

## Relation between Profitability, Leverage, and Firmsize on Tax Avoidance

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### Abstract

*This research is intended to examine the relationship between profitability, leverage and the size of the business (firmsize) on tax avoidance. The Sample used is 41 companies listed on the stock exchange in the period 2018-2019, sample determination using random sampling. The analysis tool used is linear regression multiple by using SPSS. Regression test results show that simultaneously profitability, leverage and business size (firmsize) influence significantly to tax avoidance, the test results also showed that these three variables have an effect of 35% on tax avoidance, meanwhile, partially profitability (NPM) has a negative influence and significant, leverage (DER) positive and insignificant effect, while firmsize has a negative and insignificant influence.*

### Keywords

tax avoidance; profitability;  
firmsize; leverage



## I. Introduction

Taxes are a source of income for the state, while for corporate tax is an expense that will reduce net profit. Difference sinterests of tax authorities who want a large tax revenue and continuous course contrary to the interests of the company want the minimum tax payment possible (Hardika, 2007). Fluctuation economic activities experienced by companies often do not get tolerance from the tax authorities, because tax authorities want a progressive tax acquisition and stable. The effect of fluctuations in economic activity, will certainly result the company's financial reporting and tax reporting (Maria and Tommy, 2013). Differences in perspective and interests between the company and this government then gave birth to the practice of tax avoidance. Tax avoidance is wrong one way to legally avoid tax that doesn't break the rules taxation (Igusti Ayu and Ketut Alit, 2014). According to Gusti Maya Sari (2014) tax avoidance is a transaction scheme shown by minimizing tax burden by utilizing the weaknesses (loophole) provisions-tax provisions of a country.

Tax avoidance practices conducted by companies aimed at improving company profitability and company value (Zhu, Mbroh, Monney, Bonsu, 2019), more Donohoe (2015) found that tax avoidance practices have an effect the use of derivative instruments as a tax avoidance mechanism. Hal differently proposed by Desai and Dharmapala (2005), Armstrong et al (2015), Wang (2010) and Wilson (2009) who found that tax avoidance is not experienced significant to the value of the company, although tax avoidance is quite effective to add positive cash flow in the short term (Zhu, Mbroh, Monney, Bonsu, 2019). Maximize company value and obtain short-term benefits through the increase in net profit and net cashflow in the tax year is two the main motive of Management in doing tax avoidance, the two variables can be measured into financial ratios in the form of profitability, leverage, and firm size. Permata, Nurlaela, and Masitoh (2019) based on research conducted in Indonesia found that Size, Profitability and leverage have no influence significant tax avoidance. Pangaribuan et al (2021) and Damayanti and

Wulandari (2021) in his case study in Indonesia found different things, his research shows if the variable leverage and profitability have an influence significant tax avoidance. Meanwhile, the results of the study Wang and Chen (2012) in China found that tax avoidance is a linear practice with profit management. Wang (2010) in his research on the relationship between tax avoidance and firm size argues that there is a negative relation between firm size and tax avoidance, size companies projected through transparency and funding-based investment (not debt) shows that transparent companies tend to reduce tax avoidance.

## **II. Review of Literature**

### **2.1 Tax Avoidance**

Tax avoidance is a tax saving action that is still in legal fashion corridor. The traditional theory of tax avoidance considered an activity to transfer welfare from the state to shareholders (Kim et. al.; 2011), therefore the separation of ownership and control is important. Risk-neutral shareholders will accept managers acting on their behalf to achieve maximum profit, including reducing tax liabilities as long as the expected profit is still above the estimated cost (Karimah and Taufiq, 2016). Separation ownership and management directs corporate tax decisions reflect personal interests of managers. This separation of ownership and supervision shows that tax avoidance is an important activity, so that owners need to design incentives and appropriate supervision for management for managers take effective and efficient tax decisions, namely when the cost that must be spent is still smaller than the benefits to be received (Karimah and Taufiq, 2016). To measure the degree of tax avoidance, some researchers include Marfu'ah (2015), Jusman and Nosita (2020), Purba et al. (2020), Feranika et al. (2016), Wijayani (2016), and Waluyo et al. (2015) using cash Effective ratio Tax Rates (CETR).

### **2.2 Hypothesis Development**

#### **a. Profitability and Tax Avoidance**

Profitability is an indicator of management performance in managing the company's wealth directed by the profit generated, Sudarmadji and Sularto (2007). Profitability in the form of net allocated for welfare shareholders in the form of paying dividends and retained earnings, Nuringsih (2010). If the ratio of profitability is high, it means that it shows the efficiency carried out by the management. Increased profits resulting in company profitability also increased.

H1: Profitability has a positive effect on Tax Avoidance

#### **b. Leverage and Tax Avoidance**

Leverage is a financial ratio that describes the relationship between debt company against the capital and assets of the company. Leverage ratio describes source of operating funds used by the company. According To Wirna Yola Gusti (2013) The leverage ratio also shows the risks the company faces. Cahyono, Andini, and Raharjo (2016) proves that Leverage (DER) has no effect tax Avoidance. Kurniasih and Sari (2013: 65) conducted research on the effect of leverage on tax evasion. As a result, leverage is not have a significant influence on tax evasion.

H2: Leverage negatively affects Tax Avoidance

### c. Firmsize and Tax Avoidance

Basically, a large company always gets a big profit. Sex large will attract the attention of the government to be taxed accordingly, Asfyati (2012). Large companies will be more complex transactions so that will increasingly take advantage of loopholes to perform tax avoidance actions (Rego, 2003). Sabli and Md Noor (2012) proved that the size of the company significant negative effect on tax planning, while the results of research Pohan (2009) proves that the size of the company has a positive effect on tax avoidance.

H3: the size of the company has a positive effect on Tax Avoidance

## III. Research Method

The object of this research is a company listed on the Indonesia Stock Exchange in the period from 2018 to 2019, from various industrial sectors. Sampling using random sampling. The data used is secondary data by taking a sample of 41 financial statements of the company with the period in 2018-2019. The research method used in this study is Causal Explanatory. Causal is a variable affecting another variable (Cooper & Schindler, 2011). Explanatory research is research that aims to explain the relationship between variables with research phenomena (Cooper & Schindler, 2011). Thus, Causal Explanatory is to explain the relationship between variables and hypothesis testing that has been formulated previously and aims to explain various events and phenomena. Analytical tools used is a linear regression and literature study. Operationalization Of Variables In this study, tax avoidance is measured by cash efective tax rate (ratio between income tax expense with income before tax), leverage is measured with the debt to equity ratio (the ratio between debt to capital), profitability is measured with net profit margin (the ratio of net profit to sales), and the size of the company measured by the natural logarithm of total assets ( $\ln \times$  total assets). Based on the description of variables and hypotheses prepared, regression models will be tested in this study are as follows;

$$CETR_{it} = \alpha_0 + \beta_1 PROFIT_{i,t} + \beta_2 LEVERAGE_{i,t} + \beta_3 SIZE_{i,t} + e$$

Description :

CETR	=	tax avoidance as measured by using CETR as a proxy
$\alpha_0$	=	constant
$\beta_1, \beta_2, \beta_3$	=	regression coefficient
$PROFIT_{i,t}$	=	profitability
$LEVERAGE_{i,t}$	=	Leverage
$SIZE_{i,t}$	=	company size
e	=	error

## IV. Results and Discussion

### 4.1 Descriptive Statistics

**Table 1.** Descriptive Statistics

	Tax Avoidance	Profitability	Leverage	Firm Size
N	82	82	82	82
	0	0	0	0
Mean	25,768	116,707	120,1	22,768
Median	25,000	90,000	71,000	22,000

Table 1. shows that tax avoidance has an average value (mean) amounted to 25,768 and the median value of 25,000. These results show that the value average (mean) is higher than the median value which means that the average companies used in this study tend not to do tax evasion (tax avoidance) seen cash effective tax rate.

Mean DER is equal to 120.00 with a median of 71.00. These results show that the average value (mean) is higher than the median which means the average companies used in this study cenderung memiliki value debt ratio large, which indicates that these companies have debt large to run its operations so that the company experienced pressure from external parties is high. The mean NPM is 116,707 with a median of 90,000. This result shows that the average value (mean) is higher than the median means that the average company used in this study tend to has a large net profit margin value, which indicates that the company they have big financial targets. Mean FirmsSize is 22,768 with a median value of 22,000. These results show that the average value (mean) is lower than the median value which means that the average company has a relatively low company size.

## 4.2 Classical Assumption Test

### a. Normality Test

**Table 2. Normality Test**  
**One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Predicted Value
N		82,000
Normal Parametersa	Mean	25,768
	Std. Deviation	5,260
Most Extreme Differences	Absolute	0,093
	Positive	0,060
	Negative	-0,093
Kolmogorov-Smirnov Z		0,840
Asymp. Sig. (2-tailed)		0,481

**a. Test distribution is Normal.**

Normality test results in the regression model used shows that the value of Sig 0.481 > 0.05, meaning that the data used in the regression model is normally distributed.

### b. Multicollinearity test

**Table 3. Multicollinearity test**  
**Collinearity Statistics**

	Tolerance	VIF
Profitability	.944	1.060
Leverage	.937	1.067
FirmSize	.959	1.043

Based on multicollinearity test results show that Tolerance table and VIF shows the standard Tolerance value >0.1 and VIF <10, thus the the regression model used in this study has been free from multicollinearity.

### 4.3 Regression Test Results.

**Table 4.** R Square Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics	R Square Change
1	0,360	0,130	0,096	13,894		0,130

a. Predictors: (Constant), FirmSize, Profitability, Leverage

b. Dependent Variable:  
TaxAvoidance

From R square test results in the table above shows a value of 0.36 (36%) which means that variables profitability, leverage, and firmsize only have an influence of 36% of tax avoidance, while the remaining 64% is influenced by other variables not tested in this study.

**Table 5.** Anova Test  
ANOVA<sup>b</sup>

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2241,269	3,000	747,090	3,870	0,012
	Residual	15057,329	78,000	193,043		
	Total	17298,598	81,000			

a. Predictors: (Constant), FirmSize, Profitability, Leverage

b. Dependent Variable:  
TaxAvoidance

From ANOVA test results in the table above shows the value of sig 0.01 < 0.05 with thus means that the variables profitability, leverage, and firmsize simultaneously (together) significantly affect tax avoidance.

**Table 6.** T Test  
Unstandardized Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	38.326	6.585		5.820	.000
	Profitability	-.340	.141	-.262	-2.405	.019
	Leverage	.019	.012	.173	1.582	.118
	FirmSize	-.478	.262	-.197	-1.828	.071

a. Dependent Variable:  
Tax Avoidance

Based on the results of the T test above in get the value of beta coefficient at each variables and also the significance of the dependent variable to independent variables, relations can be written into the regression equation as follows;

$$\text{CETR} = 38.32 - 0.34\text{PROFIT} + 0.19\text{LEVERAGE} - 0.478\text{SIZE} + e$$

#### **a. Effect of Profitability on Tax Avoidance**

Based on the results of the regression test above shows that the value of GIS  $0.019 < 0.05$  which means that profitability has a significant influence on tax avoidance, coefficient  $-0.34$  shows the relationship between profitability and tax avoidance is negative, meaning the higher the level of profit the smaller the company the level of tax payments made by the company, cetr is variable which shows the level of corporate tax payments, the lower coefficient then the lower the level of tax payments made by the company or you could say the tax avoidance rate increases (Sari and Kurniasih, 2013; Putri and son, 2017; Zhu, Mbroh, Monney and Bonsu, 2019). The findings in this article are in line with the results mentioned by some previous researchers, such as Pangaribuan et al (2021), Damayanti and Wulandari (2021), (Zhu, Mbroh, Monney, Bonsu, 2019), and Donohoe (2015) yang profitability affects tax avoidance behavior. Findings on this article is different from the opinions expressed by Nurlaela and Masitoh (2019) which states that there is no significance of influence between profitability tax avoidance behavior.

Inline tendency of the results found by Dewinta and Setiawan (2016) that the high level of profit is closely related to tax loopholes can be utilized can be confirmed in this article, otherwise the opinion of Nurlaela and Masitoh (2019) which suggests that the high level of profit will just make management more conservative towards tax management due to the risk of cost and time sacrificed is not relevant to the findings on this article shows the negative relationship between profitability and tax avoidance. From the results of this test then dapat concluded that hypothesis 1 accepted

#### **b. Leverage On Tax Avoidance**

Based on the results of the regression test above shows that the value of GIS  $0.118 > 0.05$  which means that leverage has an insignificant effect on tax avoidance, coefficient  $0.19$  shows that the relationship between leverage and tax avoidance is positive, meaning the higher the level of debt on Capital owned by the company also higher the ability of the company's cash for tax payments, conversely, the lower the level of debt on capital at the company the company they tend to do tax avoidance. The findings in this article are in line with the results mentioned by some previous researchers such as, Dewinta and Setiawan (2016), Kurniasih and Maria (2013) and Darmawan (2014) show that leverage is not impact on tax avoidance. The company's funding decision can become an overview of tax avoidance activities (tax avoidance) related to the tariff effective tax. This is because there are tax regulations governing on the policy of the company's funding structure (Gupta and Newberry, 1997). Results the findings in this article differ from the opinions expressed by Pangaribuan et al (2021), daughters and Sons (2017). From the results of this test then can it was concluded that hypothesis 2 was rejected.

#### **c. Influence Of Firmsize On Tax Avoidance**

Based on the results of the regression test above shows that the value of GIS  $0.71 < 0.05$  which means that firmsize has an insignificant influence on tax avoidance, coefficient  $-0.47$  shows that the relationship between firmsize and tax avoidance is negative, meaning the larger the size of the company the smaller the tendency of companies to do tax

avoidance, otherwise the smaller the size of a company, the company tends to do tax avoidance. Although not significant, the size of the company has a negative relationship with tax avoidance, meaning the larger the company, the smaller the level tax payments made by the company, *ctr* is a variable shows the level of corporate tax payments, the lower the coefficient the lower the level of tax payments made by the company or can arguably the tax avoidance rate increases (Sari and Kurniasih, 2013; Putri and Putri, 2017; Zhu, Mbroh, Monney and Bonsu, 2019). These findings show that the more large companies there is a tendency to greater potential to do tax avoidance, this finding is in line with some previous findings, such as Adelina (2012), Fatharani (2012), Maria and Tommy (2013), Nugroho (2011). Results in this research is also supported by the theory of political power that explains that large companies will have great resources for influence the desired political process and benefit the company including to do tax evasion in order to achieve tax savings optimal (Darmawan and Sukartha, 2014). From the results of this test then can it was concluded that hypothesis 3 was rejected.

## V. Conclusion

From the results of testing using multiple linear regression found that profitability negatively affect the CETR, which means the higher the profit the greater the tendency of companies to do tax avoidance, in the results testing also found that profitability significantly affect the tax avoidance. Furthermore variable Leverage positive effect on CETR, which this means that the higher the company's debt, the smaller the company's tendency to do tax avoidance, the test results show that there is no significant leverage effect on tax avoidance. Firm size does not have significant influence on CETR, although there is a tendency that the more the larger the size of the company, the greater the potential to do tax avoidance.

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