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Abstract: The interests of tax authorities who want to earn large continuous tax revenues are in contrast to the interests of companies that want to pay as little tax as possible. In addition, the phenomenon of differences in interests between taxpayers and the government, and the average tax ratio that has not reached the target can indicate tax avoidance activities. This study aims to determine the relationship between the effect of leverage, profitability and company size on tax avoidance in mining sector companies listed on the Indonesian stock exchange for the period 2014-2018. The factors tested in this study are leverage, profitability and firm size as independent variables; and tax avoidance as the dependent variable. The research method used in this research is explanatory and descriptive research methods. The population in this study were 47 mining sector companies. The data used are financial reports from a total sample of 21 companies in the mining sector. The results showed that leverage and company size have an effect on tax avoidance, while profitability has no effect on tax avoidance. For further research, this study suggests adding research model variables that have an influence on tax avoidance.

Keywords: Leverage, profitability, company size, tax avoidance

1. Introduction

1.1. Background

Optimization of revenues in the tax sector is not without constraints. One of the natures of tax is coercive, because there are tax authorities who fight in the tax collection. The obstacle to tax collection is the presence of active and passive resistance. Passive resistance is that people are reluctant to pay taxes because of the poorly understood tax system, while active resistance is carried out by tax authorities by means of tax avoidance (Mardiasmo, 2016).

Taxes are a major source of income for the state, but taxing corporations is a burden that will reduce net income. The difference of interest for tax authorities who want a large tax receipt continuously is certainly contrary to the interests of companies that want minimal tax payments (Hardika, 2007).

The phenomenon of differences of interest between tax authorities and the government and the average tax ratio that has not reached the target can indicate a considerable amount of tax avoidance activities, so that Indonesia's tax receipts are still not optimal. In addition to being required to pay taxes as a liability, companies going public in Indonesia are also required to implement Corporate Governance. Corporate governance that explains the relationship between the owner and manager of the company in determining the direction of the company's performance (Annisa & Kurniasih, 2012).

Pohan (2016) describes tax avoidance as one of the active tax resistance efforts, namely all business and actions that are directly directed to the tax authorities and aimed at avoiding taxes. The methods and techniques used are to exploit the weaknesses (grey areas) contained in the tax laws and regulations themselves, to reduce the amount of tax owed.

Researchers will use an effective tax rate indicator or often called effective tax rate (ETR). According to Rist and Pizzica (2014) in Sudaryo et al. (2018) translated effective tax rates. The level of tax avoidance that can be done by the company can be seen from the ETR value. The higher the ETR value, the lower the tax avoidance levels. Conversely, if the ETR value is low, the tax avoidance levels are higher.

Solvency or leverage ratio is a ratio used to measure the extent to which a company's assets are financed with debt. This means that the debt burden borne by the company compared to its assets. In a broad sense it is said that solvency ratio is used to measure the ability of the company to pay all its obligations, both short-term and long-term if the company is dissolved (liquidated) (Kasmir, 2017).
In practice, if the company's calculations turn out to have a high solvency ratio, this will have a greater risk of loss. Conversely, if the company has a lower solvency ratio, it certainly has a smaller risk of loss, especially at a time when the economy is declining. This impact also resulted in low returns at a time when the economy is high (Kasmir, 2017).

Profitability is a ratio to assess the company's ability to make a profit. This ratio also provides a measure of the effectiveness of a company's management. This is indicated by the profit generated from sales and investment income (Kasmir, 2017). Profitability consists of several ratios, one of which is return on assets (ROA). ROA serves to measure the effectiveness of the company in the use of its resources (Siahan, 2004 in Kurniasih & Sari, 2013). ROA can also take into account profitability, being an indicator to assess the company's financial performance, the higher the ROA value, the better the company's financial performance (Kurniasih & Sari, 2013). The agency's theory would spur agents to increase the company's bottom. When the company's profit grows, the amount of income tax will increase in accordance with the increase in the company's profit so that the tendency to do tax avoidance by the company will also increase (Dewinta & Setiawan, 2016).

According to Kurniasih and Sari (2013) defining the size of the company shows the stability and ability of the company to conduct its economic activities. The larger the size of a company, the more the center of attention from the government and will cause a tendency for company managers to act obediently (compliance) or aggressive (tax avoidance) in taxation (Nengsih et al., 2018).

Machfoedz in Ngadiman and Puspita (2014) states that the size of the company is a scale that can classify the company into large and small companies in various ways such as total assets or total assets of the company, stock market value, average sales rate, and number of sales.

1.2. Problem formulation

Based on the description of the case above, the formulation of problems in the research is as follows:
3. Does the size of the company affect the tax avoidance on mining sector companies listed on the Indonesia Stock Exchange for the period 2014 – 2018.

2. Theoretical Framework

2.1. Tax avoidance

According to Santoso and Rahayu (2013), tax avoidance are as follows:

"Tax avoidance is defined as manipulation of income legally that is still in accordance with the provisions of tax legislation to minimize the tax burden to be paid".

According to Sari (2016), tax avoidance are as follows:

"Tax avoidance is a tax avoidance that is done legally and safely for tax authorities because it does not violate the provisions of taxation, where the methods and techniques used tend to exploit the weaknesses contained in the laws and regulations of taxation itself, to reduce the amount of tax owed."

Researchers will use an effective tax rate indicator or often called effective tax rate (ETR). The tax rate is effective according to Rist and Pizzica (2014) which translates: "Describes the different levels at which corporate income is taxed as a result of different tax jurisdictions both domestic and international. Companies also use strategies to minimize taxes. To calculate the effective tax rate (average per years) the total tax burden divided by income before tax" (Sudaryo et al., 2018).

\[
ETR = \frac{\text{Tax Expense}}{\text{Pretax Income}}
\]

Source: Sudaryo et al. (2018).

From this ETR value can be seen the level of tax avoidance carried out by the company. The higher the ETR value, the lower the tax avoids and levels. Conversely, if the ETR is low then the tax avoidance levels it does are also higher. Researchers use ETR indicators of commercial financial statements data because it will be visible tax avoidance done by the company. If the financial statements data it uses is fiscal, the tax burden paid will be corrected overpaid or underpaid so that there will not be visible tax avoidance done by the company.

2.2. Leverage

Leverage ratio or often called solvency ratio is a ratio used to measure the extent to which the company's assets are financed with debt. This means that the debt burden borne by the company compared to its assets. In a broad sense it is said that solvency ratio is used to measure the ability of the company to pay all its obligations, both short-term and long-term if the company is dissolved (Kasmir, 2017).

In practice, if the company's calculations turn out to have a high solvency ratio, this will have a greater risk of loss. Conversely, if the company has a lower solvency ratio, it certainly has a smaller risk of loss, especially at a time when the economy is declining. This impact also results in a low rate of return at a time when the economy is high (Kasmir, 2017).

This research will use the ratio or percentage of total debt to equity of the company (DER) in a period, because by using DER can be analyzed a company uses more debt to finance its own company or capital. According to Agusti (2014), the existence of debt will cause a fixed burden called interest. The larger the company's debt, it will reduce the tax burden due to the growing element of business costs. These cost reductions mean a lot to companies affected by very high tax burdens. Therefore, the higher the interest rate, the greater the profit the company gets from the use of the debt. The benefits of tax savings due to high interest expenses have implications for rising corporate debt.

2.3. Profitability

Understanding profitability according to Kasmir (2017) states that:

"Profitability is a ratio to assess the company's ability to make a profit. This ratio also provides a measure of the effectiveness of a company's management. this is indicated by the profit generated from sales and investment income. The ultimate goal that a company wants to achieve is to achieve maximum profit or profit, in addition to other things".

Definition profitability according to Hery (2017) states that:

"Profitability Ratio is the ratio used by the company to measure the company's ability to generate profit from the normal activities of its business".

Researchers use ROA to measure the profitability of the company, according to Kurniasih and Sari (2016), ROA has a connection with the company's net profit and the imposition of income tax for the company. The higher the ROA value, the higher the profit value of the company so that the better the asset management of a company. The higher the ROA generated, the higher the income earned by the company. So that the level of tax avoidance that the company does is higher.

2.4. Company size

Understanding the Size of the Company which according to Riyanto (2010) is the size of the company judging by the amount of equity value, sales value or asset value.

Understanding The Size of the Company that according to Sawir (2012) is a scale where it can be classified small large companies in several ways such as based on sales, total assets, labor, and others, all of which are highly correlated.

The bigger the company, the greater the total assets it has. In conducting tax planning to reduce the tax burden to a minimum, the company can manage the company's total assets to reduce taxable income by utilizing
depreciation and amortization expenses arising from expenses to acquire such assets because the depreciation and amortization expenses can be used as a deduction for corporate taxable income (Permata & Nurlalela 2018).

The formula for measuring the size of the company is:

\[
\text{Company Size} = \ln \text{Total Assets}
\]


The use of natural logs (Ln) is intended to reduce excessive data fluctuations without changing the proportion of the actual origin value (Nengsiah et al., 2018).

2.5. Frame of mind

Solvency or leverage ratio is a ratio used to measure the extent to which a company's assets are financed with debt. This means that the debt burden borne by the company compared to its assets. In a broad sense it is said that solvency ratio is used to measure the ability of the company to pay all its obligations, both short-term and long-term if the company is dissolved (liquidated) (Kasmir, 2017).

In practice, if the company's calculations turn out to have a high solvency ratio, this will have a greater risk of loss. Conversely, if the company has a lower solvency ratio, it certainly has a smaller risk of loss, especially at a time when the economy is declining. This impact also results in a low rate of return at a time when the economy is high (Kasmir, 2017).

Previous research conducted by Putri dan Putra (2017) stated that leverage has a negative influence on tax avoidance. There are differences with research conducted by Nugrahitha and Suprasto (2018), leverage has a positive effect on tax avoidance.

Profitability is a ratio to assess the company's ability to make a profit. This ratio also provides a measure of the effectiveness of a company's management. This is indicated by the profit generated from sales and investment income (Kasmir, 2017). Profitability consists of several ratios, one of which is return on assets (ROA). ROA serves to measure the effectiveness of the company in the use of its resources (Siahan, 2004 in Kurniasih & Sari, 2013). ROA can also take into account profitability, being an indicator to assess the company's financial performance, the higher the ROA value, the better the company's financial performance (Kurniasih & Sari, 2013). The agency's theory would spur agents to increase the company's bottom. When the company's profit grows, the amount of income tax will increase in accordance with the increase in the company's profit so that the tendency to do tax avoidance by the company will also increase (Dewinta & Setiawan, 2014).

Previous research conducted by Nugrahitha and Suprasto (2018), profitability had no effect on tax avoidance. While, the results of research conducted by Dewinta and Setiawan (2014), profitability has a positive effect on tax avoidance.

The size of the company is considered capable of influencing the way a company meets its tax obligations and is a factor that can cause the occurrence of tax avoidance (Dewinta and Setiawan, 2014). According to Tommy (2013) defines the size of the company shows the stability and ability of the company to conduct its economic activities. The larger the size of a company, the more the center of attention of the government and will cause a tendency for company managers to act compliance or aggressive (tax avoidance) in taxation (Nengsiah et al., 2018).

Machfoedz in Ngadiman and Puspitasari (2014) states that the size of the company is a scale that can classify the company into large and small companies in various ways such as total assets or total assets of the company, stock market value, average sales rate, and total sales.

Previous research conducted by Faizah and Adhivinna (2017), the size of the company has no effect on tax avoidance. There is a difference with the research conducted by Putri and Putra (2017) states that the size of the company has a positive effect on tax avoidance.

2.6. Research hypothesis

This study tested the influence of leverage, profitability and size of the company on tax avoidance on companies listed in the IDX mining sector in 2014-2018 and can be formulated through a research paradigm and can be drawn hypotheses to be researched as follows:

Hypothesis 1:
H₀: Leverage has no effect on tax avoidance
H₁: Leverage affects tax avoidance

Hypothesis 2:
H₀: Profitability has no effect on tax avoidance
H₁: Profitability affects tax avoidance

Hypothesis 3:
H₀: Company size has no effect on tax avoidance
H₁: Company size affects tax avoidance.

3. Research Objects and Methods

The type of research used in this research is the exoplanet method. The purpose of this study is to explain or prove how the intervariable relationship of research. Descriptive methods are also used.

The objects in this study are leverage, profitability, company size and tax avoidance. The subject of this research is mining sector companies listed on the Indonesia Stock Exchange for the period 2013-2019.

The population in this study is all mining sector companies listed on the Indonesia Stock Exchange in the period 2014-2018 amounted to 47 companies.

The sampling technique used in this study was non-probability sampling. Types of non-probability sampling techniques used are purposive sampling.

In this study, the data used is a type of pooled data. This data is in the form of financial statements of mining sector companies listed on the Indonesia Stock Exchange in 2013-2019.

The independent variables used in this study were leverage rationalized with X₁, profitability personified with X₂, and size of companies operationalized with X₃. The dependent variable used in this study is tax avoidance (tax avoidance) which is operationalized with Y.

4. Results and Discussion

4.1. Results

Debt to Equity Ratio (DER) is the ratio of debt to equity or it can also be called the ratio of capital debt. The development of Debt to Equity Ratio in industrial sector companies listing in IDX period 2013 - 2019 experienced a volatile development whereas in 2014 decreased by 0.027 from 2013 which has an average of 1,837, as well as the following year, namely in 2015 Debt to Equity Ratio again decreased by 0.332. However, in 2016 the average Debt to Equity Ratio increased by 0.556 and the reverse decreased by 0.143 in the following year which continued until 2019.

From these developments, it can be known if the Debt to Equity Ratio in industrial sector companies has a downward trend even though the value of Debt to Equity Ratio is still above 1 or 100% which means that industrial sector companies in the period 2013-2019 have debts owned by the company is still greater than its net capital. However, this does not mean that the company is in the category of unhealthy company, because it needs further review of the type of debt of the company.

Return on Assets (ROA) is a profitability ratio that measures a company's ability to generate profit from the use of all its resources or assets. As a profitability ratio, ROA is used to assess the quality and performance of the company in generating net profit from the utilization of its assets. ROA can also be understood as a ratio used to measure the efficiency of a company in generating revenue or profit from economic resources or assets held in its balance sheet. More simply, ROA can be defined as a comparison between net profit after tax and total assets owned by a company. The development of Return On Assets in industrial sector companies listed on
IDX in the period 2013 - 2019 shows fluctuating developments where in 2014 decreased by 0.024% from 2013 which has an average of 0.05% as well as the following year, namely in 2015 Return On Assets again decreased by 0.028%. However, in 2016 the average Return on Assets increased by 0.049% which continued until 2018 with an average value of 1.00% but again decreased by 0.041% in 2019.

From the development data can be known if the best Return On Assets from industrial sector companies existed in 2018 and the least good was in 2015 because the higher or better the ROA ratio owned by the company, indicating the better the company's performance in generating net profit, and vice versa. The intended net income in this financial ratio is profit after tax or in financial statements is often also referred to as current year profit. While the total assets intended are all assets owned by the company both derived from own capital (equity) and debt.

The size of the company describes the scale, or variable scale of the company based on various conditions, such as total assets, log size, market value, stock, total sales, total revenue, total capital, etc. The group of companies is usually divided into three categories based on the scale of its business, namely: large companies, medium companies, and small companies. The size of a company is a scale that can be calculated from the total assets and sales rate that can indicate the status of the company, that is, a large company will have many sources of funds, and the funds can be used to make money to invest in its investment. The size of the company can be used to represent the financial characteristics of the company. Compared to small companies, large companies with good reputations will be more likely to gain capital in the capital market. The development of the size of the company in industrial sector companies listed in the IDX period 2013 - 2019 showed fluctuating developments where in 2014 decreased by 0.628 from 2013 which had an average of 21,333 but the following year, in 2015, the company's size increased by 0.073, which then decreased again by 0.062 in 2016. While from 2017 – 2019. From the development data can be known if the best company size of industrial sector companies existed in 2013 and the least good was in 2014. The higher or better the size of the company shows the excess in the source of funds obtained to finance its investment in profit. The size of the company can be used to represent the financial characteristics of the company so that large companies that are already well established will be easier to obtain capital in the capital market compared to small companies. Because the ease of access means that large companies have greater flexibility.

In general, Tax Avoidance is a plan that aims to minimize the tax burden by exploiting loopholes in a country's tax regulations. Basically, tax avoidance is legal because it does not violate tax regulations. However, this approach may have an impact on state taxation. Therefore, tax avoidance is in the gray area between tax compliance and tax avoidance. The development of tax avoidance in industrial sector companies listed in the IDX period 2013 - 2019 shows fluctuating developments where in 2013 to 2016 continued to experience a decrease where the largest decrease in 2014 was 2,921 from 2013 which had an average of 3,093. However, in 2017 the tax avoidance of industrial sector companies had increased by 0.598 and again rose in 2019.

From the development data can be known if the best tax avoidance of industrial sector companies existed in 2016 and the least well in 2019 because the higher the tax avoidance owned by the company, indicating the higher tax avoidance by companies, and vice versa. Tax avoidance intended in this financial ratio is a measure of a company's tax burden, as it reveals the level of tax paid against the profits of the company itself which means the ETR can also be used as an indicator of effective tax planning. Regression equations formed from the results of research are as follows:

\[ Y = -1.002258 + 0.015957X1 + 0.271803X2 + 0.037197X3 + e \]

From the result of comparison of t value calculated with t table, the result is obtained as follows:

1. The effect of DER on tax avoidance
   From the estimated results showed that DER in all industrial sector companies listed in the IDX period 2013-2019 has a statistical t of 0.512482 < t Table of 1.9766 using a degree of confidence of 95% (0.05) and degree of freedom n-k (147-4 = 143) indicates that received H0 which means there is no influence from DER on tax avoidance of industrial sector companies listing in IDX period 2013-2019.

2. ROA effect on tax avoidance
   From the estimated results showed that ROA in all industrial sector companies listed on the IDX period 2013-2019 has a statistical t of 0.452831 < t Table of 1.9766 using a degree of confidence of 95% (0.05) and degree of freedom n-k (147-4 = 143) indicates that receiving H0 which means there is no influence from ROA on tax avoidance of industrial sector companies listing in IDX period 2013-2019.

3. Effect of company size on tax avoidance
From the estimated results showed that the size of companies in all industrial sector companies listed in the IDX period 2013-2019 has a statistical t of 2.404294 > t Table of 1.9766 using a degree of confidence of 95% (0.05) and degree of freedom n-k (147-4 = 143) indicates that rejecting H0 which means the size of the company affects the tax avoidance of industrial sector companies that listing in IDX period 2013-2019.

4.2. Discussion

4.2.1. The effect of DER on tax avoidance

The results of this study showed that der variables do not have a significant influence on tax avoidance. This can be seen from the probability value of the DER variable of 0.6091 > 0.05 (a significant degree of research). In addition, it can also be seen from the results of comparison between t calculate and t table that shows the value of t calculate by 0.512482 < t Table of 1.9766. Based on this, it can be concluded that H0 is accepted, meaning that partially the DER variable has no effect on the tax avoidance variable.

From the results of this study it is known if DER has no effect, meaning that the higher or lower the DER will not have an impact on tax avoidance. This is contrary because theoretically because the leverage or debt structure measured through DER is the ratio of the amount of debt held by the company to finance its business activities, so that the increasing amount of debt will incur an interest expense to be paid by the company and the interest expense will reduce the profit before tax of the company so that the tax burden on the company will be less (Adelina, 2012). But the results showed that DER does not have an impact on tax avoidance which means companies with large or small debts are more likely to do tax avoidance. The results of this study are not in accordance with the research conducted by Cahyono et al. (2016) proves that Leverage (DER) has no effect on Tax Avoidance. Kurniasih and Sari (2013) conducted research on the influence of leverage on tax avoidance. As a result, leverage has no significant influence on tax avoidance.

The company's behavior in tax avoidance is not an offence, but it is also not in accordance with the purpose and purpose of the law. The practice of tax avoidance carried out by the management of a company is solely to minimize tax obligations that are considered legal, thus making the company has a tendency to do various ways to reduce its tax burden. Therefore, when viewed from the theory of agency there is a difference of interest between tax authorities and companies tend to cause non-compliance by tax authorities or the management of companies that have an impact on the company to conduct tax avoidance (Diantari & Ulupui, 2016).

4.2.2. ROA effect on tax avoidance

The results of this study showed that ROA variables do not have a significant influence on tax avoidance. This can be seen from the probability value of the ROA variable of 0.6514 > 0.05 (a significant level of research). In addition, it can also be seen from the results of comparison between t count and t table that shows the value of t count of 0.452831 < t Table of 1.9766. Based on this, it can be concluded that H0 is accepted, meaning that partially ROA variables have no effect on tax avoidance variables.

From the results of this study it is known if ROA has no effect, meaning the higher or lower ROA will not have an impact on tax avoidance. This is contrary because theoretically because ROA is an indicator of management performance in managing the company's wealth intended by the profit generated has increased then the cash effective tax rate is lower, the low CETR indicates high tax avoidance activity. This happens because the tax with the company's profit is directly proportional, if the company's profitability increases indicates the better the company's performance and the greater the profit generated by the company then it affects the tax burden is higher (Princess & Son, 2017). But the results showed that ROA does not have an impact on tax avoidance which means companies that have a large or small profit are more likely to do tax avoidance. The results of this study are not in accordance with the research conducted by the results of this study is consistent with the results of research conducted by Prakosa (2014), Meilinda and Cahyonowati (2013) which stated that ROA has no effect on tax avoidance.

ROA has no effect on tax avoidance due to the interests of companies so that the high value of ROA will be done careful tax planning so as to produce optimal tax and tend to decrease tax avoidance activities. Companies operating with high efficiency will get a tax subsidy in the form of an effective tax rate that is lower than companies operating with low efficiency. So, the higher the ROA does not affect tax avoidance.

4.2.3. The effect of company size on tax avoidance
The results of this study showed that the variable size of the company does not have a significant influence on tax avoidance. This can be seen from the probability value of the company size variable of 0.0175 < 0.05 (significantly significant level of research). In addition, it can also be seen from the results of comparison between t count and t table that shows the value of t count of 2.404294 > t Table of 1.9766. Based on this, it can be concluded that H0 is rejected, meaning that partially the company’s size variable affects the tax avoidance variable.

From the results of this study it is known if the size of the company is influential, meaning the higher or lower the size of the company will have an impact on tax avoidance. The larger the size of the company, the more complex the transaction will be. So it allows companies to exploit existing loopholes to perform tax avoidance actions of each transaction. In addition, companies operating cross-border have a tendency to take higher tax avoidance actions than companies operating cross-domestically, because they can transfer profits to companies in other countries, where the country collects a lower tax rate than other countries. The results of this study are consistent with the results of research conducted by Swingly and Sukartha (2015), Darmawan and Sukartha (2014), Kurniasih and Sari (2013) which stated that the size of the company affects tax avoidance.

The results showed that if the influence of the size of the company is a direct influence so that the larger the company, the greater the tax avoidance because the company can do a lot of strategies in doing tax planning. One of the tax planning strategies is tax avoidance which is how to reduce taxes legally. The practice of tax avoidance usually exploits the weaknesses of tax law and does not violate tax law. In addition to tax avoidance by using loopholes, companies can reduce taxes by utilizing deductible expenses. Deductible expense is a cost that can be deducted from gross income stated in Law No. 36 of 2008 on Income Tax article 6 paragraph 1.

5. Conclusion

This study aims to find out how Leverage, Profitability and Company Size Affect Tax Avoidance. Based on the results of data analysis and discussion that has been done in the previous chapter, the researchers took the following conclusions:

1. Leverage (DER) has no effect on tax avoidance in industrial sector companies during the period 2013 – 2019. This is seen from the comparison of t calculate smaller than t table as well as sig value greater than 0.05 so that changes in Leverage (DER) will not have an impact on tax avoidance changes.

2. Profitability (RAO) has no effect on tax avoidance in industrial sector companies during the period 2013 - 2019. This is seen from the comparison of t calculate smaller than t table as well as sig value greater than 0.05 so that changes in Profitability (RAO) will not have an impact on tax avoidance changes.

3. The size of the company affects tax avoidance in industrial sector companies during the period 2013 - 2019. This is seen from the comparison of t calculate larger than t table as well as sig value smaller than 0.05 so that changes in company size will have an impact on tax avoidance changes.

References
