

The Impact of Profitability, Leverage, and Firm Size on Tax Avoidance

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Abstract. Tax avoidance is the manipulation of tax affairs which is still within the framework of taxation regulations. Tax avoidance can occur in the sound of the provisions or written in the law and is in the soul of the law but contrary to the soul of the law. This study aims to examine the impact of profitability, leverage and firm size on tax avoidance, which is measured using the effective tax rate for companies listed on the Indonesia Stock Exchange. The population in this study are all manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2016-2018 period. The method of determining the sample in this study using purposive sampling method and obtained 74 manufacturing companies. The analysis technique in this study uses multiple regression analysis techniques. The results of the profitability test have a positive impact on tax avoidance. Meanwhile, leverage and firm size have no impact on tax avoidance.

Keywords : ROA, DAR, Firm Size, Tax Avoidance

1 Introduction

For a country, taxes are an important source of revenue that will be used to finance state expenditures. Otherwise for companies, taxes are a burden that will reduce net income. Business decisions are largely influenced by taxes, either directly or indirectly. A good business decision when it comes to taxes can be a bad business decision, and as well as otherwise. In its implementation, there are differences in interests between taxpayers and the government. Taxpayers try to pay the smallest possible tax because paying taxes means reducing the taxpayer's economic ability. On the other of government, taxes are used to finance government administration, most of which comes from revenues tax. This difference of interest causes taxpayers tend to reduce the amount of payments tax, as legally and illegally [1].

One of the efforts that can be made by entrepreneurs is to minimize the tax burden within a limit that does not violate the rules because it is one of the profit-reducing factors. Therefore, companies need proper tax planning so that companies pay taxes efficiently.

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There are two ways that corporate tax planners can do it, namely tax saving and tax avoidance because such actions do not violate regulations. There are similarities between tax saving and tax avoidance. Tax saving is an effort to reduce the amount of tax that is not included in the scope of tax, while tax avoidance is the same effort by exploiting the loopholes contained in regulations of tax because the tax authorities cannot take any action. In essence, tax avoidance is an act that reduces tax debt legally and does not reduce the ability or obligation of taxpayers to pay their taxes. However, in taking tax avoidance, efforts must be made so as not to become trapped in tax evasion.

The profitability ratio is a ratio that describes a company's ability to generate profits through all its capabilities and resources, namely those that come from sales activities, use of assets, and use of capital [2]. The higher the profitability value, the greater the profit the company gets. When the profits earned get bigger, the amount of income tax will increase according to the increase in company profits so that the tendency to do tax avoidance by the company will increase [3]. The results of research conducted by [4] show that profitability has a positive impact on tax avoidance, while research conducted by [5] shows that profitability has a negative impact on tax avoidance.

Leverage ratio is the ratio used to measure the extent to which the company's assets are financed with debt. That is, how much debt the company must bear compared to its assets. In a broad sense, it is said that leverage is used to measure a company's ability to pay all of its obligations, both short and long term. Leverage is an important tool in measuring the effectiveness of using company debt [6]. Leverage policies that produce pre-taxable corporate profits that use debt as a source that causes interest expenses can certainly reduce corporate tax obligations and can be classified as tax avoidance [7]. The results of research conducted by [8] show that leverage has a positive impact on tax avoidance, while research conducted by [9] shows that leverage has a negative impact on tax avoidance.

Firm size is the size of the company seen from the value of equity, sales value or total asset value [10]. Companies that have large total assets tend to be more able and stable to generate profits when compared to companies with small total assets. Large and stable profits will tend to encourage companies to do tax avoidance [11]. The results of another research conducted by [12] show that firm size has a positive impact on tax avoidance, while research conducted by [13] shows that firm size has a negative impact on tax avoidance.

Based on the existing phenomena and the inconsistency of previous research results, the researchers are interested in conducting further research on the impact of profitability, leverage, and firm size on tax avoidance (studies on manufacturing companies listed on the IDX in 2016-2018).

2 Literature Review and Hypothesis

2.1 Literature Review

2.1.1 Tax Avoidance

Tax avoidance is manipulation of tax affairs which is still within the framework of taxation provisions. Tax avoidance can occur in the sound of the provisions or written in the law and is in the soul of the law but it is against the spirit of the law [1].

The fiscal affairs committee of the Organization for Economic Cooperation and Development (OECD) mentions three characteristics of tax avoidance, that is there is an artificial element in which various arrangements appear to exist but are not, and this is done

in the absence of a tax factor, such schemes often take advantage of the loopholes of the law or apply legal provisions for various purposes, even though that is not what legislators really mean, and confidentiality is also a form of this scheme where consultants generally show the tools or ways to do tax evasion on the condition that the taxpayer keeps it as confidential as possible.

2.1.2 Profitability

Profitability ratio is a ratio to assess the company’s ability to seek profits. This ratio also provides a measure of the level of management effectiveness of a company. This is shown by the profit generated from sales and investment income. The use of profitability ratios is carried out by using comparisons between the components in the financial statements, especially the balance sheet financial statements and the income statement. Measurements can be made for several operating periods. The goal is to see the company's development within a certain timeframe, and to find the causes for these changes in development [14].

2.1.3 Leverage

Leverage ratio or solvency ratio is the ratio used to measure the extent to which the company’s assets are financed with debt. This means how much debt burden the company bears compared to its assets. In a broad sense, it is said that the solvency ratio is used to measure the company's ability to pay all of its obligations, both short and long term, if the company is liquidated.

In practice, if from the calculation results of the company turns out to have a high solvency ratio, this will result in a greater risk of loss, but there is also a chance to get a big profit. Conversely, if the company has a lower solvency ratio, it certainly has a lower risk of loss, especially when the economy is in decline. This impact also results in a low rate of return when high economy [14].

2.1.4 Firm Size

Firm size is the size of the company seen from value of equity, sales value or total asset value. The classification of firm size according to Regulation No. 20 of 2008 is divided into 4 (four) categories, namely micro, small, medium and large enterprises [15]. The criteria for the size of the company which are regulated according to article 6 of Regulation No. 20 of 2008 about micro, small and medium enterprises, that is [15]:

Table 1. Criteria of Firm Size

Firm Size	Criteria	
	Net Asset (does not include land and buildings for business)	Sell of The Year
Micro Enterprise	Maximum Rp50.000.000,00	Maximum Rp300.000.000,00
Small Enterprise	> Rp50.000.000,00 s/d Rp500.000.000,00	> Rp300.000.000,00 s/d Rp2.500.000.000
Medium Enterprise	> Rp500.000.000,00 s/d Rp10.000.000.000,00	> Rp2.500.000.000,00 s/d Rp50.000.000.000,00
Big Enterprise	> Rp10.000.000.000,00	> Rp50.000.000.000,00

Source: Regulation No. 20 Tahun 2008 (2019)

2.2 Hypothesis

2.2.1 The Impact of Profitability on Tax Avoidance

Profitability is the ability of a company to generate profits. One way to calculate profitability is by using Return on Assets (ROA). ROA is used to measure how much the contribution of assets in creating net income. The higher the ROA, the greater the profit the company gets. When the profits earned get bigger, the amount of income tax will increase, so that the more likely companies are to do tax avoidance to minimize the amount of income tax that must be paid.

The opinion above is supported by the results of research conducted by [3], where both studies show that profitability has a positive impact on tax avoidance. This means that the higher the profitability, the higher the efforts to do tax avoidance. Based on this description, the hypotheses in this study is:

H1: Profitability has a positive impact on tax avoidance.

2.2.2. The impact of Leverage on Tax Avoidance

Leverage is a ratio used to measure the amount of debt a company has to finance its operating activities. One way to calculate leverage is the Debt to Asset Ratio (DAR). DAR is used to measure how much the company's debt affects asset financing. The increase in debt will result in the interest expense that must be paid by the company. As a result, the profit earned by the company will decrease so that the taxes that must be paid by the company will be lower. Low tax burden will have an impact on reducing tax avoidance efforts. So the higher the leverage, the lower the company's tax avoidance.

The opinion above is supported by the results of research conducted by [9], where the research shows that leverage has a negative impact on tax avoidance. This means that the higher the leverage, the lower the efforts to do tax avoidance. Based on this description, the hypotheses in this study is:

H2: Leverage has a negative impact on tax avoidance.

2.2.3 The impact of Firm Size on Tax Avoidance

Firm size is a scale that determines the size of the company which can be seen from the value of equity, sales value or total asset value. Big profits will lead to even greater income tax, thus encouraging companies to do tax avoidance which aims to minimize the amount of income tax that must be paid.

The opinion above is supported by the results of research conducted by [4, 9], where the research shows that firm size has a positive impact on tax avoidance. This means that the higher the firm size value, the higher the efforts to do tax avoidance. Based on this description, the hypotheses in this study are:

H3: Firm size has a positive impact on tax avoidance.

3 Research Method

3.1 Research Location and Object

This research was conducted on the Indonesia Stock Exchange (IDX) which provides financial report data accessed through the website www.idx.co.id [26]. The research object used in this research are profitability, leverage, firm size, and tax avoidance in manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2016-2018.

3.2 Operational Definition of Variables and Measurement

3.2.1 Profitability

Profitability ratio is a ratio used to measure a company's ability to generate profits from its normal business activities. One of the proxies of profitability is Return on Assets (ROA). The ratio is calculated by formula [2]:

$$\text{ROA} = \frac{\text{Net Profit}}{\text{Total Assets}} \quad (1)$$

3.2.2 Leverage

The leverage ratio or solvency ratio is the ratio used to measure the extent to which the company's assets are financed with debt. In other words, the leverage ratio is the ratio used to measure how much debt the company must bear in order to fulfill its assets. One of the proxies for leverage is the Debt to Asset Ratio (DAR). In other words, this ratio is used to measure how much the company's assets are financed by debt or how much the company's debt affects asset financing. DAR can be calculated using by formula [2]:

$$\text{DAR} = \frac{\text{Total Debt}}{\text{Total Assets}} \quad (2)$$

3.2.3 Firm Size

Firm size is the size of the firm seen from the amount of equity value, sales value or total asset value or the size of the assets owned by the firm. To determine the size of the firm used asset size. The size of these assets is measured as the logarithm of total assets. Logarithms are used to refine these assets, which are very large compared to other financial variables. The firm size formula [16]:

$$\text{Size} = \text{Ln} (\text{Total Assets}) \quad (3)$$

Annotation :

Ln : Natural Logarithm

3.2.4 Tax Avoidance

Tax avoidance is a manipulation of tax affairs that is still within the framework of taxation regulations. Tax avoidance can occur in the sound of the provisions or written in the law and is in the soul of the law but it is against the spirit of the law [1]. The measurement of tax avoidance in this study uses the Effective Tax Rate (ETR) calculation. ETR is an outcome measure based on the income statement that generally measures the effectiveness of tax reduction strategies and leads to high profit after tax. ETR can be calculated with the following formula [17]:

$$\text{ETR}_{it} = \frac{\text{Tax Expenses}_{it}}{\text{Earning Before Tax}_{it}} \quad (4)$$

Annotation :

ETR_{it} : Effective Tax Rate firm i of period to-t
Tax Expenses_{it} : Total Firm Tax Expenses i of period to-t
Earning Before Tax_{it} : Earning before tax i of period to-t

3.3 Data Types and Sources

The type of data used in this study, reviewed based on the nature of the data, is quantitative data, namely data in the form of numbers or scoring qualitative data [18]. The quantitative data in this study is the financial statement data of manufacturing companies listed on the IDX in 2016-2018. Qualitative data is data in the form of words, sentences, schemes and pictures [18]. The qualitative data in this study is an overview of manufacturing companies listed on the IDX in 2016-2018. Secondary data in this study are the financial statements of manufacturing companies listed on the Indonesia Stock Exchange (IDX) 2016-2018.

3.4 Population dan Sample

3.4.1 Population

The population in this study are all manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2016-2018.

3.4.2 Sample

The method in determining the sample in this research is purposive sampling method where the sampling is done according to the criteria that have been determined according to the research objectives. The steps for determining the sample can be described in table 4.1 as follows:

Table 2. Research Sample

No	Criteria	Total
1	Manufacturing companies listed on the Indonesia Stock Exchange during 2016-2018.	166
2	Companies whose annual financial statements cannot be accessed completely from 2016-2018.	(33)
3	Companies that do not display financial statements in Rupiah currency.	(27)
4	Companies that does not have complete data according to research purpose.	0
5	Companies that incur losses during the study period.	(32)
	Total Companies	74
	Total Observation Year	3
	Total Sample	222

Source : Processed Data (2019)

3.5 Data Collection Method

The data collection method used by researchers is by conducting literature studies, by looking for information and studying through books, and other literature related to the topic of discussion of this research. This research also uses documentation method, document is a record of events that have passed. The document data in this study are the financial statements of manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the period of 2016 to 2018.

3.6 Data Analysis Technique

Data analysis techniques are techniques used and directed to answer problem formulations or test hypotheses that have been formulated [18]. Some of the data analysis techniques

used in this research are descriptive statistical analysis, classical assumption test, model feasibility test, and multiple linear analysis..

3.6.1 Descriptive statistics Analysis

Descriptive statistics provide an overview or description of data seen from the mean, standard deviation, variant, maximum, minimum, sum, range, kurtosis and skewness [19]. With descriptive statistics the variables registered in the study will be explained and will provide important numerical measures for the sample data.

3.6.2 Classic Assumption Test

Classic assumption test is to find out the results of the regression estimation carried out are completely free from the symptoms of multicollinearity, autocorrelation, and heteroscedasticity, a test called the classic assumption test is carried out.

Normality test is used to test whether in the regression model confounding or residual variables have a normal distribution. A good regression model is to have a normal or near-normal distribution [19]. The normality test used is the Kolmogorov-Smirnov test, which is by comparing the relative cumulative distribution of observations with the theoretical cumulative distribution (hopefully) or $F_{cr}(x)$. The basis for decision making in the Kolmogorov-Smirnov method, namely if the probability value of significance value > 0.05 means that the residual data is normally distributed and if the probability value of significance value < 0.05 means that the residual data is not normal distributed.

Multicollinearity test is used to test whether the regression model is found between independent variables (independent). Shaking models that should not occur between independent variables. To overcome multicollinearity in the regression model, it can be seen from the tolerance value and Variance Inflation Factor (VIF). These two measures indicate which independent variable is explained by the other independent variables. If the tolerance value > 0.10 or $VIF < 10$, it indicates that there is no multicollinearity [19].

Heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another. The method of testing the presence or absence of heteroscedasticity can vary, including the Glesjer test. This test is done by regressing the residual value on the independent variable. If the independent variable significantly affects the dependent variable, then there is an indication that heteroscedasticity occurs or vice versa. A good regression model is homoscedasticity or heteroscedasticity does not occur. This testing criterion is if the significant value of the independent variable is > 0.05 , heteroscedasticity does not occur, and if the significance value of the independent variable is < 0.05 , there is an indication of heteroscedasticity [19].

The purpose of the autocorrelation test is to detect a correlation between the data in the previous period ($t-1$) and the data after ($t1$). A good test model is autocorrelation free. Autocorrelation detection uses the Durbin-Waston test (DW test). This test model is used for level one autocorrelation (first order autocorrelation) and requires an intercept (constant) in the regression model and there is no lag variable between the independent variables [19].

3.6 Multiple Linear Regression Analysis

Multiple linear regression analysis is an analysis used to predict how the state (rise and fall) of the dependent variable (criterion), if two or more independent variables as factor predictors are manipulated (increase and decrease in value) [18]. Multiple regression

analysis was conducted in this study to test profitability, leverage, and company size as independent variables against tax avoidance as the dependent variable. The form of the multiple regression equation is:

$$TA = \alpha + \beta_1 ROA + \beta_2 DAR + \beta_3 SIZE + e \quad (5)$$

Annotation:

TA = Tax Avoidance
 α = Constanta
 $\beta_1, \beta_2, \beta_3$ = Regression coefficient
ROA = Profitability
DAR = Leverage
SIZE = Company Size
e = error component

3.7 Model Feasibility Test

3.7.1 Test the coefficient of determination (R²)

The coefficient of determination (R-square) is used to measure the ability of the model to explain the variation in the dependent variable. A value that detects one means the ability of the independent variables to provide almost all the information needed to predict variations in the dependent variable [19]. To avoid bias towards the number of independent variables included in the model, this study used an adjusted R².

3.7.2 Model Feasibility Test (F Statistical Test)

The F test aims to show whether all the independent variables included in the model have a joint influence on the dependent variable. The basis for decision making used the F test by comparing the significance level of 0.05. If the probability value <0.05, it can be said that the model fits the data. However, if the probability value > 0.05, the model does not fit the data [19].

3.7.3 Statistical Test t

The t test aims to show how far the influence of one independent variable individually in explaining the variation in the dependent variable. Tests were carried out using a significance level of 0.05 ($\alpha = 5\%$). The criteria for acceptance or rejection of the hypothesis are [19]:

1. If the Sig value > 0.05, the hypothesis is rejected (the regression coefficient is not significant). This means that partially, the independent variable does not have a significant effect on the dependent variable.
2. If the Sig value <0.05, the hypothesis is accepted (significant regression coefficient). This means that partially, the independent variable has a significant influence on the dependent variable.

4 RESULTS AND DISCUSSION

4.1 Overview of the Company

4.1.1 General History of the Indonesia Stock Exchange

Historically, the capital market has existed long before Indonesia's independence. The capital market or stock exchange has existed since the Dutch colonial era and to be precise in 1912 in Batavia. The capital market at that time was established by the Dutch East Indies government for the benefit of the colonial government or VOC.

Although the capital market has been around since 1912, the development and growth of the capital market did not go as expected, even in several periods the capital market activity experienced a vacuum. This was caused by several factors, such as World War I and II, the transfer of power from the colonial government to the government of the Republic of Indonesia, and various conditions that caused stock exchange operations to not run properly. The Government of the Republic of Indonesia reactivated the capital market in 1977, and a few years later the capital market experienced growth in line with various incentives and regulations issued by the government.

4.1.2 Vision and Mission of the Indonesia Stock Exchange

1. Vision
To become an acknowledged and credible world-class Exchange
2. Mission
Creating a trusted and credible financial market infrastructure to deliver fair, orderly and efficient market, accessible to all stakeholders through innovative products and services
3. Indonesia Stock Exchange Organizational Structure

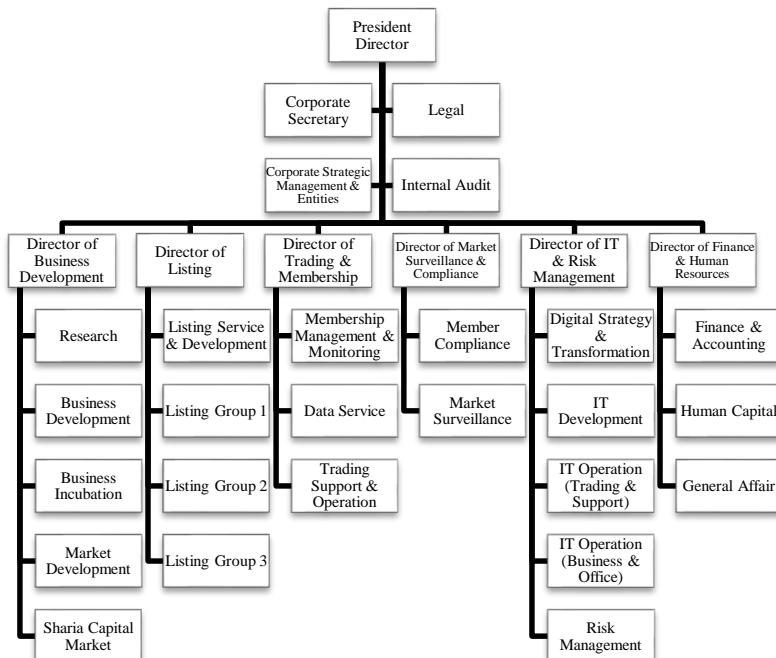


Fig. 1. Indonesia Stock Exchange Organizational Structure
 Source: Indonesia Stock Exchange (2020)

4.2 Results and Discussion

4.2.1 Descriptive Statistics

Descriptive statistics provide an overview or description of data seen from the average value (mean), standard deviation, variance, maximum, minimum, sum, range, kurtosis and skewness [19]. Descriptive statistical test results can be seen in Table 3.

Table 3. Descriptive Statistics Test Results

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	222	.00	.53	.0779	.08235
DAR	222	.08	2.06	.4322	.25347
SIZE	222	.18	12.75	7.7882	1.81899
ETR	222	-5.55	10.17	.2651	.81453
Valid N (listwise)	222				

Source: data processed in 2019

Based on Table 3 above, the results of descriptive statistics can be explained as follows:

1. The variable Return on Assets (ROA) shows a minimum value of 0.00, a maximum value of 0.53, an average value of 0.0779 and a standard deviation of 0.08235.
2. The variable Debt to Asset Ratio (DAR) shows a minimum value of 0.8, a maximum value of 2.06, an average value of 0.4322 and a standard deviation of 0.25347.
3. The company size variable (SIZE) shows a minimum value of 0.18, a maximum value of 12.75, an average value of 7.7882 and a standard deviation value of 1.81899.
4. The variable Effective Tax Rate (ETR) shows a minimum value of -5.55, a maximum value of 10.17, an average value of 0.2651 and a standard deviation of 0.81453.

4.2.2 Classic Assumption Test

1. Normality Test

The normality test aims to test whether in the regression model, confounding or residual variables have a normal distribution. It is known that the t and F tests assume that the residual value follows a normal distribution. Data can be said to be normally distributed if the Kolmogorov-Smirnov significance value is > 0.05 [19]. The results of the normality test can be seen in Table 4.

Table 4. Normality Test Results

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		222
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.46555153
Most Extreme Differences	Absolute	.337
	Positive	.269
	Negative	-.337
Kolmogorov-Smirnov Z		1.338
Asymp. Sig. (2-tailed)		.056

a. Test distribution is Normal.

b. Calculated from data.

Source: data processed in 2019

Based on Table 4 above, the Kolmogorov-Smirnov (K-S) values are 1.338 and 0.056, so it can be concluded that the data in the regression model has been normally distributed, where the significance value is greater than 0.05 ($p = 0.056 > 0.05$). Thus, overall it can be concluded that the data have been normally distributed.

2. Multicollinearity Test

Multicollinearity test is used to test whether the regression model found a correlation between independent variables (independent). To detect the presence or absence of multicollinearity in the regression model, it can be seen from the tolerance and VIF (Variance Inflation Factor) values. These two measures indicate which independent variable is explained by the other independent variables. If the tolerance value is > 0.10 or $VIF < 10$, it indicates that there is no multicollinearity [19]. The multicollinearity test results can be seen in Table 5.

Table 5. Multicollinearity Test Results

Model		Coefficients ^a		
		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	.142	.152	
	ROA	.199	.009	.820
	DAR	-.054	.125	-.017
	SIZE	.011	.017	.025

a. Dependent Variable: ETR

Source: data processed in 2019

Based on Table 5 above, it shows that all VIF values of the independent variables have values less than 10 and tolerance values greater than 0.10. The test results indicate the absence of multicollinearity signs in the regression model. Thus, it can be concluded that all the independent variables are suitable for use as predictors.

3. Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another. A proper regression model is one that is homoscedastic or does not occur heteroscedasticity [19]. This testing criterion is if the significant value of the independent variable is >0.05 , heteroscedasticity does not occur [19]. The results of the heteroscedasticity test can be seen in Table 5.5.

Table 6. Heteroscedasticity Test Results

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.220	.144		1.525	.129
	ROA	-.003	.009	-.026	-.381	.704
	DAR	.145	.118	.083	1.225	.222
	SIZE	-.018	.016	-.076	-1.121	.263

a. Dependent Variable: ABRES

Source: data processed in 2019

Based on Table 6 above, it can be explained that by using the absolute residual value in the Gleser test for the independent variable, the significant value of all independent variables is greater than 0.05, so it can be said that there is no heteroscedasticity in the variable data used in the study.

4. Autocorrelation Test

The autocorrelation test aims to test whether in the linear regression model there is a correlation between confounding error in period t and confounding error in period $t-1$ (previous period). The autocorrelation test was performed using the Durbin-Watson test. The regression model is said to be free from autocorrelation if the value of $du < d < 4-du$ [19]. The results of the autocorrelation test can be seen in Table 7.

Table 7. Autocorrelation Test Results

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.821 ^a	.673	.669	.46874	1.878

a. Predictors: (Constant), SIZE, ROA, DAR

b. Dependent Variable: ETR

Source: data processed in 2019

Based on Table 7 above, it shows the Durbin-Watson (d) value of 1.878. The value of du with the number of independent variables 3 and the number of samples 222 is 1.799, then the value of $4-du$ is 2.201. So the autocorrelation test results $du < d < 4-du = 1,799 < 1,878 < 2,201$. So it can be concluded that the regression model is free from autocorrelation.

4.2.3 Multiple Linear Regression Analysis

Multiple linear regression analysis is an analysis used to predict how the state (rise and fall) of the dependent variable (criterion), if two or more independent variables as factor

predictors are manipulated (increase and decrease in value) [18]. The results of multiple linear regression analysis can be seen in Table 8.

Table 8. Results of Multiple Linear Regression Analysis

Model		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.142	.152		.937	.350
	ROA	.199	.009	.820	21.163	.000
	DAR	-.054	.125	-.017	-.432	.666
	SIZE	.011	.017	.025	.632	.528

Source: data processed in 2019

Based on Table 8 above, the regression equation is obtained as follows:

$$TA = 0.142 + 0.199 ROA - 0.054 DAR + 0.011 SIZE + e \quad (6)$$

- 1) The constant value in the regression equation above is 0.142 indicating that if Profitability (ROA), Leverage (DAR) and Company Size (Size) are zero, then the value of Tax Avoidance (ETR) is constant at 0.142.
- 2) The Profitability Value (ROA) of 0.199 indicates that if the other independent variables are constant and the ROA increases by one unit, the ETR will increase by 0.199.

4.2.4 Model Feasibility Test

1. Test the Coefficient of Determination (R²)

The coefficient of determination (R-square) is used to measure the ability of the model to explain the variation in the dependent variable. The coefficient of determination is between zero and one. A value that detects one means the ability of the independent variables to provide almost all the information needed to predict variations in the dependent variable [19]. The results of the coefficient of determination (R²) can be seen in Table 9

Table 9. Result of Determination Coefficient Test (R²)

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.821 ^a	.673	.669	.46874	1.878

a. Predictors: (Constant), SIZE, ROA, DAR

b. Dependent Variable: ETR

Source: Appendix 6, data processed in 2019

Based on Table 9 above, it can be explained that the adjusted R² value is 0.669 or 66.9%. This shows that 66.9% of the tax avoidance variable can be influenced by the variables of profitability, leverage and company size, while the remaining 33.1% is influenced by other variables outside the research model.

2. Model Feasibility Test (F Statistical Test)

The F test aims to show whether all the independent variables included in the model have a joint influence on the dependent variable [19]. The criterion in making this test decision is that if the probability value is <0.05 , then all the independent variables in this model have a simultaneous influence on the dependent variable. The results of the F test can be seen in Table 10.

Table 10. Model Feasibility Test Results (F Statistical Test)

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	98.726	3	32.909	149.775	.000 ^a
	Residual	47.899	218	.220		
	Total	146.625	221			

a. Predictors: (Constant), SIZE, ROA, DAR

b. Dependent Variable: ETR

Source: Appendix 6, data processed in 2019

Based on Table 10 above, it can be seen that the calculated F value in this study is 149.775 with a significance level of 0.000 which means it is smaller than the significance value of 0.05. Therefore, it can be concluded that profitability, leverage and company size together have an effect on tax avoidance.

3. Statistical Test t

The t test aims to show how far the influence of one independent variable individually in explaining the variation in the dependent variable. If the value of $\text{Sig} > 0.05$ then partially the independent variables do not have a significant effect on the dependent variable, whereas if the Sig value < 0.05 , partially the independent variables have a significant effect on the dependent variable) [19]. The results of the t statistical test can be seen in Table 11.

Table 11. Statistical Test Results t

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.142	.152		.937	.350
	ROA	.199	.009	.820	21.163	.000
	DAR	-.054	.125	-.017	-.432	.666
	SIZE	.011	.017	.025	.632	.528

Source: Appendix 6, data processed in 2019

Based on Table 11 above, it can be seen as follows:

- 1) The profitability variable as measured by Return On Assets (ROA) has a t count of 21.163 and a significance value of 0.000 which is smaller than the significance value of 0.05 with a positive coefficient of 0.199. This means that profitability has a positive effect on tax avoidance, so the first hypothesis is accepted.
- 2) The leverage variable as measured by the Debt to Asset Ratio (DAR) has a t count of -0.432 with a significance value of 0.666 which is greater than the significance value of 0.05. This means that leverage has no effect on tax avoidance, so the second hypothesis is rejected.

- 3) The variable of company size has a t count of 0.632 with a significance value of 0.528 which is greater than the significance value of 0.05. This means that company size has no effect on tax avoidance, therefore the third hypothesis is rejected.

4.3 Discussion

4.3.1 Effect of Profitability on Tax Avoidance

Based on the results of the t statistical test, the profitability variable as measured by Return on Assets (ROA) has a t count of 21.163 and a significance value of 0.000 which is smaller than the significance value of 0.05 with a positive coefficient of 0.199. Based on these results it can be said that profitability has a positive effect on tax avoidance and the first hypothesis which states that profitability has a positive effect on tax avoidance is accepted.

Profitability ratio is a ratio used to measure a company's ability to generate profits from its normal business activities. Return on Assets (ROA) is a ratio that shows how much the contribution of assets in creating net income.

The higher the level of profitability, the greater the profit the company gets. When the profits earned get bigger, the amount of income tax will increase, because the tax rates used are progressive with company profits. So it can be concluded, the greater the profit obtained, the greater the efforts made by the company to carry out tax avoidance in order to minimize the amount of income tax that must be paid.

The results of this study are in line with the results of research conducted by [3, 12] which state that profitability has a positive effect on tax avoidance.

4.3.2 Effect of Leverage on Tax Avoidance

Based on the results of the t statistical test, the leverage variable as measured by the Debt to Asset Ratio (DAR) has a t count of -0.432 with a significance value of 0.666 which is greater than the significance value of 0.05. Based on these results, it can be said that leverage has no effect on tax avoidance and the second hypothesis which states that leverage has a negative effect on tax avoidance is rejected.

Leverage is the ratio used to measure how much debt the company must bear in order to fulfill assets. Debt to Asset Ratio (DAR) is a ratio used to measure how much the company's assets are financed by debt or how much the company's debt affects asset financing.

In general, the leverage ratio is used to measure a company's ability to pay off its obligations. The higher the level of leverage a company has, the more likely it is that the company will not be able to pay off its debts. Seeing these conditions, companies will focus more on minimizing the level of leverage they have compared to tax avoidance activities. In addition, interest expense arises because of the debt owned by the company, the amount does not have a big effect in reducing company profits.

The results of this study are in line with the results of research conducted by [11, 20, & 21] which state that leverage has no effect on tax avoidance.

4.3.3 The Effect of Company Size on Tax Avoidance

Based on the results of the t statistical test, the variable company size has a t count of 0.632 with a significance value of 0.528 which is greater than the significance value of 0.05. Based on these results it can be said that company size has no effect on tax avoidance and

the third hypothesis which states that company size has a positive effect on tax avoidance is rejected.

Company size is the size of the company seen from the amount of equity value, sales value or total asset value or the size of the assets owned by the company. Company size is the scale that determines the size of the company in terms of its assets. The greater the number of assets owned, the better the prospects for the company in the long term. In addition, tax avoidance efforts are not only carried out by large companies. Small companies also have the same opportunity, because the tax expense calculation is based on the profit generated, not the total assets owned by the company.

The results of this study are in line with the results of research conducted by [6, 22-24] which state that company size has no effect on tax avoidance.

5 CONCLUSION AND SUGGESTION

5.1 Conclusion

This study was conducted to re-examine the effect of profitability, leverage, and company size on tax avoidance in manufacturing companies listed on the IDX in 2016-2018. The data analysis technique in this study is multiple linear regression analysis. Based on the results of the discussion in the previous chapter, it can be concluded as follows:

1. Profitability has a positive effect on tax avoidance of manufacturing companies listed on the IDX in 2016-2018. This shows that the higher the profitability value (ROA), the higher the tax avoidance action that is taken.
2. Leverage has no effect on tax avoidance of manufacturing companies listed on the IDX in 2016-2018. This shows that the high or low leverage value (DAR) does not affect the tax avoidance actions taken.
3. Company size has no effect on tax avoidance of manufacturing companies listed on the IDX in 2016-2018. This shows that the size of the company does not affect the tax avoidance that is taken.

5.2 Suggestion

Based on the research results and conclusions, suggestions that can be conveyed regarding the limitations of this study are as follows:

1. This study only examines manufacturing companies listed on the Indonesia Stock Exchange from 2016 to 2018, so the results cannot be generalized to all companies listed on the Indonesia Stock Exchange. Further research is suggested to use other types of companies or industries, in order to know the effect of tax avoidance on each type of industry.
2. This study only uses several variables, namely profitability, leverage and company size. There are many other variables that influence tax avoidance. Further research is suggested to use other variables that affect tax avoidance apart from the variables used in this study.
3. The measurement of tax avoidance in this study uses the Effective Tax Rate (ETR). Further research is recommended to use other types of measuring instruments to calculate the value of tax avoidance, such as the Cash Effective Tax Rate (CETR) and the Book Tax Gap.

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