

# The Effect Of Return On Asset, Sales Growth, Leverage And Capital Intensity On Tax Avoidance Of Mining Companies Listed On The Indonesia Stock Exchange Period 2017-2020

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## Abstract

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Key words:

Profitability  
Debt to Equity  
Effective Tax Rate  
SPSS V.25  
Purposive Sampling

The increasingly rapid economic growth requires companies to help state finances, causing companies to want to avoid taxes. This study aims to obtain evidence about whether there is an effect of this research variable on Tax Avoidance.

The object of this research is a company that is included in a mining company listed on the IDX. The source of the data for this research is data downloaded through [www.ticmi.com](http://www.ticmi.com) to obtain the company's financial statements as the research sample. The data analysis technique used in this study uses the SPSS version 25 program

. The conclusion obtained from this study is that Return on Assets and Leverage have an effect on Tax Avoidance, while Sales Growth and capital intensity have no effect. And all of the independent variables can simultaneously affect Tax Avoidance.

## I. INTRODUCTION

Economic growth in national development which is increasingly turning into more and more makes many companies are encouraged to create all their potential to become a source of state income in order to be able to finance all the burdens that the state has. (Adhivinna, 2017) states that the source of state revenue that has the most impact on the country's economy apart from natural products is income from taxes.

In developing countries such as Indonesia, the state government usually uses taxes to provide facilities to the community and as funds for development that can prosper the country.

In economic development in Indonesia, the SME development efforts that have been carried out have not yielded satisfactory results until now, because in fact the progress that has been mentioned is very small compared to the progress of SMEs according to (Simbolon, 2021).

Service activities are accounting which has a function to facilitate quantitative data from economic enterprises, which are used to make economic decisions in determining options from certain circumstances (Wi et al., 2021).

Voluntary changes in accounting methods, usually related to managers' efforts to replace or change an existing accounting method (generally accepted accounting principle-GAAP) in (Chandra, 2019).

Even though tax avoidance is legal, the government still doesn't want it, according to (Fionasari, 2020).

## II. LIBRARY REVIEW

### Tax

(Sudirman et al., 2020) states that:

"Taxes are contributions from the community to the state that are coercive by parties who are obliged to pay them based on laws and regulations to finance various state facilities and activities".

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(Mahpuding et al., 2020) said that:

"Taxes are a mandatory contribution of the people as taxpayers to the state which are indebted and forced by law for free for the welfare of society and the state".

(Ramandey, 2020) states:

"Tax law regulates the relationship between the government which is the tax collector and the taxpayer".

(Setyawan, 2020) said if:

"tax is a mandatory contribution that must be given by a taxpayer to the state for the purposes of the state in providing prosperity to its people".

### **Return on Assets**

(Yanti & Oktari, 2018) states that:

"Profitability is an ability possessed by a company to make all assets owned into an advantage".

(Saefullah et al., 2018) states:

"Return on assets must reach a value of 5.98%, if the ratio reaches a value of 5.98%, it can be said that the Return on Assets value is good".

### **Sales Growth**

(Aprilia, 2021) states that:

"Sales growth measures how well the company maintains its position in the economy class at its level".

(Setiawan, 2020) stated that:

"Sales growth plays a very important role in managing working capital".

### **Leverage**

(Pranaditya et al., 2021) states that:

"Leverage is the company's ability to cover its fixed expenses by using the income used in the capital structure of a company".

(Wahyuni, 2019) said that:

"ratio *leverage* explains how the source of operating funds used by the company is measured using the *Debt to Equity*".

### **Capital Intensity**

(Zodhi, 2020) states that:

"Capital intensity is the investment made by the company related to investment in the form of capital which describes how capable the company is in encouraging its capital to use all its assets".

### **Tax Avoidance**

(Wijaya & Rahayu, 2021) states:

"Tax avoidance has the aim of reducing the tax burden by taking advantage of loopholes in tax regulations in a country. Tax avoidance is legal because it does not violate tax provisions.

## **III. METHOD**

### **Types of Research**

Quantitative research is the type of research used. (Jaya, 2020) stated that: "quantitative research is research that is obtained by carrying out statistical steps from a measurement".

### Operationalization of Research

Variables	Indicator	Formulation	Measurement scale
Return on assets (X1)	Total Assets	$\frac{\text{Net profit after tax}}{\text{Total assets}} \times 100\%$ (Febriana et al., 2021)	Ratio
Sales Growth (X2)	Sales Growth	$\frac{\text{Current sales}}{\text{previous sales}} \times 100\%$ (Aprilia, 2021)	Ratio
Leverage (X3)	Debt of Equity	$\frac{\text{Total debt}}{\text{Total capital}}$ (Novita et al., 2020)	Ratio
Capital Intensity (X4)	Capital Intensity	$\frac{\text{non current asset}}{\text{total assets}}$ (Novita et al., 2020)	Ratio
Tax Avoidance (Y)	Effectivity Tax Ratio	$\frac{\text{Income tax burden}}{\text{Profit before tax}}$ (Novita et al., 2020)	Ratio

### Data Collection

In this study the technique used was literature study and documentation, namely by reading some of the results of previous studies and other articles that were related to the research being studied by researchers.

### Data Analysis Techniques

#### Descriptive Statistics Experiment

In books (Ghozali, 2018) descriptive statistical essays can provide an overview or descriptive can provide a description or description of something.

#### 2. Multiple Linear Regression Analysis Experiment

It is a test that looks for whether the dependent variable is affected by the independent variable with linear regression and the significance level for 5 percent. The equation used is:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$$

Description :

Y	: Tax avoidance (ETR)
$\alpha$	: Constant
$\beta_1 \dots \beta_4$	: Coefficient of Linear Regression
X1	: Return on assets
X2	: Sales growth
X3	: Leverage
X4	: Capital Intensity
e	: Standard Error

#### 3. Classical Assumption Test

##### a. Normality

This test has a function to see whether the normal distribution in a regression model comes from confounding variables or residuals.

##### Heteroscedasticity

Test The heteroscedasticity test is a test to see whether there is an inequality of variance in the residuals of one observation against other observations in the regression model.

##### c. Autocorrelation

Test Autocorrelation test is a test that finds out whether there is a correlation between the confounding error in the current period and the error in the previous period in the linear regression model.

##### d. Multicollinearity

Test The multicollinearity test attempts to test whether there is a regression model in which there should be no correlation between the independent variables in this study.

#### 4. Hypothesis Testing

##### a) Coefficient of Determination ( $R^2$ )

How well is the ability of the independent variable in explaining the dependent variable seen with the coefficient of determination  $R^2$ .

##### b) Simultaneous Significance Test (Statistical Test F)

This test is used to determine whether the independent variables in this study simultaneously affect the dependent variable.

##### c) Individual Parameter Significant Test (t Test Statistics)

In the book (Ghozali, 2018) the t statistical test of research variables describes how far the influence of one independent variable is in providing information on variations in the dependent variable.

### IV. RESULTS

#### of the Selection Stage Criteria Purposive Sampling Method

Number	Criteria	Amount
1.	Mining companies that publish audited financial statements as of December 31, 2017-2020 in a row.	47
2.	Mining companies that do not have financial reports with complete information related to the variables studied during the 2017-2020 period	(47)
3.	Mining companies that experience losses during 2017-2020.	(25)
4.	Mining companies that change sectors during the span of the research year, namely 2017-2020.	(0)
5.	Mining companies that have outlier data.	(6)
	<b>TOTAL SAMPLES</b>	12
	<b>TOTAL SAMPLES DURING 2017-2020 (12x4)</b>	48

No.	Share Code	Company Name
1	ADRO	PT Adaro Energy Tbk
2	BSSR	PT Baramulti Suksessarana Tbk
3	BYAN	PT Bayan Resources Tbk
4	CITA	PT Cita Mineral Investindo Tbk
5	DEWA	PT Darma Henwa Tbk
6	ELSA	PT Elnusa Tbk
7	GEMS	PT Golden Energy Mines Tbk
8	MBAP	PT Mitrabara Adiperdana Tbk
9	MYOH	PT Samindo Resources Tbk
10	PTBA	PT Bukit Asam Tbk
11	RUIS	PT Radian Utama Interinsco Tbk
12	TOBA	PT Toba Bara Sejahtera Tbk

#### Descriptive Statistical Test.

		Descriptive Statistics				
		N	Minimum	Maximum	Mean	Std. Deviation
Return	On	48	,02	,46	,1365	,10546
Assets						
Sales Growth		48	,63	1,98	1,1585	,31128
Leverage		48	,17	1,95	,7746	,44477
Capital Intensity		48	,23	,91	,5244	,15352
Tax avoidance		48	,15	,45	,2854	,06098
Valid	N	48				
(listwise)						

Source: SPSS Version 25.

### Multiple Linear Regression Analysis Test

Model	Coefficients <sup>a</sup>						Collinearity Statistics	
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF	
	B	Std. Error	Beta					
1 (Constant)	,266	,043		6,148	,000			
Return On Asset	-,234	,092	-,404	-2,527	,015	,615	1,625	
Sales Growth	,029	,028	,150	1,047	,301	,769	1,300	
Leverage	,043	,021	,317	2,069	,045	,673	1,487	
Capital Intensity	-,031	,054	-,077	-,566	,574	,849	1,178	

a. Dependent Variable: Tax avoidance

Source: SPSS Version 25.

From the table above, it will get a regression equation, namely:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 +$$

$$Y = 0.266 - 0.234X_1 + 0.029X_2 + 0.043X_3 - 0.031 X_4 +$$

The equation can be interpreted as:

a. Constants (a)

Constants have a value of 0.266 which explains that if the independent variable is 0 then the value of the dependent variable has a value of 0.266.

b. Return On Assets (ROA).

The return on asset (ROA) coefficient value is -0.234. This shows that the value of tax avoidance can be reduced by 0.234 by adding 1 point to the return on assets.

c. Sales Growth.

The value of the sales growth coefficient is 0.029. This shows that tax avoidance can increase by 0.029 for every 1 point increase in sales growth.

d. Leverage (DER).

The leverage coefficient (DER) is 0.043. This shows that tax avoidance can increase by 0.043 points if 1 point is added to leverage.

e. Capital Intensity.

The value of the Capital Intensity coefficient is -0.031. This shows that the value of tax avoidance decreases by 0.031 for every 1 point increase in capital intensity.

**Classical Assumption Test**

A. Normality Test

**One-Sample Kolmogorov-Smirnov Test**

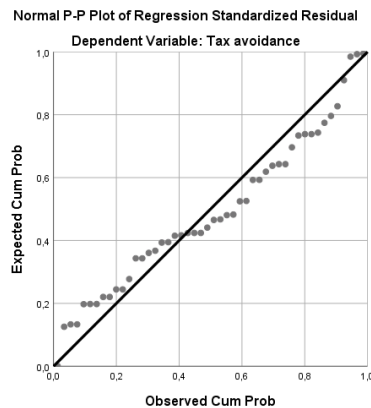
		Unstandardized Residual	
N		48	
Normal Parameters <sup>a,b</sup>	Mean	,0000000	
	Std. Deviation	,05016886	
Most Extreme Differences	Absolute	,104	
	Positive	,102	
	Negative	-,104	
Test Statistic		,104	
Asymp. Sig. (2-tailed)		,200 <sup>c,d</sup>	
Monte Carlo Sig. (2-tailed)	Sig.	,638 <sup>e</sup>	
	99% Confidence Interval	Lower Bound	,626
		Upper Bound	,650

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.
- d. This is a lower bound of the true significance.
- e. Based on 10000 sampled tables with starting seed 299883525.

**Source: SPSS Version 25.**

Asymp value. Sig.(2-tailed) is 0.200 which can be seen the value is greater than the predetermined level of significance ( $\alpha$ ) which is 0.05. The following are the results of the Normal PP PLOT Of Regression Standardized Residual:

**Normality Test Results**



**Source: SPSS Version 25.**

In the picture above shows that the P-P PLOT analysis of Standardized Residual Regression shows that the points spread out and follow a diagonal line, so it can be said that the distributed residual data in this study is normal and meets the assumption of normality.

### B. Multicollinearity Test

		Coefficients <sup>a</sup>					Collinearity Statistics	
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
		B	Std. Error	Beta				
1	(Constant)	,266	,043		6,148	,000		
	Return On Asset	-,234	,092	-,404	-2,527	,015	,615	1,625
	Sales Growth	,029	,028	,150	1,047	,301	,769	1,300
	Leverage	,043	,021	,317	2,069	,045	,673	1,487
	Capital Intensity	-,031	,054	-,077	-,566	,574	,849	1,178

a. Dependent Variable: Tax avoidance

Source: SPSS Version 25.

In the table it can be seen that the return on asset (ROA) variable has a tolerance level of 0.615 and a VIF value of 1.625. Sales growth has a tolerance value of 0.769 and a VIF value of 1.300. Leverage (DER) has a tolerance level of 0.673 and a VIF value of 1.487. Capital intensity got a tolerance value of 0.849 and a VIF value of 1.178.

### C. Autocorrelation Test

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,569 <sup>a</sup>	,323	,260	,05245	1,011

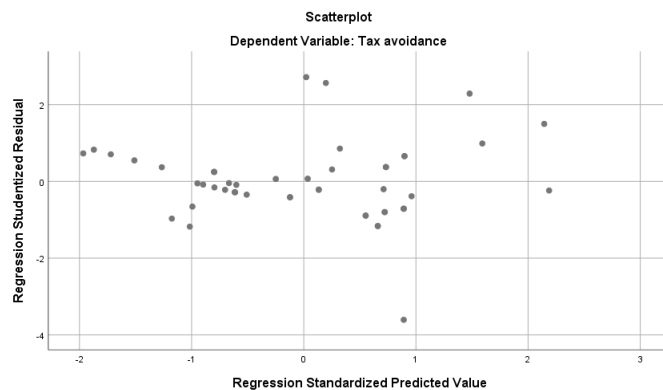
a. Predictors: (Constant), Capital Intensity, Return On Assets, Sales Growth, Leverage

b. Dependent Variable: Tax avoidance

Source: SPSS Version 25.

It can be seen that the result of the Durbin-Watson test value is 1.011, which means this value is between -2 and +2. so that it can be concluded that the research regression model does not occur autocorrelation.

### D. Heteroscedasticity Test



Source: SPSS Version 25.

This states that this research does not occur Heteroscedasticity so that the model is declared feasible to be used for research, it can be seen from the points in the image that are spread out.

## Hypothesis Testings

### Determination Coefficient Test (R2)

#### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,569 <sup>a</sup>	,323	,260	,05245	1,011

a. Predictors: (Constant), Capital Intensity, Return On Assets, Sales Growth, Leverage

b. Dependent Variable: Tax avoidance

From the table above, it can be seen that the R Square results of 0.323 or 32.3% this value can be interpreted that the independent variable of this study is able to explain 32.3% of the dependent variable. While the remaining 67.7% (100% - 32.3%) is influenced by other factors or variables.

### Simultaneous Test (Statistical Test F)

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,056	4	,014	5,134	,002 <sup>b</sup>
	Residual	,118	43	,003		
	Total	,175	47			

a. Dependent Variable: Tax avoidance

b. Predictors: (Constant), Capital Intensity, Return On Assets, Sales Growth, Leverage

#### Source: SPSS Version 25.

It can be concluded from the table above that the independent variables have a simultaneous (simultaneous) effect on Tax Avoidance because they get  $F(\text{table}) 3.21 < F(\text{count}) 5.134$  and has a significance level that is smaller than the value of 0.05 ( $0.002 < 0.05$ ).

### Partial Test (Test Statistics t)

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics	
		B	Std. Error	Beta	t		Tolerance	VIF
1	(Constant)	,266	,043		6,148	,000		
	Return On Asset	-,234	,092	-,404	-2,527	,015	,615	1,625
	Sales Growth	,029	,028	,150	1,047	,301	,769	1,300
	Leverage	,043	,021	,317	2,069	,045	,673	1,487
	Capital Intensity	-,031	,054	-,077	-,566	,574	,849	1,178

a. Dependent Variable: Tax avoidance

#### Source: SPSS Version 25.

Based on the table above, it can be concluded as follows:

#### a. The effect of Return On Assets

Return on Assets has a value of  $t(\text{table}) 2.01669 < t(\text{count}) 2.527$  and a significance level smaller than the value of 0.05 ( $0.015 < 0.05$ ) indicating that Return On Assets has a significant effect on Tax Avoidance.

#### b. Effect of Sales Growth

Sales Growth has a value of  $t(\text{table}) 2.01669 > t(\text{count}) 1.047$  and a significance level greater than the value of 0.05 ( $0.301 > 0.05$ ) indicating that Sales Growth has no significant effect on Tax Avoidance.

#### c. The effect of Leverage

Leverage has a value of  $t(\text{table}) 2.01669 < t(\text{count}) 2.069$  and a significance level smaller than the value of 0.05 ( $0.045 > 0.05$ ) indicating that Leverage has a significant effect on Tax Avoidance.

#### d. Effect of Capital



Intensity Capital intensity has a value of  $t$  (table)  $2.01669 > t$  (count)  $0.566$  and a significance level greater than the value of  $0.05$  ( $0.574 > 0.05$ ) indicating that Capital Intensity has no significant effect on Tax Avoidance.

## V. CONCLUSION

From the results of the research described previously in chapter IV, the following conclusions can be drawn:

1. By getting a significance of  $0.015$ , it means that Return on Assets is able to affect Tax Avoidance.
2. By getting a significance of  $0.301$ , it means that Sales Growth has no significant effect on Tax Avoidance.
3. By getting a significance of  $0.045$ , it means that Leverage is able to affect Tax Avoidance.
4. By getting a significance of  $0.574$ , it means that capital intensity has no effect on Tax Avoidance.
5. Because the significance level is lower than the value of  $0.05$ , all of the independent variables are able to simultaneously influence Tax Avoidance.

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