

The Effect of Profitability and Leverage on Tax Avoidance (Empirical Study on Mining and Agriculture Companies Listed on the Indonesia Stock Exchange Period 2013-2017)

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The research objective was to determine the effect of profitability and leverage on tax avoidance in mining and agricultural companies listed on the Indonesia Stock Exchange. The research method uses explanatory research. The population consists of financial report research from 132 companies. The sample selection technique uses a purposive sampling technique on the basis of criteria that companies do not experience losses and always pay corporate income tax during the observation period of 2013 – 2017; this created a sample of 20 companies. Data analysis methods use panel data regression, processed with software Eviews 10. The results show that profitability has a negative effect on tax avoidance and leverage does not affect tax avoidance. Simultaneously profitability and leverage affect tax avoidance.

Key words: *Leverage, profitability, tax avoidance..*

Preliminary Background

Tax is one of the sources of state revenue that has a large contribution and one of the posts of state cash receipts comes from state tax revenues. The contribution of tax revenue to state revenues is expected to increase from year to year (Munari, 2015). From 2013 to 2017 the composition of tax revenues in the APBN increased, as stated by the Tax Consultant, Anta Ginting, that taxes became one of the biggest sources of state revenue which became the foundation of the APBN; where almost 80 percent of the state budget came from taxes (republika.co. id).

Tax revenue is obtained from the subject of personal and corporate tax. The tax entity/company subject will contribute to tax revenue if supported by business developments that are improving (Sari, 2013: 1).

In its implementation there are differences in interests between taxpayers and the government. The company seeks to pay as little tax as possible because paying taxes means reducing the company's economic capacity (Suandy, 2008; in Arianandini and Ramantha, 2018). That condition causes many companies to try to find ways to minimize the tax burden. Minimizing the tax burden can be done in various ways, ranging from those that are still in the frame of tax regulations to those that violate tax regulations (Sari, 2014). Minimizing tax obligations that do not violate the law is commonly referred to as tax avoidance. (Arianandini and Ramantha, 2018).

Tax avoidance does not involve violating any laws, but all parties agree that tax avoidance is practically unacceptable. This is because tax avoidance directly results in reduced taxation, which results in reduced tax revenues by the state. Tax avoidance is carried out by the company, of course, through policies taken by the leadership of the company itself (Dewi and Jati, 2014).

Based on a report made jointly by Ernesto Crivelly, an investigator from the IMF in 2016, based on a survey, which was analyzed again by the UN University using a database of the International Center for Policy and Research (ICTD), and the International Center for Taxation and Development (ICTD), there emerged data on tax avoidance companies in 30 countries. Indonesia ranks 11th; where an estimated \$6.48 billion US dollars is being avoided by corporations in Indonesia (tribunnews.com). This indicates that in Indonesia there are still many who engage in tax avoidance.

The Directorate General of Tax at the Ministry of Finance (DGT of the Ministry of Finance) said that as many as 2000 multinational companies operating in Indonesia did not pay the

Corporate Income Tax (PPh) (Article 25 and Article 29) for reasons of loss; the foreign company did not pay taxes for 10 years. The practice of tax avoidance is done by transfer of pricing mode or transfer of profits or taxable profits from Indonesia to other countries. With the existence of this situation is very detrimental to the Indonesian government, especially in the tax sector. If it is allowed to continue than tax revenues will experience a significant decline (liputan6.com).

A phenomenon that occurs is the implementation of a tax avoidance strategy by means of tax planning. The tax planning method carried out by Google is performed by utilizing the physical presence requirements; where Google has subsidiaries in Singapore that manage businesses around Asia. While in Indonesia, Google only builds a marketing representative office that acts as a support office. Because Google did not establish a Permanent Establishment (BUT), Indonesia would have difficulty in pursuing the company for tax. This is because contracts are made online, as well as payments for services provided. (finance.detik.com).

In addition, a company engaged in the affiliated health services of companies in Singapore, namely PT RNI, is suspected of carrying out tax avoidance. By business entity, PT RNI has been registered as a limited liability company. However, in terms of capital, the company is dependent on affiliate debt. That is, owners in Singapore provide loans to RNI in Indonesia. So the owner does not invest but rather makes it a debt, so that when the debt and interest are paid it is considered a dividend by the owner in Singapore because the capital is included as corporate debt. In the 2014 PT RNI financial report, a debt of Rp.20.4 billion was recorded. Meanwhile, the company's turnover is only Rp.2,178 billion. Not to mention there were losses held in the same year's report valued at Rp.26.12 billion. In addition, RNI utilizes Government Regulation 46/2013 concerning special income tax for MSMEs, with a final PPh rate of 1%. Furthermore, two RNI shareholders of Indonesian citizenship did not report tax returns correctly from 2007-2015. The two shareholders, who are Singaporeans also, do not pay income tax, even though they have a business in Indonesia (ekonom.kompas.com).

There are several factors that influence a company in conducting tax avoidance, including profitability and leverage (Oktamawati, 2017; Hussain, Abidin, Kamaruzaman & Shawtari, 2018). Profitability consists of several ratios, one of which is Return On Assets (ROA) which shows the ability of the company to generate profits from the assets it uses (Sartono, 2015: 123), the higher the ROA value, the better the performance of the company. Profit is the basis of tax imposition. The higher the profit of a company, the higher the tax burden paid (Arianandini and Ramantha, 2018). Therefore, profitability is estimated to have an influence on tax avoidance.

Companies which engage in tax avoidance can be highlighted by examining the funding policies used by the company. One funding policy is leverage policy (Arianandini and Ramantha, 2018). Leverage shows the extent to which company assets are financed with debt (Kasmir, 2014: 112). The greater the use of debt by the company, the more the amount of interest expense incurred by the company, so that it can reduce the company's taxable profit which will then be able to reduce the amount of tax that the company must pay (Surbakti, 2012).

From the background above, the problem can be identified as follows:

1. How does profitability affect tax avoidance.
2. What is the influence of leverage on tax avoidance.
3. How does profitability and leverage affect tax avoidance.

Literature Review

Theoretical Basis

The agency theory concept according to Anthony and Govindarajan in Siagian (2011: 10) is as follows: "relationship or contact between principal and agent." The difference in interests between the principal and the agent can affect various matters relating to company performance, one of which is company policy regarding taxes.

Tax Avoidance

CETR aims at tax avoidance in companies. CETR describes company tax avoidance with the consideration that the larger ETR Cash indicates the lower the level of tax avoidance companies. CETR also describes all tax avoidance activities that reduce tax financing to the taxation authority.

The formulas of CETR are as follows:

$$\text{CETR} = \frac{\text{Tax Payment}}{\text{EBT}} \times 100\%$$

Profitability

Profitability is proxies by Return On Assets, which is a ratio that shows how much the asset contributes to creating net income.

The formula for Return on Assets (ROA) according to (Hery, 2016) is:

$$\text{ROA} = \frac{\text{EBIT}}{\text{Total Assets}} \times 100\%$$

Therefore, the higher the profitability, the higher the level of tax avoidance because companies with large profits will be more able to use loopholes to manage their tax burden (Chen et al. 2010).

Leverage

Leverage shows the proportion of the use of debt to finance its investment. Companies that do not have leverage are using their own capital (Sartono, 2015: 120). The formula from DER is:

$$\text{DER} = \frac{\text{Total Debt}}{\text{Equity}} \times 100\%$$

Use or debt financing has an influence on the company because debt has a fixed burden in the form of interest costs. The company's failure to pay interest on debt will cause financial difficulties that end in bankruptcy. Conversely, the use of debt will provide a deduction on taxes on interest that can benefit shareholders (Kamaludin, 2011: 48).

Framework

In a study, Arianandini and Ramantha (2018) explained that ROA is related to net income and imposition of income tax for companies. The higher the ROA, the higher the profitability. When profits are increased, the amount of income tax will increase in accordance with the increase in company profits. Therefore, the higher the profitability, the more the level of tax avoidance is high because companies with large profits will be more flexible to use loopholes to manage their tax burden.

According to Richardson and Lanis (2007), when companies rely more on debt financing than financing originating from equity for their operations, the company will have a lower CETR. The higher the level of debt, the more the company engages in tax avoidance. Therefore, leverage is estimated to have an influence on tax avoidance.

The relationship between profitability and leverage towards tax avoidance is both financial ratios which, if they have high value, can motivate the company to engage in tax avoidance. Based on previous research, profitability and leverage affect tax avoidance (Hidayat, 2018).

Based on the framework, the hypotheses in this study are as follows:

H1: Profitability influences Tax Avoidance.

H2: Leverage has an effect on Tax Avoidance.

H3: Profitability and Leverage affect Tax Avoidance.

Object and Research Methods

The objects in this study are financial reports issued by mining and agricultural companies. The research method used in this study is an explanatory method. An Explanatory is a study aimed at describing the relationship, the effect between predictive variables or predictors on predictable or prevalent variables is stated causal variables and consequent variables (Edison, 2018: 85).

Research Population and Samples

The population in this study was 660 financial reports from 132 mining and agricultural companies. A number of manufacturing companies have not met the sample selection criteria in the study. The research sample can be seen in the table presented as follows:

Mining and agricultural companies listed on the Indonesia Stock Exchange

Table 3.1: Sample Selection Criteria

Criteria	Total
Mining and agricultural companies were listed on the Indonesia Stock Exchange.	132
Mining and agricultural companies that do not publish complete financial statements for the period 2013-2017.	(23)
The financial statements of mining and agricultural companies are not stated in units of rupiah.	(28)
Mining and agricultural companies that do not display the data and information needed and used for this study during the period 2013-2017	(27)
Mining and agricultural companies with more than one Cash Effective Tax Ratio.	(15)
The number of samples used as the object of research	39
Outlier sample	19
2013-2017 Observation Year	5 Year
Number of Observations 2013-2017	100

Source: www.sahamok.com and www.idx.co.id

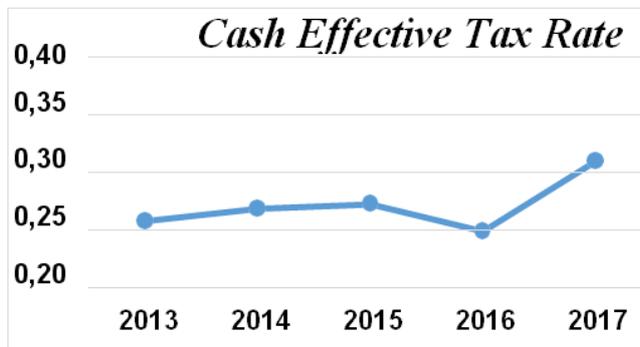
Variable Operation

The variables in the study are consisting of 1 dependent variable, namely Tax Avoidance, which is measured by the Cash Effective Tax Ratio, and the independent variable is profitability and leverage.

Research Results and Discussion

Research Variable Calculation Results

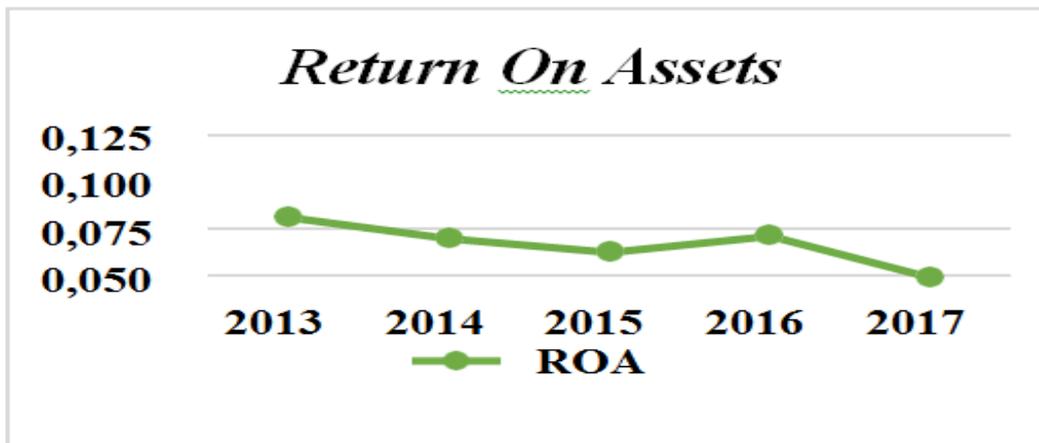
Figure 4.1. Tax Avoidance Chart in Mining and Agriculture Companies



Source: Output Eviews 10

Figure 4.1 shows the average CETR value of mining and agricultural companies. A low average CETR value indicates that the company seeks to engage in greater tax avoidance. A high average CETR value indicates that the company seeks to engage in tax avoidance less.

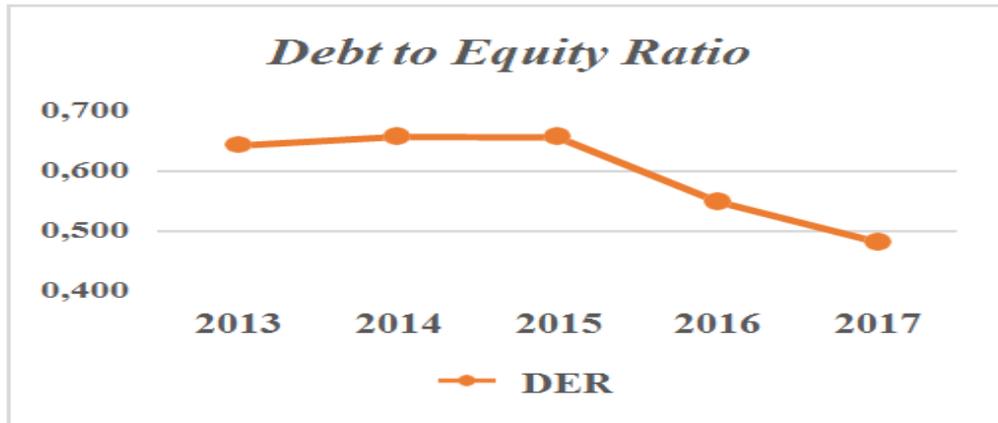
Figure 4.2. Profitability Chart on Mining and Agriculture Companies.



Source: Output Eviews 10

Figure 4.2 shows the average value of ROA of mining and agricultural companies.

Figure 4.3. Leverage Charts on Mining and Agriculture Companies.



Source: Output Eviews 10

Results of Panel Data Regression Analysis

The random effect model is as follows:

Table 4.1: Data Panel Regression Results

Dependent Variable: CETR				
Method: Panel EGLS (Cross-section random effects)				
Date: 04/04/19 Time: 19:13				
Sample: 2013 2017				
Periods included: 5				
Cross-sections included: 20				
Total panel (balanced) observations: 100				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.396078	0.035611	11.12230	0.0000
ROA	-1.072357	0.240630	-4.456465	0.0000
DER	-0.010824	0.032089	-0.337308	0.7366

Source: Output Eviews 10

Table 4.1. states the regression equation:

$$\text{CETR} = 0.396078 - 1.072357\text{ROA} - 0,010824\text{DER} + e$$

The regression equation above explains that:

1. The constant value in the regression equation above is 0.396078 indicating that if the independent variable, namely profitability and leverage variables are considered equal to zero or constant, then the dependent variable is the tax avoidance variable positive value of 0.396078.
2. The regression coefficient value of the negative Return On Assets variable indicates a unidirectional relationship between profitability and tax avoidance variables. The regression coefficient of Return On Assets is -1.072357, meaning that for each increase in Return On Assets by (one) unit, the other independent variables, namely the leverage variable are considered constant (worth 0), will cause a decrease in tax avoidance of 1.072357.
3. The regression coefficient value of the negative Debt to Equity Ratio indicates a unidirectional relationship between the leverage variable and tax avoidance. The regression coefficient of Debt to Equity Ratio is -0.010824, meaning that for each increase in Debt to Equity Ratio of (one) unit, while the other independent variables namely profitability variables are considered constant (worth 0), will cause a decrease in tax avoidance by 0.010824.

Determination Coefficient Test (R²)

Table 4.2: Determination Coefficient Test Results

R-squared	0.177347	Mean dependent var	0.198935
Adjusted R-squared	0.160385	S.D. dependent var	0.087418
S.E. of regression	0.080101	Sum squared resid	0.622370
F-statistic	10.45558	Durbin-Watson stat	2.079205
Prob(F-statistic)	0.000077		

Source: Output Eviews 10

Table 4.2 shows the coefficient of determination (R²) of 0.160385. The values obtained indicate an independent variable in explaining or influencing the dependent variable of 17.73.

T test

Table 4.3: Test Results t

Variable	t count	Probability	Conclusion
Profitability (ROA)	-4.456465	0.0000	Take effect
Leverage (DER)	-0.337308	0.7366	No effect

Source: Output Eviews 10

Variable Profitability (ROA)

1. The results of data processing show the variable profitability (ROA) has an effect on tax avoidance, because the probability value of ROA is smaller than the significant level of $0.0000 < 0.05$, other than that it is seen from the results of the comparisons between t count and t table

2. Variable Leverage (DER)

The results of data processing show that the leverage variable (DER) has no effect on tax avoidance, because the DER probability value is greater than the significant level of $0.7366 > 0.05$. 1.9847 obtained $-t \text{ count} > -t \text{ table}$ which is $-0.337308 > -1.9847$, then H_02 is accepted and H_{a2} is rejected, meaning that partially the leverage variable (DER) does not affect tax avoidance.

Test F

Table 4.4: F Test Results

R-squared	0.177347	Mean dependent var	0.198935
Adjusted R-squared	0.160385	S.D. dependent var	0.087418
S.E. of regression	0.080101	Sum squared resid	0.622370
F-statistic	10.45558	Durbin-Watson stat	2.079205
Prob(F-statistic)	0.000077		

Source: Output Eviews 10

Table 4.4 shows the P-value of $0.000077 < 0.05$, so that H_03 is rejected, besides that it is seen from the results of the comparison between F count and F table which shows the calculated F value of 10.45558 and F table of 3.09 so that $F \text{ count} > F \text{ table}$ which is $10.45558 > 3.09$.

Discussion

The result of the first hypothesis in this study is that profitability affects tax avoidance in mining and agricultural companies. The regression coefficient value of return on assets is negative, indicating a negative effect or relationship which is not in line with the profitability and tax avoidance variables, this unidirectional relationship can be seen in the graph of the average tax avoidance of mining and agricultural companies (figure 4.1), but the average graph, for the profitability of mining and agricultural companies (figure 4.2), shows a decline.

Profitability proxies by ROA has a negative influence on tax avoidance that is proxies by CETR, this means that if the ROA has increased then the Effective Cash Tax Rate will be lower, lower CETR indicates high tax avoidance activity. This happens because the tax with company profits is directly proportional, if the company's profitability increases, this

indicates the better performance of the company and the greater the profits generated by the company, which then creates a higher tax burden.

The results of the second hypothesis in this study are that leverage does not affect tax avoidance in mining and agricultural companies. Because the higher the level of debt of a company, it will not affect the existence of tax avoidance practices. This happens because the higher the level of debt of a company, the management will be more conservative in conducting financial reporting or company operations. Management will be more careful and will not take high risks to carry out tax avoidance activities to reduce the tax burden. If debt is used in large amounts, it can cause losses to the company (Arianandini and Ramantha, 2018).

The third hypothesis in this study is that profitability and leverage affect tax avoidance in companies mining and agriculture.

The results of the F test in this study indicate that jointly profitability and leverage have an influence on tax avoidance. The results of the determination test show that the independent variables of profitability and leverage are able to explain or influence the dependent variable namely tax avoidance. With the existence of profitability and leverage, it is considered capable of increasing tax avoidance; it can be seen from figure 4.1 that tax avoidance that is proxies by Cash Effective Tax Rate (CETR) for five consecutive years shows a low value. According to Dyreng et al. (2010), the lower the percentage level of CETR, the higher the level of tax avoidance used by companies.

Conclusion

The results of the study have been described in the discussion on the effect of profitability and leverage on tax avoidance in mining and agricultural companies, so that the authors can draw the following conclusions:

1. Profitability has a negative effect on tax avoidance.
2. Leverage has no effect on tax avoidance
3. Profitability and leverage affect tax avoidance.

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