# The Effect of Earning Management, Return on Asset and Debt to Equity Ratio to Tax Avoidance

## (Empirical Study on Consumer Goods Industry Sector Companies Listed on the Indonesia Stock Exchange Period 2015-2019)

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#### **ABSTRACT**

This study aims to determine the effect of earnings management, return on assets, and debt-to-equity-ratio on tax avoidance. The research method used in this study is illustrative using secondary data. The population of this research is all consumer goods sub-industry companies listed on the Indonesia Stock Exchange during 2015-2019. The purposive sampling method was used to determine the sample, in order to obtain a sample of 10 companies from a total of 50 observed data. As a data analysis method, panel data analysis and data testing use the Eviews 11. The results show that partially, earnings management, return on assets and debt-to-equity ratio have no effect on tax avoidance. Furthermore, simultaneously, earnings management, return on assets and debt to equity ratio have no effect on tax avoidance.

#### **Keywords**

Earnings management, return on asset, debt to equity ratio, tax avoidance

#### Introduction

Indonesia is a tax-collecting country, where each registered taxpayer must report and deposit the tax personally or in corporate form to the state treasury. State revenue comes from revenue originating from taxes, non-taxes and grants. Tax revenue is used for the construction and repair of public facilities that are useful for improving the welfare of all Indonesian people.

The difference point of views between companies and the government causes many companies to tend to minimize the tax burden within a limit that does not violate the rules, because tax is one of the factors for reducing profits (Sinaga and Sukartha, 2018).

The measurement of tax avoidance in this study uses a model Cash Effective Tax Rate, the smaller the CETR value indicates the higher the level of corporate tax avoidance. This measurement using the CETR proxy has been carried out in the study of Hoi et al. (2013), Maesarah, et al. (2014), Kurniasih and Sari (2013).

Company motivation in doing tax avoidance also related to the existence of facilities other than tax, including the level of debt (leverage) which aims to reduce the company's tax burden by regulating the amount of company profit which is often referred to as earnings management. Earnings management is an action taken deliberately by management in determining profit for personal gain (Schipper, 1989). These efforts are made to influence the information in the financial statements that in tax motivation, managers carry out earnings management practices to influence the amount of taxes paid by reducing profits (Scott, 1997).

Next factor that can affect activity tax avoidance is return on asset, because the asset income method shows how much profit the company gets by using the total assets it owns. According to Gupta and Newberry (1997), an increase in return on assets will cause an increase in the effective tax rate, so that the return on assets is positively correlated with the effective tax rate. Therefore, when profits increase, tax avoidance will also increase. This is because an increase in corporate profits makes corporate tax planning more intense. Mature, resulting in optimal taxation, and the tendency to avoid taxation will increase.

Debt has an influence on the size of the interest costs incurred, the bigger the debt, the greater the interest cost. The interest expense incurred will reduce the profit before tax of a company, so that the tax burden that must be paid by the company is reduced (Adelina, 2012).

Researchers conduct research on tax avoidance by using earnings management variables, return on asset, and debt to equity ratio as a focus in his research shows inconsistent results. There is research gap the significant results between one study and another encourage this research to be carried out again. Thus, in this study the author's motivation was to re-examine the studies that had previously been conducted. The difference between this study and previous research is the time period used, from 2015 to 2019.

#### **Literature Review**

## **Earning Management**

"Earnings management is a purpose intervention in the external financial reporting process, with the intent of obtaining some private gain (an opposed to say, merely facilitating the neutral operation of the process" (Schipper, 1989).

Fisher and Rosenzweig (1995) in Sulistyanto (2008), "Earnings management is an actions of a manager which serve to increase (decrease) current reported earnings of the unit which the manager is responsible without generating a corresponding increase (decrease) in long-term economic profitability of the unit."

#### **Return on Asset**

Return on Asset is an asset that explain the ability of the company to make a profit on total asset after deducting interest and tax expenses. ROA measures the company's past profitability. The ratio is intended to measure the capability to gain net income from all asset of the company, including; current asset in it are in the form of working capital, fixed asset and other asset or each IDR. 1, - total asset are able to generate a number of net income.

## **Debt to Equity Ratio**

Debt to Equity Ratio shows the company's proportion of debt held to total equity (Siregar, 2012). This ratio shows the relative proportion of a lender's claims to ownership rights and is used as a measure of the role of liability (debt). This version analyzes the proportion of liabilities which involves the ratio of total liabilities, usually current liabilities and all types of long-term liabilities to total owner's equity.

#### Tax Avoidance

Tax avoidance can be defined as a profit management strategy that is not prohibited in the tax law. One transaction plan can cut back present value of tax payments, but if these savings lead to higher non-tax costs in other areas of the organization, the transaction is not an efficient tax planning (Klassen, 1997) in Sirait and Martani (2014)). In making tax avoidance decisions, managers consider the consequences of tax avoidance actions first.

## Methodology

These research applied the quantitative approach in an associative way, for the purpose of get independent variable influence in this research Earning Management, Return On Asset and Debt of Equity Ratio on dependent variable in this case was Tax Avoidance.

This research was focused on all consumer goods sub industry companies that listed in IDX from 2015-2019. And for method of determining samples used in this research is determining samples with purposive sampling techniques. Based on that sampling method, obtained 10 companies with total data was 50 for the sample.

For the hypothesis testing, researchers using multiple linear regression for the analysis methods. Then performed classic assumption test consisting of Normality test, Multicollinearity test, and Autocorrelation test. Furthermore, partial test (t-Test), Simultaneous test (F-Test), and the last Coefficient of Determination test. The analysis model in this study were demonstrated by the following equation:

#### CETR = $\alpha + \beta 1DA + \beta 2ROA + \beta 3DER + \varepsilon$ (1)

## Caption

CETR: Tax Avoidance

: Constant

DA : Earning Management ROA: Return On Asset DER : Debt to Equity Ratio

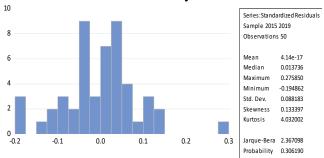
: Error

All the data was analyzed by panel data analysis, and uses Eviews 11 for data testing.

#### **Results and Discussion**

### **Correlation Analysis**

Table 1. Normality test result



Source: Output Eviews 11

From Table 1, obtained the result of a Jarque-Bera probability value of 2.367098 greater than the significance level (2.367098>0.5), that meaning the residual has a normal distribution.

Table 2. Multicollinearity test result

|     | Tuble 2. Manie | incurry test resurt |           |
|-----|----------------|---------------------|-----------|
|     | DA             | ROA                 | DER       |
| DA  | 1.000000       | -0.131565           | -0.596365 |
| ROA | -0.131565      | 1.000000            | 0.328535  |
| DER | -0.596365      | 0.328535            | 1.000000  |
|     |                |                     |           |

Source: Output Eviews 11

From Table 2, obtained result in the form of correlation values from each independent variable

< 10, that means there is no problem with multicollinearity.

**Table 3.** Autocorrelation test result

Breusch-Godfrey Serial Correlation LM Test:

Null hypothesis: No serial correlation at up to 2 lags

| F-statistic   | 2.092346 | Prob. F(2,44)       | 0.1355 |
|---------------|----------|---------------------|--------|
| Obs*R-squared | 4.342346 | Prob. Chi-Square(2) | 0.1140 |
|               | 0 0 4    | . E ' 11            |        |

Source: Output Eviews 11

From Table 3, obtained the result of the probability value of Chi-Square of 0.1140. The probability value of Chi-Square is greater than the

degree of significance (0.1140>0.05),that meanings there was no autocorrelation.

**Table 4.** Multiple linear regression

| Variable | Coefficient | Std. Error | t-Statistic | Prob.  |
|----------|-------------|------------|-------------|--------|
| С        | 0.308068    | 0.043071   | 7.15258     | 0.0000 |
| DA       | 0.055285    | 0.074691   | 0.740183    | 0.4630 |
| ROA      | -0.317374   | 0.174338   | -1.82045    | 0.0752 |
| DER      | 0.070987    | 0.048493   | 1.463862    | 0.1500 |

Source: Output Eviews 11

From Table 4, determine that the constant value and coefficient regression, it can be formed in the panel data regression equation with the random effect model as follows:

CETR: 0.308068 + 0.055285 DA + -0.3173734

ROA + 0.070987 DER

From the equation, can be interpreted that:

- 1. α amounting to 0.308068 means that if Earnings Management, Return on Asset, and Debt to Equity Ratio is worth zero, then Tax Avoidance will be worth 0.308068 units.
- 2. Coefficient Regression of Earning Management amounting to 0.055285 means that if there is a change in increase earning management equal to 1 unit then Tax Avoidance will be of value 0.055285 units.
- 3. Coefficient Regression Return on Asset amounting to -0.3173734 means that if there is

- a change in increase Return on Asset equal to 1 unit (assuming the other variables are constant), then Tax Avoidance will experience an increase of -0.3173734 units.
- 4. Coefficient Regression Debt to Equity Ratio of 0.070987 means that if there is a change in increase Debt to Equity Ratio equal to 1 unit, then Tax Avoidance will experience an increase of 0.070987 units.

#### **Hypothesis Testing**

**Table 5.** Partial test (t-test)

| Variable | Coefficient | Std. Error | t-Statistic | Prob.  |
|----------|-------------|------------|-------------|--------|
| С        | 0.308068    | 0.043071   | 7.15258     | 0.0000 |
| DA       | 0.055285    | 0.074691   | 0.740183    | 0.4630 |
| ROA      | -0.317374   | 0.174338   | -1.82045    | 0.0752 |
| DER      | 0.070987    | 0.048493   | 1.463862    | 0.1500 |

Source: Output Eviews 11

From Table 5, the results of testing the hypothesis partially are as follows following:

## 1. Testing the Earning Management Hypothesis

First partial hypothesis resulted significance value of the Earning Management variable is 0.4630 > 0.05. So it can be concluded that Earning Management doesn't statistically significant effect on Tax Avoidance. This does not support the results of the study by Badertsche et al. (2009) which shows that earnings management practices are carried out by companies as a tool to avoid government regulations (political cost hypothesis). One of the government regulations that is directly related to company profits is corporate income tax. The influence of earnings management in the income decreasing against aggressiveness with proxies effective tax rate It can be explained that profit is the benchmark for measuring the company's tax burden. Therefore, management will report earnings according to its purpose, namely using accounting choices that reduce earnings or income decreasing as a form of tax avoidance (Suryanto & Supramono, 2012).

2. Hypothesis Testing Return on Asset Second partial hypothesis result that variable Return on Assets significance value was 0.0752>0.05. So the conclusion is Return on Assets did not statistically significant effect to Tax Avoidance. That has been support by Aflina (2018), where asset return will not have an impact to tax avoidance, because some company's may do not knew the true profit due to application of earning management. This result in lined with past research by Maharani and Adit (2016), Kurniasih and Sari (2017), Putu Winning Arianandi (2018) and Putu Novia Hapsari Ardianti (2019).

Hypothesis Testing Debt to Equity Ratio 3. And the last partial hypothesis results that Debtsignificance to-Equity Ratio value 0.1500>0.05. So the conclusion is DER did not statistically significant effect to Tax Avoidance. This is supported by Richardson and Lanis (2007), where the higher the debt value of a company, the lower the CETR. When a company prefers to pay off debt rather than finance equity for operation, the CETR will be lower. And when the interest cost was high, that will reduce the company's tax burden. Next, the higher the debt value the higher the CETR value that used to avoid the taxes. Last, the three independent variable cannot influence the tax avoidance. Where the independent variable only has 10% influence, and another 90% was influenced by another variable outside research model.

**Table 6.** Simultaneous test (F-test)

| Root MSE                  | 0.07132  | R-squared           | 0.100296 |
|---------------------------|----------|---------------------|----------|
| Mean dependent var.       | 0.131819 | Adjusted R-squared  | 0.04162  |
| S.D. dependent var.       | 0.075954 | S.E. of regression  | 0.074357 |
| Sum squared resid.        | 0.25433  | F-statistic         | 1.709316 |
| <b>Durbin-Watson stat</b> | 2.146928 | Prob. (F-statistic) | 0.178231 |

Source: Output Eviews 11

In Table 6, a simultaneous signification value of F-Test was obtained 0.178231>0.05. This means

all independent variables have an insignificant effect on Tax Avoidance.

**Table 7.** Coefficient of determination

| Root MSE                  | 0.07132  | R-squared           | 0.100296 |
|---------------------------|----------|---------------------|----------|
| Mean dependent var.       | 0.131819 | Adjusted R-squared  | 0.04162  |
| S.D. dependent var.       | 0.075954 | S.E. of regression  | 0.074357 |
| Sum squared resid.        | 0.25433  | F-statistic         | 1.709316 |
| <b>Durbin-Watson stat</b> | 2.146928 | Prob. (F-statistic) | 0.178231 |

Source: Output Eviews 11

From Table 7, coefficient of determination or R Square is 0.100296. The amount coefficient of determination (R Square) is 0.100296 or equal to 10.00%. The figure means that the variables of profit management, return on assets, and debtequity simultaneously does not affect the variable tax avoidance of 10.00%. While, the rest (100% - 10.00% = 90.0%) influenced by variables other than research models.

#### Conclusion

- 1. Earning management doesn't affect to tax avoidance
- 2. Return on Asset doesn't affect to tax avoidance
- 3. Debt to equity ratio doesn't effect to tax avoidance
- 4. All the variables that have been studied have no effect on tax avoidance

## **Suggestions**

The authors' suggestions to several interested parties include:

## 1. Company

Companies need to be more careful in using debt to finance their operational activities so as not to pose too high a risk for the company's survival.

#### 2. Investors

Investors, especially institutional shareholders, are expected to increase their supervision of the decisions or policies taken by the company so that managers do not take opportunetic actions that cause losses to the company and shareholders.

#### 3. Next Researchers

This research is expected to be a further literature research. And the research was conducted using data over a five-year period. Preferably a longer period over five years for further research. Another suggestion, it's better to add or replace the variables that have been studied. Such as company size, in order to get up-to-date information.

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