Leverage, Profitability, and Tax Avoidance: Transfer Pricing as a Moderating Variable

Abstract

This study analyze the impact of leverage and profitability on tax avoidance, using transfer pricing as a moderating variable. The study focuses on manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2021-2023 period (3 years). Data were collected from the company's financial statements and analyzed using the Eviews application. The determination of the sample for this study was using the Purposive Sampling method and the analysis used panel data with the multiple regression method. The results of the study indicate that leverage has no effect on tax avoidance, profitability has a negative effect on tax avoidance, transfer pricing is able to positively moderate the effect of leverage and profitability on tax avoidance. The novelty of this study lies in the use of transfer pricing as a moderating variable in the relationship between leverage, profitability, and tax avoidance. This study provides a managerial contribution by identifying factors that influence tax avoidance and the role of transfer pricing in strengthening or weakening this influence. The results of this study are expected to be a reference for company management in formulating more effective and efficient financial policies in managing the company's tax burden.

Keywords: Leverage; Profitability; Tax Avoidance; Transfer Pricing; Manufacturing company.

INTRODUCTION

Taxes are an essential tool for the state to maintain economic balance, as taxes provide revenue that supports government programs and policies (Juliarini, 2020). According to the Republic of Indonesia Law Number Seven of Two Thousand Twenty-One concerning the Harmonization of Tax Regulations “taxes are mandatory contributions from individuals or entities that are coercive in nature, in accordance with the law, without direct compensation, and are used for the state's benefit and the welfare of the people”. The collection of taxes is a means for the state to generate revenue, and tax revenues are expected to increase annually according to the established targets (Abadi Joko et al., 2022).

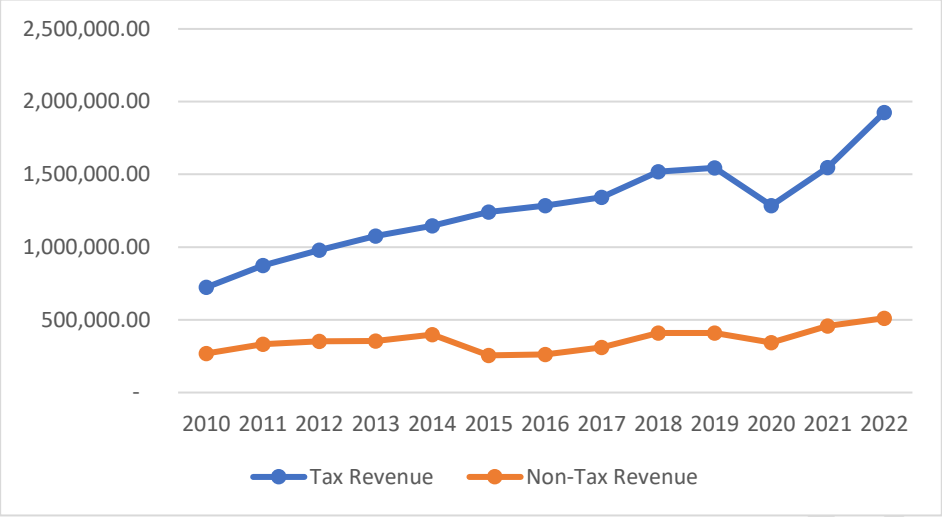

Figure 1. Realization of State Revenue
Source: Badan Pusat Statistik 2023, Jakarta

From **Figure 1** shows it is evident that the state's tax revenue is greater than its non-tax revenue. Although state revenue tends to increase each year, there was a decline in two thousand twenty due to the COVID-19 pandemic. This pandemic created a dual crisis in the health and economic sectors, significantly impacting Indonesia's economy. As a measure to mitigate the pandemic's impact, the government provided tax incentive programs to businesses experiencing a decline in revenue. However, these tax incentives were misused by some companies to avoid taxes during the pandemic (Firmansyah & Ardiansyah, 2021).

Tax revenue collection does not only depend on the central and regional governments but also requires active participation from the community or taxpayers. According to the Harmonization of Tax Regulations Law Taxpayers are individuals or entities with tax rights and obligations as stipulated by the regulations. Companies, as taxpayers, have made a significant contribution to the country's tax revenue, making their role crucial for both the state and society. Taxes are a vital source of revenue for the state, which is used to fund development projects and welfare programs. However, for companies, taxes are often seen as a financial burden that can affect their profitability (Tiranda, 2019). This difference in perspective often

leads companies to seek ways to avoid taxes as an effort to reduce financial burdens and increase profits. By structuring their finances and exploiting gaps in tax regulations, companies can reduce the amount of tax that must be paid, thereby increasing their profitability.

Several phenomena have occurred in Indonesia that have caused losses to the state. The first phenomenon occurred in two thousand nineteen involving PT Bentoel Internasional Investama. This company has engaged in tax avoidance in Indonesia, resulting in a loss to the state of fourteen million US dollars per year. The company has diverted part of its revenue by taking out numerous intra-company loans between two thousand thirteen and two thousand fifteen to refinance bank debt as well as to pay for machinery and equipment. The interest payments on these loans could be deducted from the company's taxable income in Indonesia. Ideally, Indonesia could have imposed a twenty percent tax on the loan amount. This tax avoidance phenomenon indicates that factors such as profitability and the amount of debt can encourage taxpayers to practice tax avoidance (Prima & Dewi, 2019).

The second phenomenon is the tax avoidance carried out by the coal company PT Adaro Energy Tbk. This company is suspected of structuring its operations in such a way that management paid one hundred twenty-five million US dollars less in taxes than should have been paid in Indonesia. The Directorate General of Taxes is investigating the alleged tax avoidance by PT Adaro Energy Tbk through a transfer pricing scheme involving its subsidiary in Singapore (Sugianto, 2019).

The third phenomenon is a report from the Tax Justice Network, estimating that Indonesia experiences losses of four point eight six billion US dollars per year due to tax avoidance practices. The report notes that around four point seven eight billion US dollars comes from corporate tax avoidance practices in Indonesia. Meanwhile, the remainder, totaling seventy-eight point eight three million US dollars, is derived from individual taxpayers.

Multinational companies tend to shift their profits to countries considered tax havens, with the aim of not reporting the true extent of profits generated in the countries where they operate. This practice ultimately results in companies paying less tax than they should (The State of Tax Justice 2020: Tax Justice in the Time of COVID-19, 2020).

These various negative issues create fiscal challenges, particularly related to transfer pricing practices. In this context, multinational companies are often perceived as engaging in efforts to minimize their tax liabilities through the manipulation of transfer prices, especially with affiliated entities abroad. This practice tends to shift global income to low-tax countries while moving larger costs to high-tax countries. Drawing from the explanation and the various tax avoidance phenomena outlined, it can be concluded that tax avoidance is a complicated matter. On one hand, tax avoidance is not illegal; however, on the other hand, the government discourages such practices as they can diminish state revenue. This has prompted further research into tax avoidance.

Tax avoidance practices by companies can be affected by different factors like leverage and profitability. Leverage is a ratio that shows the amount of debt used by a company to finance its operational activities (Mukhammedova & Akromov, 2021) Study by (Mulyati et al., 2019) found that leverage negatively impacts tax avoidance. The findings of this study are consistent with those of Ernawati et al. (2019), Sulaeman (2021), Nguyen (2021), Sulaeman & Surjandari (2024), Yuniar et al. (2021). However, study conducted by Suciarti et al. (2020), stated that leverage does not impact tax avoidance, and these findings align with the study conducted by Sulistyowati & Hendrawati (2019), Eddy et al. (2020), Darsani & Sukartha (2021), Sari et al. (2021), (Apriatna & Oktris, 2022).

Profitability is a ratio used to determine a company's ability to generate profit or gain from certain revenues (Pardede & Munthe, 2023). The study by Darsani & Sukartha (2021)

found that profitability positively impacts tax avoidance, indicating that as a company's profits increase, its tax avoidance practices also intensify, this is in line with study conducted by Sulaeman & Surjandari (2024), Sulistyowati & Hendrawati (2019). However, this is different from the study conducted by Sari et al. (2021), Wahyuni et al. (2019), and Apriatna & Oktris (2022) the results of these study show that profitability has no effect on tax avoidance.

Based on the two variables previously described as the causes of tax avoidance and supported by past studies, there remains inconsistency in the results concerning the relationship between leverage and profitability and their impact on tax avoidance. As a novelty in this study, transfer pricing is introduced as a moderating variable. The procedure for determining transfer prices within a company is closely related to efforts to avoid tax payments, and this phenomenon is exacerbated by technological advances. Therefore, transfer pricing may influence the relationship between leverage and profitability in relation to tax avoidance (Hayani & Deny Darmawati, 2023). The emergence of transfer pricing practices occurs due to special relationships between the parties involved, such as the relationship between parent organizations and subsidiaries. Additionally, this practice arises as a result of different objectives, depending on the perspective taken. Specifically, these objectives include strengthening relationships between organizations and investors, increasing company profits through administrative recording, and actions to decrease the tax burden on the organization.

The researcher is motivated to undertake this study due to the inconsistency in previous research findings and the widespread tax avoidance practices by corporations as taxpayers. Tax avoidance practices can benefit companies, but they harm the government. However, if tax avoidance is conducted in compliance with tax regulations, such activities are permissible and acceptable. On the other hand, the government does not favor tax avoidance as it reduces national revenue. Several factors may drive companies to engage in tax avoidance practices,

including leverage, profitability, and transfer pricing. Therefore, this study aims to analyze tax avoidance more thoroughly, with the title "Leverage and Profitability Affect Tax Avoidance with Transfer Pricing as Moderating".

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Agency Theory

Agency Theory as explained by Jensen & Meckling (1976), describes the relationship between two parties: the principal (such as the company owner or investor) who delegates authority, and the agent (company management) who is tasked with overseeing the company's operations. In the context of taxation, Agency Theory can be viewed from the perspective of the government as the principal and the company as the agent. There is often a conflict of interest between the two, where the government requires companies to fulfill their tax obligations, while companies often seek to optimize profits by minimizing costs, including tax expenses, to maximize their profits. As a company's profits increase, its tax payments also increase proportionately. This is a common reason why many companies engage in tax avoidance practices. The conflict between the agent and principal can be minimized through oversight mechanisms that align their objectives. However, this approach is not without risks and can lead to other issues, such as the emergence of agency costs.

Tax Avoidance

Tax avoidance refers to efforts by companies to minimize their tax burden legally, without violating any laws or regulations, as taxes are considered an expense that reduces profits (Nguyen, 2021). It is distinct from tax evasion, which involves illegal actions (Pradana & Wulandari, 2023). While tax avoidance operates within the boundaries of legal tax

provisions, tax evasion refers to unlawful manipulations (Saputra, 2019). Tax avoidance typically exploits loopholes in the tax system to reduce tax obligations (Chrysilla & Sandra, 2023), making it a legally safe practice. Tebiono et al. (2019) highlight several strategies for tax avoidance, including relocating taxable subjects or objects to tax havens, selecting formal transactions that minimize tax burdens, and applying anti-avoidance rules related to transfer pricing, thin capitalization, treaty shopping, and controlled foreign corporations.

Leverage

Leverage represents a financial ratio that shows the relationship between a company's debt and its equity or assets (Eddy et al., 2020). It reflects a company's ability to use debt to finance its operations. The higher the leverage, the greater the financial risk faced by the company and its investors. This ratio indicates how much of the company is funded by debt compared to its equity.

Profitability

Profitability refers to a company's primary goal of generating profit from its operations(Apriatna & Oktris, 2022). Profit is the difference between revenue earned and expenses incurred. It serves as a measure of the company's efficiency in managing its resources, including assets and capital, to generate profit. Companies with high profitability are considered to have strong financial performance due to effective management.

Transfer Pricing

Transfer pricing refers to the pricing of transactions between affiliated entities, often used in inter-divisional exchanges (Turwanto et al., 2022). According to tax regulations, transfer pricing can lead to tax avoidance when prices in related-party transactions deviate from fair market values (mispricing). While financial reporting standards like PSAK 7 require disclosure of related-party transactions, specific details about transfer pricing are not mandated

(Irawan, 2022). In the context of tax regulations (PMK-213/PMK.03/2016), transfer pricing documentation is prepared to ensure fairness in intercompany transactions and prevent tax avoidance.

The effect of Leverage on Tax Avoidance

The effect of leverage on tax avoidance refers to how a company's debt level can affect its tendency to engage in tax avoidance practices. Study conducted by Nguyen (2021) indicates that leverage has a negative effect on tax avoidance. The higher the leverage ratio, the greater the amount of funding obtained by the company from third-party debt, and the larger the interest expense arising from that debt. This increase in interest expense leads to a reduction in the company's tax burden (Yuniar et al., 2021).

H_1: Leverage effects tax avoidance.

The Effect of Profitability on Tax Avoidance

The effect of profitability on tax avoidance refers to how a company's profitability level can affect its tendency to engage in tax avoidance practices. The profitability achieved by the company will influence the actions it takes to maximize the net profit received. The higher the company's profit, the greater its tendency to engage in tax avoidance to reduce its tax burden by moving the company's profit to other companies in different country with lower tax rates. This is consistent with study conducted by Sulaeman & Surjandari (2024), which states that profitability has a positive impact on tax avoidance.

H_2: Profitability effects tax avoidance.

The Effect of Transfer Pricing on Tax Avoidance

Transfer pricing involves setting prices in transactions between affiliated or related companies. The influence of transfer pricing as a moderating variable on tax avoidance reflects

how transfer pricing can affect or alter the relationship between other variables, such as firm size, leverage, and profitability, with tax avoidance practices.

Larger companies may have more interparty transactions and operational complexities, which can affect tax avoidance practices. Transfer pricing strategies employed by companies can moderate the impact of firm size on tax avoidance. For example, aggressive transfer pricing practices can increase tax avoidance, regardless of company size.

High leverage can provide an advantage in managing tax burdens, particularly through the recognition of interest expenses as tax deductions. The use of aggressive transfer pricing strategies can limit the effect of debt levels on tax avoidance practices. For instance, companies with high debt levels may be more likely to use transfer pricing to manage profits and reduce tax liabilities.

High profitability can provide flexibility in designing tax strategies and exploiting tax loopholes. Companies may use transfer pricing to optimize tax benefits derived from high profits.

H_3: Transfer Pricing can moderate the effects of leverage on tax avoidance.

H_4: Transfer Pricing can moderate the effects of profitability on tax avoidance.

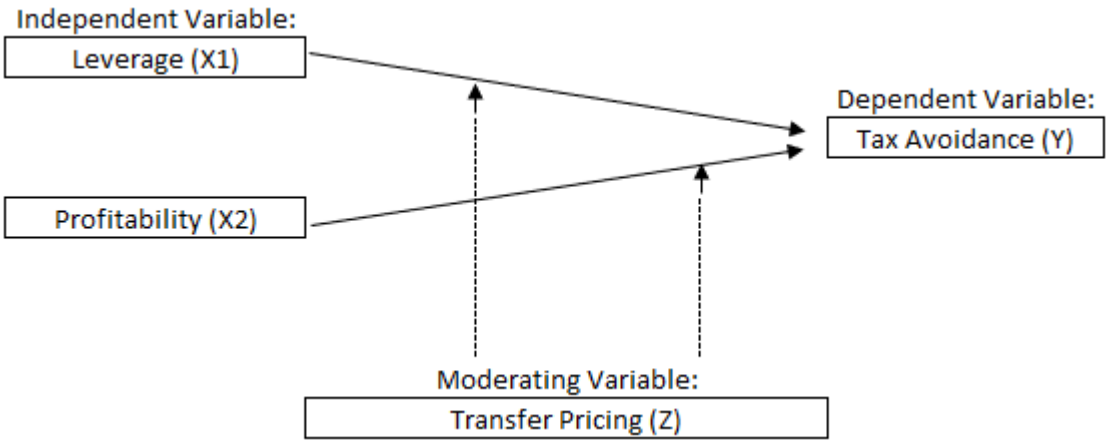

Figure 2. Research Model

RESEARCH METHOD

This study adopts a quantitative approach. Donmoyer (2009) defines quantitative study as an empirical approach in which data can be measured in numerical form. This study focuses on the collection and analysis of data with numerical characteristics. This type of study is conducted through a structured and organized process from the beginning to the end.

Data collection uses a literature review, and the type of data used is secondary data. Secondary data refers to sources that do not directly provide data to the data collectors. Secondary data is obtained from sources that support the study, including documentation and literature.

The population in this study consists of manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2021-2023 period. The total sample in this study is 183 companies (source: www.idx.co.id).

The sample size is determined based on the following sample criteria used in this study: (1) Manufacturing companies listed on the Indonesia Stock Exchange during the 2021-2023 period, (2) Manufacturing companies whose financial statements are fully accessible during the 2021-2023 period, (3) Manufacturing companies that recorded profits during the 2021-2023 period, (4) Manufacturing companies that had affiliated transactions during the 2021-2023 period. Table 1shows the sample selection: Research Method describes research plan or research design, research objective and target (population and sample), technique in collecting research data, research model, and technique used for analysis.

Table 1 Population and Sample Criteria

No.	Criteria	Population Size
1.	Manufacturing companies listed on the Indonesia Stock Exchange during the 2021-2023 period.	170

2.	Minus manufacturing companies whose financial statements are not fully accessible during the 2021-2023 period.	(6)
3.	Minus manufacturing companies that incurred losses and do not have receivables with related parties during the 2021-2023 period.	(103)
	Total Number of Sample Companies	61
	Data panel analyzed (61 companies x 3 years)	183

Variables and Measurements

Cause-and-effect relationships within the unit of analysis are the focus of this type of causality study. The independent and moderating variables are looked at as causes in this study, while the dependent variable is the effect. There are three kinds of variables involved: the dependent variable is tax avoidance. The Cash Effective Tax Rate which divides tax expenses by earnings before tax is used to measure tax avoidance (Tebiono et al., 2019), which is the effort made by taxpayers to lower their tax liabilities by slashing company profits.

Then there are independent variables, namely leverage it is he ability of a company to pay debts used by the company to fund its equity to carry out its operational activities, leverage measured by DER which is calculated by dividing the amount of debt by the amount of equity (Sari et al., 2021).

Profitability as a part of the independent variable measured by ROA, which is dividing the amount of net profit after tax by the amount of total assets (Mulyati et al., 2019).

Additionally, transfer pricing serves as a moderating variable, representing the volume of a company's transactions with related parties. It is measured by dividing the Related Party Receivables by the Total Company Receivables (Turwanto et al., 2022).

Research Model

$$CETR=\alpha+\beta1LEV+\beta2ROA+\beta3TP+\beta4(LEV\times TP)+\beta5(ROA\times TP)+\epsilon$$

Where LEV is Leverage, ROA is Profitability, TP is Transfer Pricing, CETR is Tax Avoidance, α is Constant, β is Regression coefficients, ϵ is Standard error.

The use of panel data in this analysis is due to its advantages compared to other data types, as it combines both time series and cross-sectional data, allowing for more comprehensive analysis. Model selection is adjusted to fit the available data. According (Basuki & Prawoto, 2016) the data analysis is conducted using EViews, following several steps: selecting the optimal model through the Chow test, LM test, and Hausman test. These tests help choose the best model from three options: the Common Effects Model (CEM), the Fixed Effects Model (FEM), and the Random Effects Model (REM).

The Common Effect Model assumes no individual or time-specific effects, using the Ordinary Least Square (OLS) method. The Fixed Effect Model accounts for differences across entities by allowing intercepts to vary. The Random Effect Model assumes that differences across entities are random and uncorrelated with the independent variables.

After choosing the best model, classical hypothesis tests are conducted, including checks for multicollinearity, autocorrelation, and heteroskedasticity. The Normality Test assesses whether the residuals in the regression model follow a normal distribution. The Autocorrelation Test checks for correlations between error terms across different time periods. The Multicollinearity Test ensures that there is no correlation among the independent variables in the regression model. The Heteroscedasticity Test evaluates whether the variance of residuals is consistent across observations.

To prove the hypothesis a coefficient of determination, F-test, and t-test were performed. Coefficient of Determination (R^2) is to measures the proportion of the variance in the dependent variable that is predictable from the independent variables.F-Test is to see whether all the independent variables jointly have a significant effect on the dependent variable. T-Test is to

see the individual significance of each independent variable in explaining the variation in the dependent variable.

RESULT AND ANALYSIS

Manufacturing companies listed on IDX.co.id represent the largest sector on the Indonesian Stock Exchange (IDX), making them ideal for analysis. The use of EViews software starts with selecting the best model, followed by classical assumption testing, and concludes with tests such as the coefficient of determination, F-test, and t-test. Using purposive sampling, 183 financial statement data points were processed and analyzed with EViews software, as detailed in **Table 2**.

Table 2 Descriptive Statistics

	CETR	DER	ROA	TP
Mean	0.248639	0.668744	0.130172	0.326231
Median	0.221244	0.544222	0.063932	0.118077
Maximum	0.822852	3.928398	4.449812	11.27971
Minimum	0.004852	0.032540	0.000055	5.00E-12
Std. Dev.	0.120764	0.538427	0.455545	0.871559
Observations	183	183	183	183

Based on the **Table 2** descriptive statistical analysis with 183 observations: The minimum value of Tax Avoidance is 0.004852 at PT Solusi Bangun Indonesia Tbk, and the maximum value is 0.822852 at PT Indo Acidatama Tbk. The average value is 0.248639 or 24.86%, indicating that, on average, companies in the sample pay an effective tax rate slightly higher than the official tax rate of 22%, suggesting a low level of tax avoidance.

The minimum value of Leverage is 0.032540 at PT Indocement Tunggal Prakarsa Tbk, and the maximum value is 3.928398 at PT Unilever Indonesia Tbk. The average value is

0.668744, indicating that, on average, the companies in the sample have debt amounting to 66.87% of their total equity. This suggests a general tendency for companies to have a more balanced capital structure, with slightly more equity than debt.

The minimum value of profitability is 0.000055 at PT Sumi Indo Kabel Tbk, and the maximum value is 4.449812 at PT Siantar Top Tbk. The average value is 0.130172, indicating that, on average, companies in the sample generate a profit of 13.02% from their total assets, suggesting efficient use of assets to generate profits.

The minimum value of Transfer Pricing is 0.000000000005 at PT Merck Tbk, and the maximum value is 11.27971 at PT Budi Starch & Sweetener Tbk. The average value is 0.326231, indicating that, on average, the companies in the sample conduct about 32.63% of their transactions with affiliates, showing a moderate level of transfer pricing practices among these companies.

Then as shown **in Table 3**, the best model selection analysis is carried out with the Chow test to compare the Fixed Effect Model (FEM) with Common Effect Model (CEM), Hausman test for comparing Fixed Effect Model (FEM) and Random Effect Model (REM), and the LM test to compare Random Effect Model (REM) with Common Effect Model (CEM).

Table 3 Selection of the Best Model

Test	Comparison	Result	Selected
Chow	FEM vs CEM	Prob F = 0.0000	FEM
Hausman	FEM vs REM	Prob Cross-section = 0.4849	REM
LM	REM vs CEM	Prob Cross-section = 0.0000	REM

Based on **Table 3**, the estimation of the panel data regression model is known, so the conclusion from the results of this test strengthens the assumption that the model for all data samples is better using the Random Effect model (REM).

Once the Random Effect Model is identified as the optimal model, classical assumption tests are performed, as detailed in **Table 4**. These tests include the normality test, autocorrelation test, multicollinearity test, and heteroscedasticity test.

Table 4 Classical Assumption Test

Test	Indicator	Result	Description
Normality	Prob > 0.05	Prob is 0.180049	Ok
Autocorrelation	dU < d < 4-dU	1.7802<2.015361<2.2198	Ok
Multicollinearity	Coefficient < 0.85	Coefficient is -0.107105	Ok
Heteroscedasticity	Prob > 0.05	Prob DER = 0. 2480 Prob ROA = 0.5054	Ok

Then, the coefficient of determination, F-test, and t-test are used to back up the hypothesis. As a discussion of the main findings of this study, the random effect model (REM) is used as the model selection test.

Table 5 Coefficient of Determination

Root MSE	0.095351	R-squared	0.079015
Mean dependent var	0.163625	Adjusted R-squared	0.052999
S.D. dependent var	0.099630	S.E. of regression	0.096954
Sum squared resid	1.663808	F-statistic	3.037119
Durbin-Watson stat	1.725126	Prob(F-statistic)	0.011766

Table 5 shows the results of the determination coefficient analysis (R2). It is known that the significance value of the Adjusted R square is 0.052999, which means that the ability of the independent variable to explain the dependent variable is 5.29%, the remaining 94.71% is explained by other variables that are not explained by this study.

In the F-test Table 6 shows the calculated F value of 3.037119 and the F table of 3.05 so that the calculated F> F table, prob <0.05 P-value of 0.000001 <0.05, it can be concluded

that all independent variables, namely leverage and profitability, together influence tax avoidance so that the model is declared feasible or the independent variables are able to explain the dependent variable.

Table 6 F Test Result

Root MSE	0.095351	R-squared	0.079015
Mean dependent var	0.163625	Adjusted R-squared	0.052999
S.D. dependent var	0.099630	S.E. of regression	0.096954
Sum squared resid	1.663808	F-statistic	3.037119
Durbin-Watson stat	1.725126	Prob(F-statistic)	0.011766

Table 7 T Test Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.278582	0.024506	11.36766	0.0000
DER	0.024019	0.019407	1.237677	0.2175
ROA	-0.514417	0.168781	-3.047843	0.0027
TP	-0.135808	0.067392	-2.015182	0.0454
DER*TP	0.091164	0.059164	1.540880	0.1251
ROA*TP	0.869554	0.290785	2.990372	0.0032

Based on the results of the hypothesis test in Table 8, it can be seen: (1) Leverage variable t-statistic value of 1.237677 with a probability value of 0.2175. where T count (1.237677) < T table (1.97331) and the probability value above 0.05 indicates that leverage has no effect on tax avoidance so that H1 is rejected. (2) Profitability variable t-statistic value of -3.047843 with a probability value of 0.0027. where if the t count value is -3.047843 < -1.97331 and the probability value is below 0.05 indicates that profitability has a significant effect on tax avoidance so that H2 is accepted. (3) Leverage variable moderated by transfer pricing t-statistic value of 1.540880 with a probability value of 0.1251. The probability value below 0.05 indicates that transfer pricing is able to moderate the positive but insignificant effect of leverage on tax avoidance so that H3 is accepted. (4) The profitability variable is moderated by transfer pricing with a t-statistic value of 2.990372 with a probability value of 0.0032. The probability

value below 0.05 indicates that transfer pricing is able to moderate the positive but significant effect of profitability on tax avoidance so that H4 is accepted.

Result and analysis presents result of data analysis, hypothesis testing, answer of research question, as well as finding and its interpretation.

Discussion

The Effects of Leverage on Tax Avoidance in Manufacturing Companies Listed on the IDX

The first hypothesis in this study, which posited that leverage effects tax avoidance, was rejected (H1 rejected). This finding indicates that leverage does not directly impact management's decision to engage in tax avoidance. Descriptive statistical analysis revealed that the average leverage, measured by the Debt to Equity Ratio (DER), is 66.87%, meaning the companies in the sample have debt amounting to 66% of their total equity. This ratio reflects a moderate use of debt, where companies are not overly reliant on debt to finance their operations.

From the perspective of Agency Theory, this result is intriguing because the theory often assumes potential conflicts between management and shareholders regarding the use of debt and tax policies. Management, responsible for running the company, might have incentives to reduce the tax burden to increase corporate profits and, ultimately, shareholder value. However, this finding shows that companies with moderate leverage levels do not use debt as a tool for tax avoidance.

The average DER of 66.87% indicates that the companies in the sample maintain relatively controlled leverage levels. Leverage at this level tends not to create significant financial pressure, so companies may not feel the need to resort to tax avoidance strategies to reduce their financial burden. Companies with balanced DER appear to focus more on long-

term financial stability and meeting debt obligations rather than pursuing short-term gains through tax avoidance practices.

Although high debt levels can lead to substantial interest expenses, which theoretically could be used as a tool to reduce the tax burden, this study's findings suggest that companies do not exploit this opportunity for tax avoidance. One underlying reason may be Indonesia's tax regulations, which limit the debt-to-equity ratio within an accounting period, where the ratio must not exceed 4:1. This rule encourages companies to avoid taking on excessive debt as a tax avoidance strategy due to the risk of violating tax regulations and the potential financial consequences.

Therefore, these findings align with Agency Theory in certain contexts, where management opts not to take high risks related to tax avoidance, especially when the company's leverage is already at a balanced level. This suggests that when leverage is moderate, its influence on management's tax avoidance decisions becomes less significant.

The conclusion drawn from this study is that leverage does not affect tax avoidance, meaning that the level of leverage, whether high or low, does not influence the degree of tax avoidance undertaken by the company (Darsani & Sukartha, 2021). Related studies by Suciarti et al. (2020), Eddy et al. (2020), Sari et al. (2021), Apriatna and Oktris (2022) also found that leverage does not influence tax avoidance, consistent with this study's findings

The Effects of Profitability on Tax Avoidance in Manufacturing Companies Listed on the IDX

The second hypothesis, stating that profitability effects tax avoidance, was accepted (H2 accepted). This study found that profitability, measured by Return on Assets (ROA), has a significant negative impact on tax avoidance in manufacturing companies listed on the Indonesia Stock Exchange (IDX). With an average ROA of 13.01%, the companies in the

sample demonstrated good efficiency in using their assets to generate profits. The findings suggest that the higher the profitability of a company, the lower its tendency to engage in tax avoidance.

In the context of Agency Theory, the relationship between shareholders (principals) and management (agents) often involves potential conflicts of interest, especially concerning decisions that affect profitability and tax payments. Management, responsible for the day-to-day operations, might have incentives to reduce tax burdens to increase net profits, ultimately enhancing the company's value and providing financial benefits for both the company and themselves.

However, this study's results show that more profitable companies tend to avoid tax avoidance practices. From an Agency Theory perspective, this can be explained by several factors. First, companies with high ROA, as seen in this study (with an average of 13.01%), may face less pressure to reduce tax burdens since they are already in a strong financial position. In this situation, management may focus more on maintaining good relationships with stakeholders, including shareholders, the government, and the public, by fully complying with tax obligations.

Second, more profitable companies may be more concerned about the reputational risks associated with tax avoidance. Management aware of the potential long-term losses from tax avoidance practices, such as fines, penalties, or even reputational damage, may choose to fully pay their taxes despite opportunities to avoid them. This indicates that in more profitable companies, management's interests are more aligned with shareholders' interests in maintaining the company's sustainability and reputation.

Within the framework of Agency Theory, these results suggest that management in more profitable companies may act more as "stewards" rather than purely as agents focused on

maximizing short-term gains. They are bound to go with choices that help the drawn out interests of the organization and investors, including satisfying assessment commitments. Therefore, high profitability reduces the incentive to engage in tax avoidance, as the company is already in a strong enough position to meet these obligations without harming financial performance.

Thus, these findings align with Agency Theory, showing that management in more profitable companies tends to prioritize decisions that support the company's long-term stability and sustainability, including tax compliance.

The consistency of these results with the study by Sulistyowati and Hendrawati (2019) reinforces the notion that profitability may not be a major determinant in tax avoidance practices in Indonesia, particularly in the manufacturing sector. Related studies by Gultom (2021), Prasatya et al. (2020), and Manik and Darmansyah (2022) also showed similar results.

The Effects of Leverage on Tax Avoidance with Transfer Pricing as a Moderating Variable

The third hypothesis, stating that transfer pricing moderates the effects of leverage on tax avoidance, was accepted (H3 accepted). This study's findings indicate that transfer pricing can moderate the effects of leverage on tax avoidance, but this effect is not significant. In other words, while transfer pricing has the potential to strengthen the relationship between leverage and tax avoidance, the moderating impact is not strong enough to have a significant effect.

Descriptive statistical analysis reveals that the average leverage, measured by the Debt to Equity Ratio (DER), is 66.87%, while the average transfer pricing practice is 32.62%. The DER of 66.87% suggests that the companies in the sample maintain moderate leverage levels, meaning they use debt in a balanced manner within their capital structure. On the other hand,

the average transfer pricing of 32.62% indicates that most companies in the sample engage in transfer pricing, though not aggressively.

From an Agency Theory perspective, the relationship between leverage, transfer pricing, and tax avoidance can be viewed through the lens of the conflict of interest between management (agents) and shareholders (principals). Management, which controls the company's operational and financial decisions, may be motivated to use transfer pricing as a tool to reduce the tax burden, especially when the company has relatively high leverage. With moderate leverage, as indicated by the average DER of 66.87%, companies have room for financial maneuvering, including using transfer pricing to minimize taxes.

However, the insignificant results may suggest that transfer pricing, while potentially useful, is not strong enough to significantly moderate the relationship between leverage and tax avoidance. One reason might be that companies with moderate leverage do not feel financially pressured enough to fully exploit transfer pricing as a tax avoidance tool. In other words, management might be more cautious in employing strategies that could attract tax authorities' attention or harm the company's reputation.

Furthermore, the relatively moderate level of transfer pricing, with an average of 32.62%, indicates that this practice is not conducted aggressively by the companies in the sample. This may reflect management's awareness of the risks associated with transfer pricing, including scrutiny from tax authorities. In this context, management might prioritize financial stability and long-term sustainability over short-term gains through tax avoidance.

Agency Theory also helps explain why transfer pricing does not significantly moderate the relationship between leverage and tax avoidance. In companies more focused on long-term growth and stability, management may choose to avoid risky financial strategies, such as tax avoidance through transfer pricing, especially when leverage is already at a balanced level.

With a DER of 66.87%, companies are not overly reliant on debt, reducing the pressure to engage in tax avoidance.

Overall, the findings of this study suggest that while transfer pricing has the potential to moderate the relationship between leverage and tax avoidance, its effect is not significant. This indicates that in companies with moderate leverage and less aggressive transfer pricing practices, management tends to be more conservative and focused on maintaining long-term financial balance rather than pursuing short-term gains through tax avoidance.

The Effects of Profitability on Tax Avoidance with Transfer Pricing as a Moderating Variable

The fourth hypothesis, which states that transfer pricing can positively and significantly moderate the influence of profitability on tax avoidance, is accepted (H4 accepted). This study's findings demonstrate that transfer pricing positively and significantly moderates the influence of profitability on tax avoidance in manufacturing companies listed on the Indonesia Stock Exchange (IDX). In other words, the higher a company's profitability, the more transfer pricing strengthens this influence, thereby encouraging tax avoidance practices.

Descriptive statistical analysis reveals that the average profitability, measured by Return on Assets (ROA), is 13.01%, while the average transfer pricing practice is 32.62%. The relatively high ROA indicates that companies in the sample are efficient in generating profits from their assets. On the other hand, the 32.62% transfer pricing level shows that this practice is fairly common among these companies, although not excessively used.

In the context of Agency Theory, these results reflect the dynamics between management (agents) and shareholders (principals). Management, responsible for the company's operations, may be motivated to maximize net profits, partly by reducing the tax burden. When a company has high profitability, as indicated by the average ROA of 13.01%, management may have a

greater incentive to maintain and enhance this profitability, including through transfer pricing practices that can minimize tax liabilities.

Transfer pricing, as a tax management tool, provides management with the flexibility to allocate income and expenses among entities within a corporate group, often to take advantage of different tax rates across jurisdictions. With this significant positive moderation, it can be assumed that highly profitable companies are more likely to use transfer pricing to reduce their tax burden and ultimately increase net profits. This aligns with Agency Theory, where management acts in their own and shareholders' interests in ways that maximize profits, even if it means taking certain risks regarding tax avoidance.

However, the significant use of transfer pricing also indicates that these companies may be more willing to take steps that enhance profitability, even at the risk of facing strict scrutiny from tax authorities. The average transfer pricing of 32.62% reflects that the companies in the sample are quite active in using this strategy, possibly driven by their high profitability levels. These results also suggest that management in highly profitable companies is more likely to take advantage of available opportunities to reduce tax liabilities through transfer pricing, allowing them to continue reporting strong financial performance to shareholders. In this scenario, Agency Theory explains that management might be more inclined to pursue moderately but significantly aggressive tax avoidance strategies, such as transfer pricing, to meet financial targets and keep shareholders satisfied.

Overall, these findings confirm that in highly profitable companies, transfer pricing becomes an effective tool for moderating the influence of profitability on tax avoidance. This indicates that more profitable companies tend to be more aggressive in their tax management strategies, using transfer pricing to maximize profits while simultaneously reducing their tax burden.

CONCLUSION

The study concludes that leverage does not have a significant impact on tax avoidance among manufacturing companies listed on the Indonesia Stock Exchange (IDX), as the average Debt to Equity Ratio (DER) of 66.87% reflects moderate debt usage, which is not sufficient to influence management's tax avoidance decisions. In contrast, profitability, with an average Return on Assets (ROA) of 13.01%, significantly and negatively affects tax avoidance, indicating that more profitable companies tend to avoid tax avoidance practices. The relationship between leverage and tax evasion is moderated by transfer pricing, but this effect is not significant, suggesting that companies with moderate leverage are cautious in using transfer pricing to avoid taxes. However, transfer pricing significantly moderates the influence of profitability on tax avoidance, showing that more profitable companies are likely to use transfer pricing to reduce their tax burden, aligning with Agency Theory, where management focuses on maximizing profits and shareholder satisfaction through aggressive tax management strategies.

Based on the analysis, discussion, and conclusions, it is recommended that future research explore other factors that may influence tax avoidance, such as differences in tax policies, tax planning, economic conditions, and social dynamics. A more profound assessment of these elements could give a more complete comprehension of duty evasion conduct in the assembling area. Additionally, analyzing other industries outside the manufacturing sector could offer broader insights into the determinants of tax avoidance across different contexts. Longitudinal studies that observe changes in corporate behavior towards tax avoidance over

longer periods are also needed to provide a clearer picture of the impact of policies and regulatory changes on tax avoidance practices.

For manufacturing company management, it is advisable to evaluate funding policies with a greater focus on operational and investment needs, considering that leverage does not significantly impact tax avoidance. Wise use of debt, in compliance with existing regulations, will more effectively support company growth without the concern of tax avoidance risks. Companies should also develop more comprehensive tax efficiency strategies by considering factors beyond leverage and profitability, such as applicable tax regulations, management's risk perception, and company reputation. Transfer pricing can be an effective tool in moderating the relationship between leverage and tax avoidance, so companies should ensure that their transfer pricing practices comply with existing regulations to maximize tax benefits without violating legal provisions.

Disclaimer (Artificial intelligence)

Author(s) hereby declare that generative AI technologies such as Large Language Models, etc. have been used during the writing or editing of manuscripts. This explanation will include the name, version, model, and source of the generative AI technology and as well as all input prompts provided to the generative AI technology

Details of the AI usage are given below:

1. Chat GPT

REFERENCE

Abadi Joko, E., Manne, A., & Abubakar, H. (2022). EFEKTIVITAS PEMUNGUTAN PAJAK KENDARAAN BERMOTOR DALAM RANGKA MENINGKATKAN PENERIMAAN PAJAK DAERAH PADA DINAS PENDAPATAN DAERAH PROVINSI SULAWESI SELATAN. *Indonesian Journal of Business and Management*, *4*(2), 182–189. https://doi.org/10.35965/jbm.v4i2.1382

Apriatna, P., & Oktris, L. (2022). *The Effect of Profitability, Company Size, and Sales Growth on Tax Avoidance with Leverage as a Moderating Variable*. https://api.semanticscholar.org/CorpusID:259107175

Basuki, A., & Prawoto, N. (2016). *Analisis Regresi dalam penelitian Ekonomi dan Bisnis: Dilengkapi Aplikasi SPSS dan Eviews*. PT Raja Grafindo Persada.

Chrysilla, J., & Sandra, A. (2023). Determinan Indikasi Tax Avoidance Perusahaan Multinasional. *Jurnal Ekonomi Dan Bisnis Dharma Andalas*, *25*(2), 625–641. https://doi.org/10.47233/jebd.v25i2.440

Darsani, P. A., & Sukartha, I. M. (2021). The Effect of Institutional Ownership, Profitability, Leverage and Capital Intensity Ratio on Tax Avoidance. *American Journal of Humanities and Social Sciences Research*, *5*(1), 13–22. https://ojs.uph.edu/index.php/JPA/article/view/8290/pdf

Eddy, E. P. S., Angela, A., & Erna. (2020). The Impact Analysis of Return on Asset, Leverage and Firm Size to Tax Avoidance. *Jurnal Akuntansi*, *12*(2), 256–264. https://doi.org/10.28932/jam.v12i2.2908

Ernawati, S., Chandrarin, G., & Respati, H. (2019). Analysis of the Effect of Profitability, Company Size and Leverage on Tax Avoidance (Study on Go Public Companies in Indonesia). *International Journal of Advances in Scientific Research and Engineering*, *05*(10), 74–80. https://doi.org/10.31695/ijasre.2019.33547

Firmansyah, A., & Ardiansyah, R. (2021). BAGAIMANA PRAKTIK MANAJEMEN LABA DAN PENGHINDARAN PAJAK SEBELUM DAN SETELAH PANDEMI COVID19 DI INDONESIA? *Bina Ekonomi*, *24*(2), 31–51. https://doi.org/10.26593/be.v24i1.5075.87-106

Gultom, J. (2021). Pengaruh Profitabilitas, Leverage, dan Likuiditas terhadap Tax Avoidance. *JABI (Jurnal Akuntansi Berkelanjutan Indonesia)*, *4*(2), 239–253. https://www.researchgate.net/publication/354707655_Pengaruh_Profitabilitas_Leverage_dan_Likuiditas_terhadap_Tax_Avoidance

Hayani, N. S., & Deny Darmawati. (2023). PENGARUH UKURAN PERUSAHAAN, LEVERAGE, DAN PROFITABILITAS TERHADAP TAX AVOIDANCE DENGAN TRANSFER PRICING SEBAGAI VARIABEL MODERASI. *Jurnal Ekonomi Trisakti*, *3*(2), 2397–2408. https://doi.org/10.25105/jet.v3i2.16955

Irawan, F. (2022). Riset Kuantitatif Dan Kualitatif Penghindaran Pajak: Metode Apa Yang Tepat Untuk Indonesia. *Jurnalku*, *2*(1), 16–24. https://doi.org/10.54957/jurnalku.v2i1.128

Juliarini, A. (2020). KOMPARASI PENERIMAAN PAJAK DAERAH KOTA DAN KABUPATEN DI INDONESIA SETELAH BERLAKUNYA UNDANG-UNDANG PAJAK DAERAH DAN RETRIBUSI DAERAH. *Jurnal BPPK : Badan Pendidikan Dan Pelatihan Keuangan*, *13*(2), 1–10. https://www.researchgate.net/publication/354707655_Pengaruh_Profitabilitas_Leverage_dan_Likuiditas_terhadap_Tax_Avoidance

Manik, J., & Darmansyah, D. (2022). Determinan Penghindaran Pajak dengan Profitabilitas Sebagai Pemoderasi pada Perusahaan Manufaktur. *Jurnal Riset Akuntansi & Perpajakan (JRAP)*, *9*(02), 146–158. https://doi.org/10.35838/jrap.2022.009.02.12

Mukhammedova, D., & Akromov, S. (2021). *Optimal Leverage Ratio In Company Management And Application Practices*. 1036–1046. https://doi.org/10.15405/epsbs.2021.09.02.115

Mulyati, Y., Subing, H., Fatonah, A., & Prameela, A. (2019). Effect of Profitability, Leverage and Company Size on Tax Avoidance. *International Journal of Innovation, Creativity and Change*, *6*(8). https://www.ijicc.net/images/Vol6Iss8/6803_Mulyati_2019_E_R.pdf

Nguyen, M. (2021). The Impact on Corporate Financial Leverage of the Relationship Between Tax Avoidance and Institutional Ownership: A Study of Listed Firms in Vietnam. *Montenegrin Journal of Economics*, *17*(4), 65–73. https://doi.org/10.14254/1800-5845/2021.17-4.6

Pardede, P., & Munthe, H. (2023). Effect of Net Profit Margin on Current Ratio in PT. Siantar Top, PT. Kimia Farma and PT. Gudang Garam Companies Period 2020-2022. *Jurnal Ekonomi, Bisnis & Entrepreneurship*, *17*(2), 253–265. https://doi.org/10.55208/jebe.v17i2.420

Pradana, F. A., & Wulandari, S. (2023). Fenomena Praktik Penghindaran Pajak Saat Pandemi Covid-19 Pada Perusahaan Property Dan Real Estate. *Jurnal Akuntansi Dan Keuangan*, *11*(1), 21–34. https://doi.org/10.29103/jak.v11i1.9500

Prasatya, R. E., Mulyadi, J., & Suyanto, S. (2020). Karakter Eksekutif, Profitabilitas, Leverage, dan Komisaris Independen Terhadap Tax Avoidance Dengan Kepemilikan Institusional Sebagai Variabel Moderasi. *Jurnal Riset Akuntansi & Perpajakan (JRAP)*, *7*(02), 153–162. https://doi.org/10.35838/jrap.2020.007.02.13

Prima, B., & Dewi, H. K. (2019). *Tax Justice laporkan Bentoel lakukan penghindaran pajak, Indonesia rugi US$ 14 juta*. Kontan.Co.Id. https://nasional.kontan.co.id/news/tax-justice-laporkan-bentoel-lakukan-penghindaran-pajak-indonesia-rugi-rp-14-juta/#:~:text=Lembaga%20Tax%20Justice%20Network%20pada%20Rabu%20%288%2F5%29%20melaporkan,bisa%20menderita%20kerugian%20US%24%2014%20juta%20per%20tahun.

Saputra, H. (2019). ANALISA KEPATUHAN PAJAK DENGAN PENDEKATAN TEORI PERILAKU TERENCANA (THEORY OF PLANNED BEHAVIOR) (TERHADAP WAJIB PAJAK ORANG PRIBADI DI PROVINSI DKI JAKARTA). *Jurnal Muara Ilmu Ekonomi Dan Bisnis*, *3*(1), 47. https://doi.org/10.24912/jmieb.v3i1.2320

Sari, D., Wardani, R., & Lestari, D. (2021). The Effect of Leverage, Profitability and Company Size on Tax Avoidance (An Empirical Study on Mining Sector Companies Listed on Indonesia Stock Exchange Period 2013-2019). *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, *12*(4), 860–868. https://doi.org/10.17762/turcomat.v12i4.574

Suciarti, C., Suryani, E., & Kurnia, K. (2020). The Effect of Leverage, Capital Intensity and Deferred Tax Expense on Tax Avoidance. *Journal of Accounting Auditing and Business*, *3*(2), 76. https://doi.org/10.24198/jaab.v3i2.28624

Sugianto, D. (2019). *Mengenal soal Penghindaran Pajak yang Dituduhkan ke Adaro*. Finance.Detik.Com. https://finance.detik.com/berita-ekonomi-bisnis/d-4612708/mengenal-soal-penghindaran-pajak-yang-dituduhkan-ke-adaro

Sulaeman, A., & Surjandari, D. A. (2024). The Influence of Capital Intensity, Leverage, Profitability, and Corporate Social Responsibility on Tax Avoidance with Firm Size as a Moderating Variable. *Asian Journal of Economics, Business and Accounting*, *24*(5), 433–442. https://doi.org/10.9734/ajeba/2024/v24i51320

Sulaeman, R. (2021). Pengaruh Profitabilitas, Leverage dan Ukuran Perusahaan Terhadap Penghindaran Pajak (Tax Avoidance). *Syntax Idea*, *3*(2), 354–367. https://doi.org/10.46799/syntax-idea.v3i2.1050

Sulistyowati, & Hendrawati. (2019). Influencing Factors of Tax Avoidance. *Proceedings of the 5th Annual International Conference on Accounting Research (AICAR 2018)*, *73*. https://doi.org/10.2991/aicar-18.2019.47

Tebiono, J. N., Bagus, I., & Sukadana, N. (2019). FAKTOR-FAKTOR YANG MEMPENGARUHI TAX AVOIDANCE PADA PERUSAHAAN MANUFAKTUR YANG TERDAFTAR DI BEI. *JURNAL BISNIS DAN AKUNTANSI* , *21*, 121–130. https://media.neliti.com/media/publications/321924-faktor-faktor-yang-mempengaruhi-tax-avoi-38a7523b.pdf

The State of Tax Justice 2020: Tax Justice in the time of COVID-19. (2020).

Tiranda, Y. M. (2019). Hak Preferensi Negara atas Utang Pajak di Indonesia: Analisis Yuridis-Filosofis. *Lex Publica*, *6*(2), 17–25. https://doi.org/10.58829/lp.6.2.2019.17-25

Turwanto, T., Primasari, K., & Firmansyah, A. (2022). Penghindaran Pajak Melalui Transfer Pricing Pada Perusahaan Di Indonesia: Analisis Isi Atas Risalah Putusan Pengadilan Pajak. *Educoretax*, *2*(1), 75–90. https://doi.org/10.54957/educoretax.v2i1.158

Undang-Undang (UU) Nomor 7 Tahun 2021 Tentang Harmonisasi Peraturan Perpajakan (2021).

Wahyuni, L., Fahada, R., & Atmaja, B. (2019). The Effect of Business Strategy, Leverage, Profitability and Sales Growth on Tax Avoidance. *Indonesian Management and Accounting Research*, *16*(2), 66–80. https://doi.org/10.25105/imar.v16i2.4686

Yuniar, Y. D., Kamayanti, A., & Asdani, A. (2021). FENOMENA PENGHINDARAN PAJAK DI PERUSAHAAN INDUSTRI DASAR DAN KIMIA. *JIAFE (Jurnal Ilmiah Akuntansi Fakultas Ekonomi)*, *7*(2), 247–258. https://doi.org/10.34204/jiafe.v7i2.3795

1.