CAPITAL STRUCTURE, PROFITABILITY, FIRM SIZE AND CORPORATE TAX AVOIDANCE: EVIDENCE FROM INDONESIA PALM OIL COMPANIES

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ABSTRACT

This study aims to provide empirical evidence about the effect of capital structure, profitability and firm size on coporate tax avoidance. The dependent variable used in this study was tax avoidance proxied by the effective tax rate (ETR), and the independent variable was capital structure (DER), profitability (ROA), and firm size. The population in this study were palm oil companies listed on the Indonesian Stock Exchange for the period 2007-2018. The samples consist of 4 palm oil companies by using purposive sampling method. The analysis technique used in this research was multiple linier regression analysis. The result shows that capital structure and profitability has positive effect on tax avoidance, while firm size have no effect on tax avoidance.

Keywords: Capital Structure; Profitability; Firm Size; Tax Avoidance.

INTRODUCTION

Indonesia is one of the countries with the largest palm oil plantations in the world. This advantage makes the plantation sector as a source of state revenue in the form of taxes. However, taxes create differences in interests between the government as tax collectors and companies as taxpayers. For the government, tax revenues must be collected as much as possible but different for companies, taxes are a burden that reduces their income.

Minimizing the tax burden by utilizing the gaps in tax law is legal. But not all companies can minimize taxes due to several factors, these factors such as capital structure, according to (Faulkender & Smith, 2016) companies with high leverage tend to operate in countries with high tax rates. Then profitability, the level of corporate profits can affect the company's ability to minimize the tax burden (Noor, Fadzillah, & Mastuki, 2010). Then the factors that influence tax avoidance are the size of the company (Irianto, Sudibyo, & Wafirli, 2017; Noor et al., 2010).

In this study tried to find empirical evidence of the effect of capital structure, profitability and company size on tax avoidance in palm oil companies in Indonesia. Dependent variable in this research use tax avoidance proxied by ETR. And use three independent variables which are capital structure (DER), profitability (ROA) and firm size.

Based on the research variable, the research model can be described as follows:
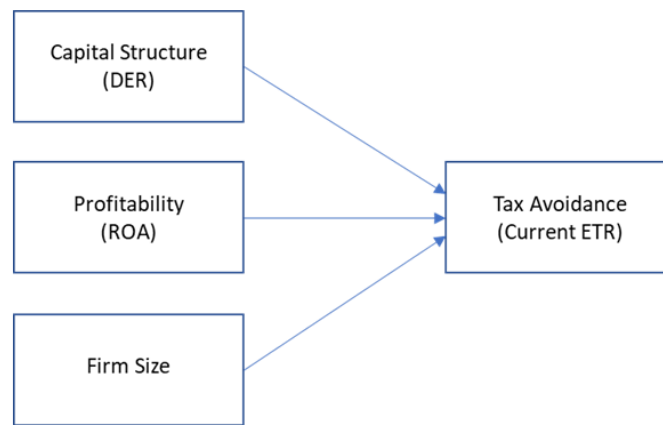
Figure 1 Conceptual Framework

The ETR use in this research is Current ETR (Current tax income divided by income before taxes). the level of ETR which is close to 25% indicates that the low tax avoidance (Oktaviyani & Munandar, 2017).

$$Current\ ETR = \frac{Current\ Tax\ Income}{Pre\text{-}Tax\ Income}$$

This measurement is also used in previous studies conducted by (Delgado, Fernandez-Rodriguez, & Martinez-Arias, 2014) dan (Noor et al., 2010).

The capital structure is a mix of financial liabilities and equity. In Indonesia interest is tax deductible and use debt financing for companies can be useful to reduce the tax burden. Capital structure is proxied using DER. This ratio is used to see the ratio of debt to equity. This debt will have an interest expense that can reduce the taxes paid by the company, DER formula as follows:

$$DER = \frac{Total\ liabilities}{Total\ equity}$$

In this study profitability was measured using ROA. Profitability is a measure of how much a company makes a profit compared to the total assets. The greater the level of profitability, the greater the tax burden. ROA formula as follows:

$$ROA = \frac{Net\ Income}{Total\ Assets}\ x\ 100\%$$

Firm size in this study is measured using the natural logarithm of total assets, which is useful to see how big or small the size of a company based on total assets.

$$SIZE = (Ln)\ Total\ Assets$$

Based on the background research, this research will answer a number of questions. (1) Does capital structure affect tax avoidance? (2) Does profitability affect tax avoidance? (3) Does the firm size affect tax avoidance?

The results of previous studies by (Irianto et al., 2017), (Danis & Zulaikha, 2014), and (Ngadiman & Puspitasari, 2017) showed that DER has a negative influence on ETR, meaning that the higher the DER the greater the level of tax avoidance. It show the higher the debt financing, company can take advantage of interest costs that can reduce taxes. Therefore, the first hypothesis is:

H1: Capital structure had a positive effect on tax avoidance

A high level of profitability will have an impact on the amount of income tax that must be paid by the company and cause the company to maximize its tax planning to reduce the tax. The results of previous studies regarding the effect of profitability on tax avoidance vary. Research results from (Rizal, 2016) and (Rani, Susetyo, & Fuadah, 2018) said profitability had a negative effect on tax avoidance. Another case with the results of research from (Irianto et al., 2017), (Parisi, 2016) said profitability had positive effect on tax avoidance. And the last (Fitri & Munandar, 2018), (Danis & Zulaikha, 2014) and (Anouar, 2017) said there is no influence between profitability and tax avoidance. Based on the results of previous research, the hypothesis is:

H2: Profitability affect on tax avoidance

Firm size has an positive influence on tax avoidance based on previous research by (Ngadiman & Puspitasari, 2017), (Danis & Zulaikha, 2014), (Irianto et al., 2017). Whereas based on other research by (Annisa, Taufik, & Hanif, 2017) and (Aminah, Chairina, & Yustika, 2017) shows that size does not significantly influence tax avoidance. Based on the results of previous research, the hypothesis is:

H3: Firm Size had positive effect on Tax Avoidance

METHODS

This research use quantiative methods and using secondary data from financial statements. The population in this study used palm oil companies listed on the Indonesian stock exchange in the period 2007 to 2018. The samples are selected by purposive sampling methods. the criteria used to select the sample are as follows:

1. Palm oil companies listed on Indonesia Stock Exchange from 2007 to 2018.
2. Palm oil companies publish complete audited financial statements as of December 31st, 2007 to December 31st, 2018.
3. Palm oil companies have no loss during 2007 to 2018.

Based on predetermined sample criteria. From 18 palm oil oil companies listed on the Indonesia Stock Exchange only 4 companies were sampled in the study with a period of observation carried out for 12 years.

The analysis technique used is multiple linear regression with hypothesis test uses T-test. Based on the variables used, regression equation is as follows.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Description:

Y = Tax Avoidance
α = Constant
β_1-β_3 = Regression Coefficients
X_1 = Capital Structure (DER)
X_2 = Profitability (ROA)
X_3 = Firm Size
e = Error

RESULT AND DISCUSSION

Classical Assumption Test Result

Normality Test

The normality test used in this study is the Kolomorov-Smirnov test.

Table 1 Kolmogorov-Smirnov Test

		Unstandardized Residual
N		48
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.50024854
Most Extreme Differences	Absolute	.099
	Positive	.054
	Negative	-.099
Test Statistic		.099
Asymp. Sig. (2-tailed)		.200[c,d]

from the data in table 1 shows a significant value of 0.200 which is greater than 0.05, it can be concluded that the data is normally distributed.

Multicollinearity Test

The method used to diagnose multicollinearity refers to the value of Variance Inflation Factor (VIF). VIF value < 10 indicates that there is no multicollinearity. The multicollinearity test results are shown in table 2.

Table 2 Multicollinearity test

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
SIZE	.926	1.080
ROA	.564	1.772
DER	.567	1.763

Heteroscedasticity Tests

The park test was used to test for the symptoms of heteroscedasticity, where if a significance value > 0.05 showed no heteroscedasticity.

Table 3 Park Test

Model	t	Sig.
1 (Constant)	.330	.748
LNDER	-.479	.641
LNROA	-1.226	.246
LNSIZE	-.383	.709

Autocorrelation Test Result

Based on the results of the autocorrelation test, the Durbin Watson value is 1.883. The DW value is between du = 1.6708 and 4-du = 2.3292, which means there is no autocorrelation.

Hypothesis Test Result

Table 4

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.552[a]	.305	.257	.51702

a. Predictors: (Constant), DER, LNSIZE, ROA

T-Test Results

Table 5

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.170	1.874		-.091	.928
	DER	-.349	.107	-.543	-3.252	.002
	ROA	-.498	.118	-.705	-4.212	.000
	LNSIZE	-.013	.115	-.015	-.112	.911

a. Dependent Variable: ETR

The influence of capital structure on tax avoidance

Based on the results of multiple regression analysis, the value of the regression coefficient is -3.252 and significance value is 0.002. It means that H1 is accepted, that the capital structure proxied by DER has a negative influence on the ETR. A high DER value will cause lower tax burden as indicated by the smaller ETR value. This shows that capital structure has a positive effect on tax avoidance.

This result is consistent with previous research by (Irianto et al., 2017), (Ngadiman & Puspitasari, 2017) and (Danis & Zulaikha, 2014). As explained before, tax regulations in Indonesia allow interest expenses as tax deductions. Companies with capital structure with more debt have advantages in terms of taxation.

The influence of profitability on tax avoidance

Based on the results of multiple regression analysis, the value of the regression coefficient is -4.212 and significance value is 0.000. It means that H2 is accepted. With a negative coefficient value, profitability has a negative effect on ETR, which means the higher the profit from the company, the higher the tax avoidance.

This result is consistent with previous research by (Irianto et al., 2017) and (Parisi, 2016). The companies that have high profits can maximize tax planning to minimize corporate tax (Parisi, 2016), (Kraft, 2014) and (Noor et al., 2010).

The influence of firm size on tax avoidance

Based on the results of multiple regression analysis, the value of the regression coefficient is -0.112 and significance value is 0.911. It means that H3 is rejected. The results show that firm size has no effect on tax avoidance.

This result is consistent with previous research by (Annisa et al., 2017) and (Aminah et al., 2017). It means there is no influence large or small companies on tax avoidance.

CONCLUSION

There are some conclusions that can be drawn from this study, first that the capital structure proxied by DER has a positive influence on tax avoidance, which means that the higher the DER value of the company, the greater the tax avoidance. The high interest expense of the loan can reduce the tax paid. Second, the profitability variable also has a positive influence on tax avoidance, which means that the higher the level of profitability, the greater the tax avoidance, indicating that palm oil companies with high profitability tend to treat of reducing the tax burden. The last conclusion is that the size of the company does not have a significant effect on tax avoidance.

This study still has several limitations. First, research like this has been done by many previous researchers use manufacture companies but there are still a few who use specific palm oil sector as an object of research, especially in Indonesia, causing a lack of references to tax avoidance by the palm oil sector. Second, there are very few samples that meet the criteria of this study.

Based on the results of the research obtained, then the suggestions for further research to add other variables in future research, especially for studies that use palm oil companies as the object of research.

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