–2024. *Scientific Journal of Accounting and Humanities*, 15(2). <https://doi.org/10.23887/jiah.v15i2.100222>
- Wulandari, F., & Ernandi, H. (2025). Leverage and Liquidity Drive Tax Avoidance in Manufacturing Companies. *Academia Open*, 10(2). <https://doi.org/10.21070/acopen.10.2025.11042>
- Yino, D., & Ngadiman. (2025). Transfer Pricing, Capital Intensity, and Leverage Projected to Influence Tax Avoidance. *Journal of Economics*, 30(1), 130–152. <https://doi.org/10.24912/je.v30i1.2941>
- Juniar, M., Azis, MT, & Surono. (2025). The Effect of Capital Intensity, Sales Growth, and Transfer Pricing on Tax Avoidance in the Telecommunications and Transportation Sectors. *Multi-Science Journal of Management Economics*, 16(1). <https://doi.org/10.52657/jiem.v16i01.2987>
- Pamungkas, MR, & Nurdiniah, D. (2025). The Effect of Transfer Pricing and Capital Intensity on Tax Avoidance with Leverage as a Moderating Variable. *AKURASI: Journal of Accounting and Financial Research*, 7(2), 195–204. <https://doi.org/10.36407/akurasi.v7i2.1686>
- Febriani, SD, Fauziyah, F., & Rahayu, P. (2026). The Effect of Leverage, Firm Size, and Transfer Pricing on Tax Planning in Energy Sector Companies Listed on the Indonesia Stock Exchange from 2022–2024. *Al-Kharaj: Journal of Islamic Economics and Business*, 8(2). <https://doi.org/10.24256/kharaj.v8i2.9877>