

# The effect of financial factors on tax avoidance in mining companies listed on the indonesia stock exchange 2018 – 2020

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#### ABSTRACT

# Taxes have a significant role in the development and support of the running of a country's government. Tax collection is used to finance all expenditures issued by the state in order to realize national development. Tax payments are also a manifestation of the state's obligations and the participation of the community in collecting funds to finance the state in national development. This study aimed to determine the effect of profitability and company size on tax avoidance in 2018-2020. In this study, the research method used is descriptive analysis and quantitative techniques, collecting secondary data from the 2018-2020 financial statements. The sampling method used in this research is using a purposive sampling method. The sample set in this study is 30 mining companies listed on the Indonesia Stock Exchange that meet the criteria. The normality test, namely the Kolmogorov-Smirnov test, was used in this study to test whether the data were normally distributed or not. When the data were not normally distributed, it is done by case wise diagnostic. The results showed that the profitability and firm size has a test that is less than 0.05, it can be concluded that profitability and firm size did not affect tax avoidance.

KEYWORDS

Taxes; Profitability; Firm Size; Tax Avoidance

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# Introduction

Indonesia is a country where the funding source comes from taxes and non-taxes. Taxes have a significant role in the development and support of the running of a country's government because taxes are the largest source of revenue in the State Revenue and Expenditure Budget (APBN). Tax collection is used to finance all expenditures issued by the state in order to realize national development. Tax payments are also a manifestation of the state's obligations and the participation of the community in collecting funds to finance the state in national development.

The following is Indonesia's state income in 2018-2020, which comes from sources of tax revenue and nontax revenue sources, as follows:

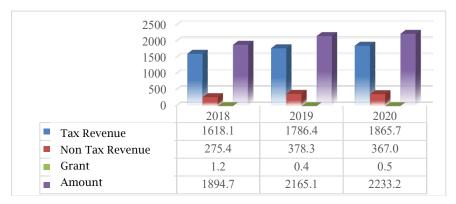


Figure 1. Indonesia's state income in 2018-2020

Indonesia's state income in 2018-2019, where income from taxes is higher than non-tax revenues, and income from taxes increases yearly from 2018-2020. However, the government still expects a significant contribution from taxpayers in paying taxes. There are differences in interests between the government and companies, which makes companies try to legally minimize their tax payments by avoiding taxes. Corporations and personal taxpayers avoid

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tax by taking advantage of loopholes in existing tax regulations. Due to the lack of clarity in the existing tax regulations, taxpayers can use them to reduce the tax burden that must be paid (Rizki & Fuadi, 2019).

Cases of tax evasion are often found in various business and economic sectors. One sector that has the potential and often performs tax evasion is the mining sector. The mining sector in Indonesia is one of Indonesia's mainstay strategic sectors. Unfortunately, the management of this sector is not transparent enough, so the potential revenue for the state is not yet optimal. (Ganiswari, 2019). Tax avoidance actions by companies in Indonesia will have an impact on decreasing the percentage of tax revenue achievement. There is a decrease in the percentage of achievement of tax revenues and not achieving the expected target. This condition happens because tax avoidance causes low tax revenues that are not following the realization of the state revenue budget.

Research conducted by Sulaeman (2021) states the results that profitability has a positive effect on tax avoidance. Meanwhile, (Ariska et al., 2020) state the results that profitability has a negative effect on tax avoidance. Research conducted by (Wastam, 2018) states the results that company size has a positive effect on tax avoidance actions. Meanwhile, (Susanti, 2018) states the results that company size has a negative effect on tax avoidance.

#### Literature review

#### Agency theory

According to (Ramadona, 2016), agency theory is related to agreements between company members, and this theory explains the monitoring of various costs and imposes relationships between these groups. Based on agency theory, the difference in interests between the tax collector and the company causes taxpayer non-compliance, namely the company's management, so it will try to avoid corporate taxes. (Dewinta, I., & Setiawan, 2016). The company took advantage of this loophole but did not violate the applicable tax laws. The company wants to change its tax burden so that it reduces the company's profits and does not reduce its performance rewards.

#### Tax Avoidance

Tax avoidance, according to (Faizah, S. N., & Adhivinna, 2017), is an effort by taxpayers to reduce the tax burden that must be borne by taking advantage of the weaknesses of the legislation. Meanwhile, according to (Fadila, 2017) is a way to avoid or minimize taxes that do not exceed the scope of the applicable law. Therefore, it can be concluded that tax avoidance is one way for managers to reduce corporate taxes.

#### Profitability

Profitability is the ratio used to assess the company's ability to seek profit or profit. This ratio can also explain the size of the level of management effectiveness in a company (Kasmir, 2016). Research conducted by Praditasari & Setiawan (2017) shows that the higher the ROA value, the higher the income generated by the company. Because the profit generated by the company is the basis for the imposition of income tax, if the profit is significant, the amount of income tax will increase, so the company tries to take tax avoidance measures to avoid an increase in the tax burden.

H1: Profitability has a positive effect on tax avoidance.

#### Firm size

*Firm size* is the size of the company, which can be measured by the size of the total assets or assets of the company using the calculation of the logarithmic value of total assets. The larger the size of a company, the more complex the transactions that occur. It allows the company to take advantage of existing loopholes to take tax avoidance actions from each transaction. (Jasmine, 2017). Previous research conducted (Jasmin{Bibliography}e, 2017) stated that large companies could regulate their taxation based on tax planning that has been done to achieve optimal tax savings.

H2: Firm size has a positive effect on tax avoidance.

#### Methods

#### Data collection technique

This study uses quantitative methods. This study uses a sample of mining sector companies listed on the Indonesia Stock Exchange (IDX) from 2018-2020. The type of data used in this research is in the form of a financial Report. The sample selection in this study was made through purposive sampling. The total sample used in this study was 79 research data.

#### Tax avoidance (y)

ETR is the tool most often used to measure how much a company can do tax avoidance which is part of tax management. The smaller the value of ETR indicates that there is tax avoidance behavior by companies that are getting bigger. Tax avoidance uses a ratio scale measured by ETR (Effective Tax Rate). The ETR value, according to (Sandy, S., & Lukviarman, 2015), can be proxied as follows:

$$ETR = \frac{\text{Tax Expense}}{\text{Earnings before Taxt}}$$

#### **Profitability (X1)**

Profitability is one way to measure the value of the company's financial performance in obtaining profits for a certain period based on the level of sales, assets and capital. In this study, the profitability variable uses the ROA (Return on Asset) calculation indicator with a ratio measurement scale. According to (Kasmir, 2016) the ROA value can be calculated by the formula:

$$ROA = \frac{Net \ Earnings}{\text{Total Activa}}$$

#### Firm size (x2)

Firm size is a measurement in grouping the size of the company in various ways such as total assets owned, company operational activities, income received, and others. In this study, the calculation of the size of the company uses the log indicator of the company's total assets on a ratio scaleIn this study, the company's size calculation uses the indicator log of the company's total assets on a ratio scale. According to Niresh & Velnampy (2014), firm size can be formulated as follows:

SIZE = Ln (Total Assets)

# Results

#### Descriptive statistical analysis

The ROA variable has a minimum value of -0.1520 generated by PT. Borneo Olah Sarana Sukses Tbk in 2020, and the maximum value of 0.2818 was generated by PT. Baramulti Sukses Sarana Tbk in 2018. As for the mean or average value of 0.045527 with a standard deviation of 0.0783426. Furthermore, the SIZE variable had a minimum value of 17,0007 in 2018, produced by PT. Bukit Asam Tbk. and the maximum value of 32.0558 produced by PT. Medco Energi International Tbk in 2019. As for the mean or average value of 28.041431 with a standard deviation of 3.0286190.

	Ν	Minimum	Maximum	Mean	Std. Deviation
ROA	79	-0,1520	0,2818	0,045527	0,0783426
SIZE	79	17,0007	32,0558	28,041431	3,0286190
ETR	79	0,0003	0,7362	0,291415	0,1847178
Valid N (listwise)	79				

Table 1. Descriptive Statistic Result

# Normality test

Table 2	Kolmogorov-Smirnov Test
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		Unstandardized Residual
Ν		79
Normal Parameters <sup>a,b</sup>	Mean	0,0000000
	Std.	0,16845506
Deviation		0,097
More Extreme Differences		0,097
Absolute		-0,067
		0,097
		0,063°

Based on table 2, the results of the Kolmogorov-Smirnov test obtained the significance of Asymp. Sig.(2-Tailed) of 0.063 > 0.05 significance level. Thus, this value indicates that the data is normally distributed because the result of the significance of Asymp Sig.(2-Tailed) is greater than its significance level.

		Table 5. Multiconnearity rest	
Model		Colline	arity Statistics
Model		Tollerance	VIF
1	ROA	0,834	1,199
	SIZE	0,237	4,215

Table 3 Multicollinearity Test

Based on Table 3, it is known that the Tolerance value for the ROA (X1) variable is 0.834, SIZE (X2) is 0.237. Variable tolerance > 0.10. While the VIF value for the ROA (X1) variable is 1.199, SIZE (X2) is 4.215, the VIF variable is < 10. Thus, it can be concluded that there is no multicollinearity symptom in the regression model.

#### Heteroscedasticity test

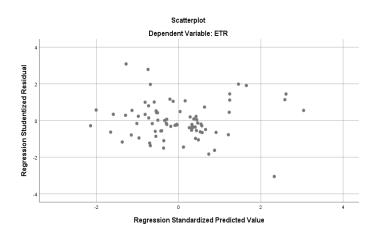


Figure 2. Heteroscedasticity test result

Based on the test results in Figure 1, it can be seen that the data points do not form a certain pattern and the data spreads above and below the number 0 on the Y axis, it is concluded that there is no heteroscedasticity, meaning that this regression model is good.

#### Autocorrelation test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0,410ª	0,168	0,123	0,1729480	1,932

Based on the results of the autocorrelation test, it is known that the Durbin-Watson (DW) value is 1.932. To obtain the value of du can be seen in the Durbin-Watson table, where the number of samples (n) is 79 and the number of variables (k) is 4, the results obtained are:

#### ( du < d < 4 - du ) ( 1.7423 < 1.932 < 2.2577 )

That is, the du value of 1.7423 is smaller than the Durbin-Watson (DW) value of 1.932 and smaller than 4 minus the du value of 2.2577. So it can be concluded that there is no positive or negative autocorrelation with the decision not to be rejected.

#### Multiple regression analysis

		Unstandardized Coefficients		Standardized Coefficients t		Sig	
	Model	В	Std. Error	Beta	-		
1	(Constant)	0,100	0,190		-0,524	0,602	
	ROA	0,351	0,247	0,149	1,283	0,204	
	SIZE	0,002	0,013	0,032	0,146	0,884	

 Table 5. Multiple Regression Analysis Result

Based on Table 5, the regression model is obtained as follows:

#### ETR = 0.100+0.351ROA + 0.002SIZE

The constant value is 0.100 which means, if all the independent variables are fixed, then the value of the dependent variable is 0.307 units. Then the regression coefficient value of the ROA variable has a positive effect of 0.351, meaning that every increase of one unit of profitability will increase corporate tax avoidance by 0.351 units and the regression coefficient value of the SIZE variable has a positive effect of 0.002, meaning that each increase of one unit of company size will increase corporate tax avoidance. of 0.002 units.

## Coefficient of determination test

Table 6. Coefficient of determination test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0,410ª	0,168	0,123	0,1729480	1,932

Based on Table 6, the value of Adjusted R Square is 0.123 which indicates that the proportion of the effect of the variables Profitability (ROA), Leverage (DER), Company Size (SIZE), and Intangible Assets (IA) on the Tax Avoidance (ETR) variable is 12.3 %, while the remaining 87.7% is influenced by other factors not included in this research model. This shows that together the variation of the Tax Avoidance variable is 12.3%.

# Goodness of fit test (f test)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	0,448	4	0,112	2,762	$0,008^{b}$
	Residual	2,213	74	0,030		
	Total	2,661	78			

#### Tabel 7. Goodness of fit test

Based on table 4.9, the F value is 2.762 with a significance value of 0.008, which means that the significance value is smaller than the significance level of 0.05. Then 0.008 <0.05 can be interpreted as a positive and significant regression coefficient. Thus it can be concluded that the independent variables, namely profitability, leverage, firm size and intangible assets have a joint effect on the dependent variable, namely tax avoidance.

# *Hypothesis test (t test)*

Tabel 8. Hypothesis test								
Unstandardized Standardize Coefficients Coefficients T Sig								
Hipotesis Variabel		В	Std. Error	Beta	-		Conclusion	
(Constant)	1	0,100	0,190		- 0,524	0,602		
H1 H2	ROA SIZE	0,351 0,002	0,247 0,013	0,149 0,032	1,283 0,146	0,204 0,884	Not supported Not supported	

Based on Table 8, it can be concluded that ROA has a significance value of 0.204 > a significance level of 0.05, so it can be concluded that the first hypothesis is rejected, which means that the profitability variable has no effect on tax avoidance. Furthermore, for SIZE has a significance value of 0.884 > a significance level of 0.05, it can be concluded that the third hypothesis is rejected, which means that the firm size variable has no effect on tax avoidance.

# Discussion

# The effect of profitability on tax avoidance

Based on the results of hypothesis testing, it shows that profitability has a beta value of 0.351 with a positive direction. The significance value is 0.204, which means 0.204 > 0.05, so it can be concluded that profitability has no significant effect on tax avoidance. Therefore, the first hypothesis in this study, namely the effect of profitability on tax avoidance, is not supported. This is because when the company has a high ROA (Return On Asset) or profit after tax, the company tends not to avoid tax. After all, this follows the wishes of shareholders who want high after-tax profits. Then the management or manager will try to maximize profit after tax.

This is in line with research (Dyas, Rirta, & Kharis, 2016) and (Yulyanah, & Kusumastuti, 2019) which shows that profitability does not affect tax avoidance. However, this contradicts research (Arianandini P. W. & Ramantha, 2018) and (Marsono, S., & Sari, 2020), which shows that profitability affects tax avoidance.

#### The effect of firm size on tax avoidance

The hypothesis testing results show that the firm's size has a beta value of 0.002 in a positive direction. The significance value is 0.884, which means 0.884> 0.05, so it can be concluded that profitability has no significant effect on tax avoidance. Therefore, the third hypothesis in this study, namely the effect of firm size on tax avoidance, is not supported. This is because large companies with significant total assets tend to be more stable and able to generate profits to pay their obligations than companies with small total assets. So the more significant the total assets and the excellent use of resources in managing tax planning activities, the larger companies have better prospects in a relatively long period. Therefore there is no need to do tax avoidance.

The results of the study are in line with research conducted by (Tebiono & Sukadana, 2019) and (Annisa, 2017), which states that company size affects tax avoidance. At the same time, the results of this study are not in line with research conducted by (Handayani & Mildawati, 2018) and (Honggo dan Marlinah, 2019) which states that company size does not affect tax avoidance.

#### Conclusion

Based on the test results for the first hypothesis, profitability does not significantly affect tax avoidance because when the company has a high ROA (Return On Asset) value or profit after tax, the company tends not to do tax avoidance. So the hypothesis in this study is not supported. Furthermore, the test results for the third hypothesis, namely, the size of the company, do not significantly affect tax avoidance. This condition happens because the more significant the total assets and the use of good resources in managing tax planning activities causes large companies to have better prospects over a relatively long period. So the second hypothesis in this study is not supported. It is hoped that further researchers can increase the observation time to get better research results.

Moreover, it is expected to add or replace other variables in research that affect tax avoidance, such as sales growth variables, audit committees, independent commissioners, asset growth, and institutional ownership, in order to provide better results so that they can affect tax avoidance. In addition, companies are expected to consider and be more careful in making decisions related to tax planning by applicable tax laws so that they do not risk receiving tax sanctions. This research was conducted based on annual financial report data obtained from the company's website and the Indonesia Stock Exchange website without considering data that the company did not report. In addition, 30 companies were made into the population, seven companies did not publish their financial statements during 2018-2020, and ten companies did not have complete data related to research variables during 2018-2020.

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