The Effect of Profitability, Leverage, Liquidity, and the Company Size on Aggressiveness Tax the Sector Companies Consumer Goods Industry That Listed On The Indonesia Stock Exchange Year 2014-2016

Erna Setyowati\textsuperscript{a}, Kartika Hendra Titisari\textsuperscript{a}, Riana Rachmawati Dewi\textsuperscript{b}

\textsuperscript{a}Islamic University of Surakarta Batik, JL. KH. Agus Salim No. 10, Surakarta, Indonesia
\textsuperscript{b}Islamic University of Surakarta Batik, JL. KH. Agus Salim No. 10, Surakarta, Indonesia
Corresponding e-mail: ernastyowati08@gmail.com

Abstract: This research aims to examine and analyze the effect of profitability, leverage, liquidity, and company size on the tax aggressiveness. The tax aggressiveness is an independent variable that is measured by the ETR (Effective Tax Rate). Variable dependent is profitability, leverage, liquidity, and company size. The population in this study is sector companies consumer goods industry that listed on The Indonesia Stock Exchange in period 2014-2016. Sampling technique using purposive sampling method obtained by samples of 62 sector companies consumer goods industry that listed on The Indonesia Stock Exchange in period 2014-2016. Data used in this study is secondary data. This research used data in the form of corporate financial statements contained in The Indonesia Stock Exchange (IDX) and www.idx.co.id website. Data analysis method used is multiple linear regression. The result shows that the profitability, leverage, and size of company do not affect impact on tax aggressiveness. Meanwhile, liquidity affect impact on tax aggressiveness. Based on the determination coefficient test ($R^2$) obtained the coefficient of determination with adjusted $R^2$ of 0.093. This result show that 9.3% of variables tax aggressiveness can be explained by the profitability, leverage, liquidity, and company size. While, the rest of 91.7% is explained by other factors outside in this research.

Keywords: Aggressiveness Tax, Profitability, Leverage, Liquidity, and Company Size.

1. INTRODUCTION

Indonesia is a country with a population that a lot and developing countries that have a number of wealth abundant natural and geography. Indonesian strategic to track the world trade. So in Indonesia there are many companies standing good of home and abroad. It will raise income state especially in the sector taxes.

Several factors such as the profitability, leverage, liquidity, and the size of the company is the thing that could affect the level aggressiveness a company. Profitability is a company's ability to produce a profit. According Rodriguez and Arias (2012) in Nugraha (2015) profitability is determinants of tax expense, because the greater the income generated company then tax would be great too. However, if the company has profit low then pay low tax anyway. With the compensation system tax, loss can reduce the amount of tax are borne on the following year.

Leverage is the ratio of which is used to measure the extent to which assets company financed with debt. Calculation results ratio leverage indicates how big
assets owned company that comes from the loan capital of the company. Subramanyam & Wild (2010) defines the liquidity as a company's ability to meet the obligations of the short-term that conventional, "short-term" is a period of up to one year. The size of the company is a measurement grouped by large size of the company, and describe the activities of operations and profit acquired the company. According Kurniasari (2013) company great would maintain good name and reputation to reveal the information in fact, has the internal control system and risk management effective, and do social responsibility to get the opinion of a good.

Many previous research that examines aggressiveness tax with variable different and the led to the results of different. So it appears the problems of research on the factors that affect aggressiveness taxes. These differences interesting author to investigate further and do the research re-based phenomenon is going on and existing problems.

Based on the background and previous study the researchers are interested in researching "The Effect Of Profitability, Leverage, Liquidity, And The Company Size To Aggressiveness Tax The Sector Companies Industrial Goods Consumption That Listed In Indonesia Stock Exchange Year 2014-2016".

2. RESEARCH METHODS

2.1 Type Research

This research is quantitative research. According Sugiyono (2012), quantitative research can be interpreted positivistic method with the sampling technique in general, randomized, data collection using the research instruments, data analysis quantitative or statistics in order to test the hypothesis that has been determined.

2.2 Population and Sampling

Population used in this study is a company industry sector consumer goods registered in Indonesia stock Exchange (IDX) years 2014-2016. Samples in this study selected using purposive sampling. Criteria samples that meets the criteria 62 sector companies consumer goods industry that listed on The Indonesia Stock Exchange in period 2014-2016.

3. METHODS OF DATA ANALYSIS

3.1 Descriptive Statistical Tests

Testing the descriptive statistics output the form of the size of numerical easier to understand the reader. Picture or descriptive of data seen from the average value (mean), the standard deviation, the maximum, the minimum (Ghozali, 2011).

3.2 Test The Classical Assumptions

This study using the classical assumption test which includes normality test, multicollinearity test, test heteroscedasticity, and the autocorrelation test.

3.3 Regression Analysis

This study using the regression model multiple linear aimed to determine the effect of one or more independent variables to the dependent variable. This study using the following formula:

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e = -0,721 - 0,017 X_1 + 0,001 X_2 - 0,030 X_3 - 0,193 X_4 \]
Information:

$Y$ : Effective Tax Rates (ETR)

$A$ : Regression coefficients (constant)

$\beta_1$ : regression coefficients profitability

$\beta_2$ : regression coefficients leverage

$\beta_3$ : regression coefficients liquidity

$\beta_4$ : regression coefficients company size

$X_1$ : variable profitability

$X_2$ : variable leverage

$X_3$ : variable liquidity

$X_4$ : variable company size

$e$ : error

3.3.1 F Test

F test is done by looking at the value of F research results ($F_{\text{count}}$) and compare it with $F_{\text{table}}$. If the value of $F_{\text{count}} > F_{\text{table}}$ shows that all the independent variable together affect the dependent variable with confidence level 5%.

3.3.2 t-Test

t test done by comparing the value of the coefficient of $t$ count with $t_{\text{table}}$, if the value of $t_{\text{count}} > t_{\text{table}}$ then $H_0$ will be accepted and $H_1$ rejected. But if the value of $t_{\text{count}} < t_{\text{table}}$ then $H_0$ rejected and $H_1$ accepted. With significant level 5%.

3.3.3 The Coefficient of Determination

The coefficient of determination ($R^2$) measures how far the ability of the model independent variables in explain the variation of the dependent variable. If the value $R^2 = 0$ then no slightest percentage of the influence of a given the independent variable to the dependent variable. Instead $R^2 = 1$ then the percentage of the influence of a given the independent variable to the dependent variable is perfect or variation independent variables used in the model describes 100% variable variation of the dependent variable.

4. RESULTS AND DISCUSSION

4.1 Descriptive Statistics

Based test statistic descriptive, the test results descriptive statistics presented in table as follows:

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>62</td>
<td>0.023</td>
<td>0.432</td>
<td>0.14640</td>
<td>0.109087</td>
</tr>
<tr>
<td>LEV</td>
<td>62</td>
<td>0.017</td>
<td>0.415</td>
<td>0.09848</td>
<td>0.097794</td>
</tr>
<tr>
<td>CR</td>
<td>62</td>
<td>0.514</td>
<td>7.604</td>
<td>2.69898</td>
<td>1.554226</td>
</tr>
<tr>
<td>SIZE</td>
<td>62</td>
<td>25.842</td>
<td>32.085</td>
<td>28.78150</td>
<td>1.592068</td>
</tr>
<tr>
<td>ETR</td>
<td>62</td>
<td>0.222</td>
<td>0.299</td>
<td>0.25715</td>
<td>0.17424</td>
</tr>
</tbody>
</table>

Source: of Results Data, 2017

The results of descriptive statistics show that variable profitability have a minimum value for 0.023, the maximum of 0.432, with an average (mean) for 0.14640 and the level of Std. deviation of 0.109087. Variable leverage have a minimum value for 0.017, the maximum of 0.415, with an average (mean) for 0.09848 and the level of Std. deviation of 0.097794. Variable liquidity have a minimum value for 0.514, the maximum of 7.604, with an average (mean) for 2.69898 and the level of Std. Deviation of 1.554226. Variable the size of the company has minimum value of 25.842, the maximum of 32.085, with an average (mean) for 28.78150 and the level of Std. deviation of...
Variable aggressiveness tax have a minimum value for 0,222, the maximum of 0,299, with an average (mean) for 0,25715 and the level of Std. deviation of 0,17424.

4.2 Test The Classical Assumptions

4.2.1 Test of Normality

Normality test aims to test the variable bully or residual in regression model. Regression models good is to have the data distributed normal. After testing obtained results normality test as follows:

Table 2 Test of Normality

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sig</th>
<th>Standar</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unstandarized Residual</td>
<td>0,389</td>
<td>&gt;0,05</td>
<td>Normal</td>
</tr>
</tbody>
</table>

Source: of Results Data, 2017

The results of normality test showed that the value of the significance of the variables unstandardized residual value> 0,05 amounting 0,389. It can be concluded that distributed data normally.

4.2.2 Multicollinearity Test

Multicollinearity test aims to test whether in regression model found the correlation between the independent variables. With the value of the cutoff commonly used to indicate multikolonieritas is the value of tolerance < 0,1 or value VIF > 10 (priyatno, 2009). After testing obtained results multicollinearity test as follows:

Table 3 Multicollinearity Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tolerance</th>
<th>VIF</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ln ROA</td>
<td>0,774</td>
<td>1,293</td>
<td>No multicollinearity</td>
</tr>
<tr>
<td>Ln LEV</td>
<td>0,784</td>
<td>1,275</td>
<td>No multicollinearity</td>
</tr>
<tr>
<td>Ln CR</td>
<td>0,932</td>
<td>1,073</td>
<td>No multicollinearity</td>
</tr>
<tr>
<td>Ln SIZE</td>
<td>0,908</td>
<td>1,101</td>
<td>No multicollinearity</td>
</tr>
</tbody>
</table>

Source: of Results Data, 2017

Test results multicollinearity show that the entire independent variables used in this study has a value of Tolerance > 0,1 and value VIF <10. It can be concluded that there is no symptoms multicollinearity on variable studied.

4.2.3 Autocorrelation Test

Autocorrelation test is used to know whether or not deviation assumption classical autocorrelation the correlation happened between the residual on one observations with the observation of the other in the regression model. Based testing obtained results autocorrelation test as follows:

Table 4 Autocorrelation Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Durbin-Watson</th>
<th>Information</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2,483</td>
<td>dU &lt; d &lt; 4- dU</td>
<td>No autocorrelation</td>
</tr>
</tbody>
</table>

Source: of Results Data, 2017

Based on the testing autocorrelation in table 4 above method Durbin-Watson (dw) shows that the value of d for 2,483, while the value of Upper Bound (dU) and the Lower Bound (dL) is a 1,729
and 1,455. Pursuant to which has been described above that the value of \( d \) is located on the \( dU < d< 4-dU \), it can be concluded that there is no autocorrelation in this study.

### 4.2.4 Heteroscedasticity Test

Heteroscedasticity test aims to test whether in regression model happen inequality variance of the residual one observations to the observation of the other. Regression models good is the homoskedastisitas or not the case heteroscedasticity (Ghozali, 2011). Research to know whether or not symptoms heteroscedasticity known by using the test glejser, provided that if the value of the significance of the entire independent variable has a value > 0.05, then it can be concluded that there is no symptoms heteroscedasticity. After testing obtained test results heteroscedasticity as follows:

#### Table 5 Heteroscedasticity Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sig</th>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ln ROA</td>
<td>1</td>
<td>&gt;0.05</td>
<td>No</td>
</tr>
<tr>
<td>Ln LEV</td>
<td>1</td>
<td>&gt;0.05</td>
<td>No</td>
</tr>
<tr>
<td>Ln CR</td>
<td>1</td>
<td>&gt;0.05</td>
<td>No</td>
</tr>
<tr>
<td>Ln SIZE</td>
<td>1</td>
<td>&gt;0.05</td>
<td>No</td>
</tr>
</tbody>
</table>

Source: of Results Data, 2017

Based on the test heteroscedasticity in table 5 shows that all the independent variables used in this study has a value of significance > 0.05. It can be concluded that there is no symptoms heteroscedasticity on the regression model or variance of the residual one observations to observations other remain homoskedastisitas.

### 4.3 The Regression Test

Based testing obtained results multiple linear regression analysis as follows:

#### Table 6 The Regression Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>( \beta )</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.721</td>
<td>0.188</td>
</tr>
<tr>
<td>Ln ROA</td>
<td>-0.017</td>
<td>0.195</td>
</tr>
<tr>
<td>Ln LEV</td>
<td>0.001</td>
<td>0.911</td>
</tr>
<tr>
<td>Ln CR</td>
<td>-0.03</td>
<td>0.028</td>
</tr>
<tr>
<td>Ln SIZE</td>
<td>-0.193</td>
<td>0.223</td>
</tr>
</tbody>
</table>

Source: of Results Data, 2017

### 4.4 Test the Hypothesis

#### 4.4.1 F Test

F test basically shows are all the independent variables included in the model has influence simultan against the dependent variable. If the value of \( F_{\text{count}} > F_{\text{table}} \) shows that all the independent variable together affect the dependent variable with confidence level 5%. After testing obtained test results F as follows:

#### Table 7 F Test

<table>
<thead>
<tr>
<th>Model</th>
<th>( F_{\text{count}} )</th>
<th>( F_{\text{table}} )</th>
<th>Sig</th>
<th>Standart</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.569</td>
<td>2.53</td>
<td>0.048</td>
<td>&lt;0.05</td>
<td>Model of a Significant</td>
</tr>
</tbody>
</table>

Source: of Results Data, 2017

F test results show that \( F_{\text{count}} \) of 2.569. This means that \( F_{\text{count}} > F_{\text{table}} \) (2.569 > 2.53) and the value of the
significance of 0.048 which means less than 0.05 (0.048 <0.05). So it can be concluded that the study can explain between the independent variable (profitability, leverage, liquidity, company size) affect the dependent variable (aggressiveness tax) and eligible to research.

### 4.4.2 t Test

T test basically shows how far the influence of the independent variable individually in explain the variation of the dependent variable. If the value of \( t_{\text{count}} > t_{\text{table}} \) then \( H_a \) will be accepted and \( H_o \) rejected. But if the value of \( t_{\text{count}} < t_{\text{table}} \) then \( H_a \) rejected and \( H_o \) accepted. With significant level 5%. After testing obtained results hypothesis test (t test) as follows:

#### Table 8 t Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>( t_{\text{count}} )</th>
<th>( t_{\text{table}} )</th>
<th>Sig</th>
<th>Std</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ln ROA</td>
<td>1.313</td>
<td>2.002</td>
<td>0.195</td>
<td>&lt;0.05</td>
<td>( H_1 ) Rejected</td>
</tr>
<tr>
<td>Ln LEV</td>
<td>0.113</td>
<td>2.002</td>
<td>0.911</td>
<td>&lt;0.05</td>
<td>( H_2 ) Rejected</td>
</tr>
<tr>
<td>Ln CR</td>
<td>-</td>
<td>2.002</td>
<td>0.028</td>
<td>&lt;0.05</td>
<td>( H_3 ) Accepted</td>
</tr>
<tr>
<td>Ln SIZE</td>
<td>1.232</td>
<td>2.002</td>
<td>0.223</td>
<td>&lt;0.05</td>
<td>( H_4 ) Rejected</td>
</tr>
</tbody>
</table>

Source: of Results Data, 2017

Based on the t test can be explained the hypothesis that formed as follows:

a. Variable the profitability of value \( t_{\text{count}} \) of -1.313. It turns out \( t_{\text{count}} \) calculate>\( t_{\text{table}} \) (-1.313 > -2.002) and the value of the significance of 0.195 which means greater than 0.05 (0.454>0.05). Then this means \( H_o \) received and \( H_1 \) rejected. That is variable the profitability of no effect on aggressiveness taxes.

b. Variable leverage value \( t_{\text{count}} \) of 0.113. It turns out \( t_{\text{count}} < t_{\text{table}} \) (0.113<2.002) and the value of the significance of 0.911 which means greater than 0.05 (0.911>0.05). Then this means \( H_o \) received and \( H_2 \) rejected. That is variable leverage not affect the aggressiveness taxes.

c. Variable liquidity value \( t_{\text{count}} \) for -2.250. It turns out -\( t_{\text{count}} < t_{\text{table}} \) (-2.250<-2.002) and the value of the significance of 0.195 which means greater than 0.05 (0.028<0.05). Then this means \( H_o \) rejected and \( H_3 \) accepted. That is variable liquidity negatively affect aggressiveness taxes.

d. Variable the size of the company has value \( t_{\text{count}} \) of -1.232. It turns out -\( t_{\text{count}} > t_{\text{table}} \) (-1.232>-2.002) and the value of the significance of 0.223 which means greater than 0.05 (0.223>0.05). Then this means \( H_o \) received and \( H_4 \) rejected. That is variable the size of the company does not affect the aggressiveness taxes.
4.4.3 The Coefficient of Determination

The coefficient of determination ($R^2$) measures how far the ability of the model independent variables in explaining the variation of the dependent variable. After testing obtained test results coefficient of determination ($R^2$) as follows:

<table>
<thead>
<tr>
<th>Model</th>
<th>$Adjusted R^2$</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.093</td>
<td>The independent variable can explain the dependent variable</td>
</tr>
</tbody>
</table>

Source: of Results Data, 2017

The results show that the independent variables used in this study can explain the variation of the dependent variable in this case aggressiveness tax of 9.3%. It looks of value Adjusted $R^2$ of 0.093. While for 91.7% dependent variable aggressiveness tax influenced by the variables other outside the model of this research.

5. DISCUSSION

5.1 The Effect Of The Profitability Of Aggressiveness Tax

Based on the hypothesis testing showing variables profitability of no effect on aggressiveness tax, then the H$_1$ rejected. This result in line with the research Lanis & Richardson (2011), Ardyansah (2014), Nugraha (2015), and Rosalia (2017) that is not supported by the empirical evidence. These results are not in line with Chiou et al. (2012), Syah & Supriyadi (2014) and Ribeiro et al. (2015) showed that ROA influential positive and significant to ETR. While Noor (2010) and Agusti (2015) showed that ROA negatively affect ETR.

The profitability of a company low and high will not affect the aggressiveness tax, because the majority of a company of there is a profit high want tax payments as low as possible in a way that allowed by legislation.

5.2 The Effect Of The Leverage Of Aggressiveness Tax

Based on the hypothesis testing showing variables leverage not affect the aggressiveness tax, then H$_2$ rejected. These results are not in line with the study conducted by Lanis & Richardson (2011), Agusti (2014), Ardyansyah (2014), Dyah & Supriyadi (2014), Anita (2015), Adisamartha & Noviari (2015), Tiaras And Victory (2015), and Swingly & Sukartha (2015) that is not supported by the empirical evidence. These results are not in line with Ribeiro et al. (2015) showed leverage positive influence to ETR. Nugraha (2015) and Fadli (2016) showed leverage significantly influence aggressiveness corporate tax.

The results of this study explained that leverage high and low will not affect the aggressiveness tax, as companies in charge with flowers from debt, so that the company has a tendency to avoid the obligations of the tax.
5.3 The Effect Of The Liquidity Of Aggressiveness Tax

Based on the hypothesis testing showing variables liquidity affect aggressiveness tax, then H₃ accepted. This result in line with the study conducted by Anita (2015), Adisamartha & Noviari (2015), And Fadli (2016), which is supported by the presence of empirical evidence. These results are not in line with Rosalia (2017) and Tiaras & Wijaya (2015) showed that the liquidity not affect the tax avoidance.

The results of this study explained that liquidity high and low will affect aggressiveness tax, because if liquidity high aggressiveness tax will also be a high because of the company’s ability to meet the obligations of the tax filled with either by in accordance with that have been calculated and set.

5.4 The Effect Of The Company Size Of Aggressiveness Tax

Based on the hypothesis testing showing variables the size of the company does not affect the aggressiveness tax, then H₄ rejected. This result in line with the study conducted by richardson & lanis (2017), lanis & richardson (2011), anita (2015), and nugraha (2015) that is not supported by the empirical evidence. These results are not in line with the research conducted Noor (2010), Chiou et al. (2012), and Ribeiro et al. (2015) that the company size effect positive and significant to ETR. Research Ardyansah (2014) Tiaras and Wijaya (2015) showed that the company size significantly influence effective tax rate. Further research conducted by Swingly & Sukartha (2015) showed company size positive influence of the tax avoidance.

The results of this study explained that the level size of a company will not affect the aggressiveness tax, because of the company great tend want profit or revenues for prosperity company owner than meet the obligations of taxation.

6. CONCLUSION

The purpose of this study is to test and analyze the influence of profitability, leverage, liquidity and the size of the company to aggressiveness taxes. This study using a sample of 62 sector companies consumer goods industry that listed on The Indonesia Stock Exchange in period 2014-2016.

Based on the testing, stating that the profitability, leverage, and the size of the company does not affect the aggressiveness taxes. While the test results liquidity affect aggressiveness taxes.

7. REFERENCE


