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Impact of Leverage, Profitability, and Company Size on Tax Planning in Manufacturing Firms

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ABSTRACT

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This research aims to examine the influence of leverage, profitability and company size on tax planning. The independent variables used in this research are leverage, profitability and company size. Meanwhile, the dependent variable in this research is tax planning. Tax planning in this research is measured by legal tax avoidance (Tax Avoidance) using Books Tax Difference (BTD). The population in this study are manufacturing companies listed on the Indonesia Stock Exchange (BEI) in the 2020-2022 period. Determining the sample in this research used the purposive sampling method. There are 37 manufacturing companies registered on the IDX which were used as research samples based on predetermined criteria. The research results show that leverage and profitability have a significant effect on tax planning. Meanwhile, size does not have a significant effect on tax planning.

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1. Introduction

Taxes are the largest source of income for the Indonesian people to carry out national development. The government is targeting state revenue of IDR 2,781.3 trillion in the 2024 budget year. Of this target, tax revenue is IDR 2,307.9 trillion. Deputy Minister of Finance (Wamenkeu) Suahasil Nazara said this target took into account the future movement of the economy. (Ministry of Finance, 2023)

To achieve this revenue target, the government will take a number of steps to optimize tax revenue and increase efficiency in tax administration. In order to increase the taxation ratio, the government implemented the Population Identification Number (NIK) as a Taxpayer Identification Number (NPWP). In addition, the government will also increase

compliance and explore tax potential, as well as maintain the effectiveness of tax reform through the Law on Harmonization of Tax Regulations to expand the tax base. It is hoped that the provision of various appropriate and measurable tax incentives will be able to accelerate recovery and increase the competitiveness of national investment, as well as spur economic transformation.

But on the other hand, we return to basic human nature. If you can pay less, why should you pay, and if you can pay less, why should you pay more? For taxpayers, tax is a cost that tends to be avoided, because the company's main goal is to maximize profit after tax by minimizing the overall corporate tax rate effectively by carrying out good tax planning. Tax planning is a means for taxpayers to comply with tax policies but the

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amount of tax paid can be minimized so that it does not reduce the income earned too much.

Here there are differences in interests between taxpayers and the government. This difference in interests causes taxpayers to tend to legally minimize their income tax burden if there are opportunities that can be exploited in accordance with applicable tax regulations. However, the government also continues to reform tax regulations to narrow the loopholes for taxpayers to avoid tax.

Therefore, poor management of tax obligations can have a very detrimental impact on taxpayers, because quite a few taxpayers are exposed to fraud by the tax authorities in managing their tax obligations, which will result in tax sanctions that can be detrimental to taxpayers.

Minimizing the amount of the tax burden is one form of tax planning that can be carried out by companies, either by tax avoidance or by tax evasion. According to Logue (in research by Suarningrat & Setiawan, 2013), in simple terms tax avoidance can be defined as managing all company tax affairs to minimize taxes in a way that is consistent with the law, while tax evasion involves an element of deliberate intent. breaking the law in paying taxes.

Leverage(debt structure) is a ratio that describes the amount of debt a company has to fund its operational activities, the interest expense that must be paid by the company due to the increase in total debt. Parts of the interest expense will reduce the pre-tax profits that the company must pay (Adelina, 2012). This is supported by research conducted by Olen Rahmadini and Nita (2019) which proves that leverage has a negative effect on tax planning.

Brigham and Houston (2014) state that companies that have a high level of profitability will also be subject to a high tax burden. The greater the taxable profit of a company, the higher the tax burden that the company must bear. Therefore, the company is suspected of reducing the tax burden that will be paid by carrying out tax planning. This is supported by research conducted by Olen Rahmadini and Nita (2019) which proves that leverage has a positive effect on tax planning.

The ability of a company to return tax decisions shows the size of the company. "In carrying out its

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economic activities, the size of the company shows the stability and capability of the company. The higher the size of a company, the more it becomes the center of attention from the government and will give rise to a tendency to comply in paying taxes. (Kurniasih & Sari, 2013). This is supported by research conducted by Umiarsih (2021) which proves that company size has a positive effect on tax planning.

In relation to tax planning, several previous studies have found factors that influence tax planning, including research conducted by Evita Sysmantia and Einde Evana (2023), Shelawati Arinda (2020), Afni Eliana Saragih, Yan Christin BR Sembiring, Maria Rani Fransiska BR Purba (2023), Indah Rahmadini and Nita Erika Ariani (2019),. In general, this research shows that tax planning can be influenced by several factors, namely leverage, profitability, corporate governance, company size, ownership proportion, transfer pricing, deferred taxes, and advertising expenses. Several previous studies have made researchers interested in taking the title "The Influence of Leverage, Profitability and Company Size on tax planning in manufacturing companies listed on the Indonesia Stock Exchange in 2020-2022" to conduct further research by choosing leverage, profitability and company size as dependent variable which is thought to have an influence on tax planning in accordance with the latest tax regulations.

2. Critical Riview

Agency theory is a contract under which one or more agents are engaged to perform some services for them by delegating authority. perform some services for them by delegating decision-making authority to the agent (Jensen & Meckling, 1976). decision-making authority to the agent (Jensen & Meckling, 1976). According to Eisenhardt's Assumption (1989), agency theory has three basic assumptions that exist in humans, which contain, namely:

- 1) Self Interest: thinking about each other's personal interests and goals.
- 2) Bounded Rationality: the thinking power of future views is limited.



3) Risk Averse: tends to minimize and avoid risk.

Agency theory explains the conflict of interest between the principal and the agent in a company. The principal, who is not directly involved in the management of the company, can be disadvantaged because it is difficult to get complete information about the company. Tax avoidance can be assumed to be based on agency theory, where corporate policy is influenced by the differences in interests between the principles of the agency and the company (Yuniasih et al., 2012). Related to taxes is influenced by differences in interests between principals and agents. The pressure received by management to provide benefits to the principal is the reason behind the tax avoidance practices carried out by the agent. Tax avoidance practices carried out by company management (Lestari & Putri, 2017).

Leverage is another name for the debt ratio, this ratio is used to analyze and interpret short-term financial position. Leverage is a company policy when it comes to investing funds. The company allows the use of debt to meet the company's operational and investment needs. If a company uses debt for financing, there will be fixed expenses or interest borne by the company. Leverage (debt level) is also related to tax planning. Companies may use debt to meet the company's operational and investment needs.

Brigham and Houston (2014: 141) state that interest can be a tax deduction, the use of debt will reduce tax liabilities and leave greater operating profits. So it can be concluded that the higher the level of leverage, the effort to carry out tax planning will decrease because the interest paid by the company is a tax deduction. Research by Richardson and Lanis (2015) provides evidence that leverage has a significant negative effect on tax planning actions, in other words, the higher the company's leverage, the lower the tax planning efforts carried out by the company. From this brief explanation, it is indicated that the company uses interest costs arising from its debt to minimize the tax burden.

Profitability is the company's ability to earn profits in relation to sales, total assets and own capital (Sartono, 2010: 122). This shows how efficient management is in generating profits by

managing all the resources available in the market. Profitability reflects the net results of all company funding policies and operating decisions (Brigham and Houston, 2014).

Brigham and Houston (2014: 189) state that the higher the company's profitability, the higher the tax that must be paid, while companies that have a low level of profit or even experience losses will pay less tax or not at all. In Law no. 36 of 2008 article 1 explains that income received by tax subjects will be subject to income tax. The size of the tax that must be paid by the taxpayer is directly proportional to the size of the income earned by the taxpayer in a period.

Umiasih (2021) states that profitability has a positive effect on tax planning. Profitability is the level of a company's ability to generate profits. If the company has a high level of profitability, the higher the profits generated by the company. On the other hand, if the greater the profit the company generates, the greater the tax paid will be.

The larger the company size, the greater the sales results will be. Based on Law No. 36 of 2008 concerning income tax, article 31E states that companies with gross sales or sales of IDR 4.8 billion to IDR 50 billion will be given tax facilities, namely a reduced rate of 50% from the 25% basic rate imposed on taxable income. tax. So the higher the value of a company's gross turnover and sales, the greater the company's opportunity to obtain and take advantage of reduced tax rates, the smaller the tax burden borne by the company. Companies that take advantage of reduced tax rates with the aim of reducing the company's tax burden indicate that the company is carrying out tax planning. This is in accordance with the agency theory point of view, managers will try harder to reduce the tax burden when their company does not receive tax deduction facilities.

According to Siegfried (1972) in Richardson and Lanis (2007) stated that large companies will be more aggressive with taxes in order to achieve optimal tax burden savings, because large companies want greater profits. Furthermore, research by Derashid and Zang (2003) also explains that company size has a positive effect on tax planning, in other words, companies that are

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large-scale companies will pay higher taxes than small-scale companies.

Taxes for companies are considered as costs so certain efforts or strategies need to be made to reduce them. The strategy used is to carry out tax planning through tax avoidance, namely efforts to reduce legal tax debt by following existing regulations (Suandy, 2014; 25). The framework of this research shows the influence of leverage, profitability and company size on tax planning in manufacturing companies listed on the Indonesia Stock Exchange in 2020-2022. For more details, see the following diagram of the flow of the framework of thought.

H1: Leverage influences tax planning in manufacturing companies

H2: Profitability influences tax planning in manufacturing companies.

H3: Company size influences tax planning for manufacturing companies.

3. Method Innovation

In this research, the research subject is the audited annual financial reports of manufacturing companies listed on the Indonesia Stock Exchange in 2020-2022.

This research uses a quantitative type of research. Quantitative research is research that presents data in the form of numbers as the results of the research. Population According to Sugiyono (2013), population is a generalized area consisting of objects/subjects that have certain qualities and characteristics. The population in this research is manufacturing companies listed on the Indonesia Stock Exchange in the 2020-2022 period. The sample in this research is companies that have met the criteria which will be counted as 37 companies using the following sample selection procedure.

Based on the source, the data in this research is secondary data obtained from accessing the BEI website. Likewise, the data collection technique used in this research is using data obtained from accessing the BEI website with a purposive sampling collection technique where commercial annual reports are obtained on the official BEI website, namely web.idx.id. According to Notoatmodjo, he explained that the purposive sampling technique was carried out based on the researcher's consideration of the population.

These considerations are like the nature and characteristics of the population.

The dependent variable in this research is tax planning which will be measured by legal tax avoidance using the Book Tax Difference (BTD) book tax difference. Book Tax Difference is "the difference between accounting profit and fiscal profit arising from differences in methods of recognizing income, expenses, deductions and tax credits between financial statements and income tax reports." (Mulyadi, 2012:1). The smaller the BTD value, the greater the tax avoidance, and vice versa. In this research, the leverage to be measured will use the Debt to Asset Ratio. DAR is used to measure how much a company's assets are financed by debt or how much company debt influences asset financing. The greater the company's debt, the greater the obligations the company must pay. (Hery, 2016). In this research, the method that will be used to calculate profitability is to use Return On Assets (ROA). According to Kasmir (2014). ROA is a ratio that is useful for assessing the results of a number of assets used by a company. In other words, ROA is the ratio between the amount of profit or profits obtained and the amount of assets that have been used.

Company size is a scale where the size of the company can be classified as measured by total assets, number of sales, share value and so on (Widiastari & Yasa, 2018).

According to the National Standardization Agency, company size is divided into three types, namely:

- a) Large companies are companies that have net worth greater than Rp. 10 billion including land and buildings. Has sales of more than Rp. 50 billion/year.
- b) Medium companies are companies that have a net worth of Rp. 1-10 billion including land and buildings. Having sales proceeds greater than Rp. 1 billion and less than Rp. 50 Billion.
- c) Small companies are companies that have a net worth of at most Rp. 200 million does not include land and buildings and has a minimum sales proceeds of IDR. 1 billion/year.
- d) To measure company size in this research, it will be measured by calculating the logarithm of total sales for large companies

according to the criteria according to the National Standardization Agency.

This research uses multiple linear regression as a model in its analysis. This research also uses the classic assumption test which uses the normality test, multicollinearity test, autocorrelation test and heteroscedasticity test.

4. Result and Discussion

Since the results of the normal P-Plot graph were not compelling, the normality of the residuals was evaluated using the Kolmogorov-Smirnov test. The p-value obtained from the Kolmogorov-Smirnov test was determined to be 0.200, which exceeds the significance level of 0.05. This suggests that the residuals follow a normal distribution. It is further supported by the Normal P-Plot graph of normalized regression residuals, which displays a pattern closely following the diagonal line, indicating the data is normally distributed and that the regression model meets the normality assumption.

The purpose of the test of multicollinearity was to look for correlations between the regression model's independent variables. The findings revealed that none of the Variance Inflation Factor (VIF) values surpassed 10, and none of the Tolerance values were less than 0.10. This suggests that there is no significant issue of multicollinearity in this study. Thus, the regression model is considered to be free from any severe multicollinearity problems.

The residual points were randomly distributed and did not create any obvious pattern around the horizontal axis, according to the results of the heteroscedasticity test, which was carried out using a scatterplot graph. This suggests that the variations in the residuals are uniform across all observations, indicating that there is no heteroscedasticity present in the regression model. Therefore, the condition of homoscedasticity is satisfied.

We used the Durbin-Watson test to look for autocorrelation. Given a sample size of 37 and three independent variables ($K=3$), the upper limit (du) value was determined to be 1.6550, while the estimated Watson Durbin value was found to be 1.980. The result of 2.345 for the $4-du$ statistic

indicates that there is no autocorrelation present in the regression model. Therefore, all traditional assumption tests validate the appropriateness and reliability of the regression model employed in this work.

To determine how leverage (X_1), profitability (X_2), and firm size (X_3) affect tax planning (Y), a multiple linear regression approach was used. The regression model was expressed as $Y = 0.642 + 0.029X_1 + 0.033X_2 - 0.001X_3 + e$. The constant coefficient (b_0) of 0.642 signifies that when the independent variables are held constant, the value of tax planning would be 0.642. The variable representing leverage (X_1) exhibits a regression coefficient of 0.029, indicating a positive association. This implies that a 1% rise in leverage leads to a 0.029% increase in tax planning. The regression coefficient for profitability (X_2) is 0.033, meaning that a 1% rise in profitability results in a 0.033% increase in tax planning. In contrast, the regression coefficient for company size (X_3) is -0.001, indicating a negative link between the two variables, with a 1% rise in firm size translating into a 0.001% drop in tax planning.

With a coefficient of determination (R^2) of 0.538, it can be inferred that the independent variables - leverage, profitability, and firm size - account for 53.8% of the variability in tax planning, while other factors not covered in this study account for 46.2%. The determined t value of 2.437 and significant value of 0.020, along with a constant value of 0.642, are the findings of the t-test for the regression model. Tax planning is the dependent variable, and the independent factors have a large impact on it, as seen by the estimated t value, which is more than the t table value (1.69236). This thorough examination validates the regression model's accuracy and suitability for elucidating how leverage, profitability, and firm size affect tax planning.

The first hypothesis in this research is that leverage has a positive effect on tax planning. The t test results in the table above show that the t value of the leverage variable is 2.940 with a significance value of 0.006. This value shows that the calculated t is greater than the t table value and $\text{sig } 0.006 < 0.05$, it can be concluded that the first

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hypothesis is accepted, leverage has a significant effect on tax planning.

The second hypothesis in this research is that profitability has a positive effect on tax planning. The t test results in the table above show that the t value of the profitability variable is 6.026 with a significance value of 0.000. This value shows that the calculated t is greater than the t table value and $\text{sig } 0.000 < 0.05$, it can be concluded that the second hypothesis is accepted, profitability has a significant effect on tax planning.

The third hypothesis in this research is that company size has a positive effect on tax planning. The t test results in the table above show that the t value of the leverage variable is -0.192 with a significance value of 0.849. This value shows that the calculated t is smaller than the t table value and $\text{sig } 0.849 > 0.05$, it is concluded that the third hypothesis is rejected, company size does not have a significant effect on tax planning.

The F test results aim to find out whether all independent variables together (simultaneously) have a significant influence on the dependent variable. The significance of the regression model in this study was tested by looking at the significance value (sig). The results of the F test in this research can be seen in the following table:

Table F value ($\text{df}(N1) = 4-1$; $\text{df}(N2) = nk$) where N is the number of samples used and k is the number of variables used in this research, so that a df value of 2.89 is obtained. The table above

shows that the calculated F value is 12.812 with a sig value. of 0.000. This indicates that the regression model can be used to predict the dependent variable, because the calculated F value is greater than the F table value, namely $12.812 > 2.89$ and a significant value < 0.05 . This can be concluded that there is a significant simultaneous influence between leverage, profitability, and company size on tax planning.

5. Conclusion

Overall, this study findings offer significant insights into the determinants of tax planning strategies in companies. Tests for heteroscedasticity, autocorrelation, multicollinearity, and normality were performed, and all results were satisfactory, indicating that the regression model is robust. The findings highlighted the important effects of profitability and leverage on tax planning techniques, but they also revealed subtleties like the small effect of business size. These findings add to the existing body of knowledge on corporate finance and tax management, providing practical insights for companies aiming to improve their tax strategies under different financial circumstances. To improve comprehension and predictive accuracy of tax planning behaviors, future research could examine new variables or improve existing approaches.

6. Data Image and Table

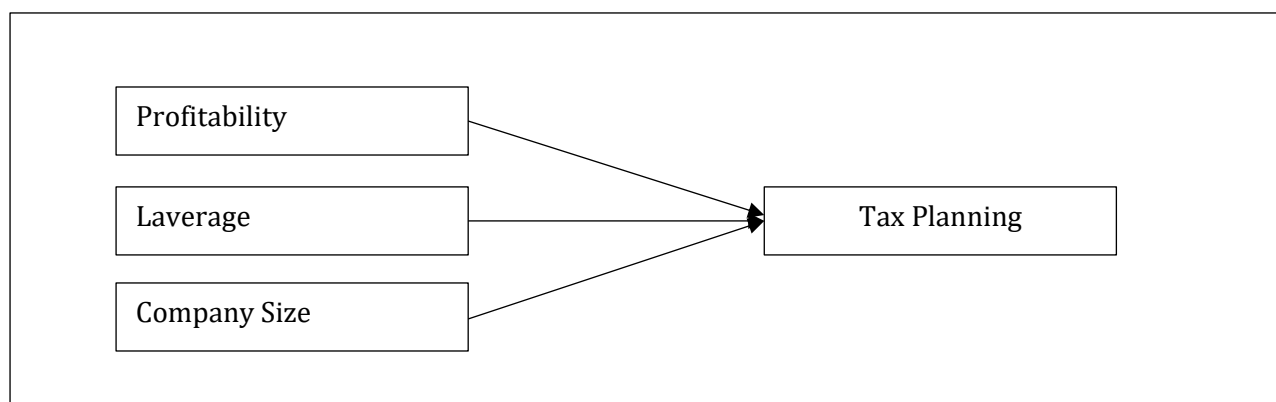


Figure 1. Framework

Table 1. Kolmogorov Smirnov test results

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Kolmogorov Smirnov test results One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residuals	
	N		37
Normal Parameters, b	Mean		,0000000
	Std. Deviation		,07151276
Most Extreme Differences	Absolute		,106
	Positive		,106
	Negative		-,077
Statistical Tests			,106
Asymp. Sig. (2-tailed)			,200c,d

Source data processed by the author 2024

Table 2. Autocorrelation Test

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,734 ^a	,538	,496	,07469	1,980

Source data processed by the author 2024

Table 3. Multiple Linear Test

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	,642	,263		2,437	,020		
	X1	,029	,010	,439	2,940	,006	,628	1,592
	X2	,033	,005	,848	6,026	,000	,707	1,414
	X3	-,001	,003	-,025	-,192	,849	,824	1,213

Source data processed by the author 2024

Table 4. Coefficient of Determination Test Results

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,734 ^a	,538	,496	,07469	1,980

Source data processed by the author 2024

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Table 5. t Test Results

		Coefficients ^a				Collinearity Statistics	
Model		Unstandardized Coefficients		Standardized Coefficients		Tolerance	VIF
		B	Std. Error	Beta	t		
1	(Constant)	,642	,263		2,437		
	X1	,029	,010	,439	2,940	,628	1,592
	X2	,033	,005	,848	6,026	,707	1,414
	X3	-,001	,003	-,025	-,192	,824	1,213

Source data processed by the author 2024

Table 7. F Test

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,214	3	,071	12,812	,000 ^b
	Residual	,184	33	,006		
	Total	,399	36			

Source data processed by the author 2024

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