The Effect of Corporate Social Responsibility, Profitability, and Leverage toward Tax Aggressiveness with Size of Company as Moderating Variable

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ABSTRACT

This research aimed to examine the influence of Corporate Social Responsibility (CSR), profitability, and leverage toward tax aggressiveness by considering the size of the company as the moderating variable. The population was 111 companies listed on the Indonesian Stock Exchange (BEI) from 2010 to 2015. Determination of the sample used purposive sampling method, and it obtained a sample of 36 manufacturing based on certain criteria. The analysis technique used was the multiple regression analysis. The results show that CSR and leverage have a significant and negative effect influence on the tax aggressiveness of the corporate tax. Meanwhile, profitability does not significantly influence the tax aggressiveness in corporate taxes, and the size of company cannot moderate the influence of CSR, the profitability, and leverage on tax aggressiveness.

Keywords: Corporate Social Responsibility, profitability, leverage, tax aggressiveness, size of company

INTRODUCTION

One of the obligations of citizens to their country is to pay taxes. According to Waluyo (2011), it is one way to realize the independence of the nation in fostering development. Taxes are one of the main and greatest sources of income for the state. Therefore, the government is concerned about this.

Based on data in the Badan Pusat Statistik (2009) in the period 2010-2015, there was an increase from Rp723.207 billion in 2010 to Rp1.240.418 billion in 2015 or an increase of 71.50% over the period of 2010-2015. Income has indeed increased over the last six years, but the revenue target has not reached the set target. In fact, the revenue in last six years does not reach the target. In 2015, it had the lowest income.

The company is one of the taxpayers who have the obligation to pay taxes. However, for the company, tax is a burden that can reduce the gained profit. Therefore, the company will seek way to minimize the tax. The efforts or strategies undertaken are by tax planning or tax aggressiveness. Most companies perform tax aggressiveness to minimize tax expense which is useful for managers in decision making. Hlaing in Kuriah (2016) defined tax aggressiveness as a tax planning activities. Tax planning was a process of controlling action to avoid the undesired consequences of taxation. To minimize the tax liability, it could be done in various ways that still met the provisions of taxation and violated tax regulations (Suandy, 2016). Richardson and Lanis (2011) agreed that tax aggressiveness was aimed to minimize tax costs that had to be paid by the company. They said that companies performing tax aggressiveness was considered as socially irresponsible. The tax aggressiveness had formula as follow.

\[ ETR = \frac{\text{Tax Expense}}{\text{Net Profit Before Tax}} \] (1)
Corporate Social Responsibility (CSR) is undertaken activity to show company’s responsibility to the environment. The underlying theory of CSR is legitimacy theory and stakeholders theory. Legitimacy theory is company strategy to increase public trust.

It is based on the phenomenon of social contact between an organization and society. The organization’s objectives should be congruent with the values that exist within a society (Sagala & Ratmono, 2015). This theory explains the social contact between company, social community, and environmental disclosure. Meanwhile, stakeholder theory is a theory that describes the relationship between companies with its stakeholders in carrying out its activities. Stakeholder refers to the group or individual who can affect or be affected by the achievement of company goals. The purposes of these theories are to assist and strengthen relationships with external groups to develop competitive advantage (Mardikantao, 2014).

The social disclosure category used in this research refers to the disclosure indicator, Global Report Initiative (GRI). In GRI report, there are several impacts. Those are economic impact, environmental impact, and social impact (Solihin, 2011). The CSR has formula as follows by Prasista and Setiawan (2016).

\[ CSRI_{i} = \frac{\sum X_{yi}}{ni} \]  

(2)

Then, financial ratios related to tax aggressiveness are profitability and leverage. Profitability is a financial ratio that measures the overall effectiveness of management. It is directed by the size of the gained profits in relation to sales or investment. The better the profitability ratio is, the better the ability to capture the high profits of the company will be (Fahmi, 2014). Profitability is obtained from profit amount gained by company. Large profit will effect company assets. The amount of earned revenue will be used to cover the debt so that the gained profits will be lower. The profitability has formula as follows (Kasmir, 2015).

\[ ROA = \frac{Net \ Income}{Total \ Asset} \]  

(3)

Leverage is a ratio that measures how much a company is financed by debt. The excessive use of debt will jeopardize the company because the company will be categorized as extreme leverage (the extreme debt). It means that the company is stuck in a high debt level. It is difficult to pay the debt because the company should balance how much debt is worth taking and from where it can be used to pay the debt (Fahmi, 2014). The leverage has formula by Kasmir (2015).

\[ DER = \frac{Total \ Debt}{Total \ Equity} \]  

(4)

Moreover, characteristics of companies are a characteristic or trait attached to a business entity. It can be viewed from various aspects including type of business or industry, level of liquidity, profitability, firm size, investment decisions and others (Kuriah, 2016). Size of company is a measurement based on the size of a company and can be described as the activity and income of a company. The larger the company is, the greater the effort made by the company to attract public attention will be. Therefore, disclosure about the size of company is added as moderating variables. It is considered to affect the relationship CSR, profitability, and leverage, and tax aggressiveness. The size of company has formula by Kuriah and Asyik (2016).

\[ SIZE = (Ln)from \ Total \ Asset \]  

(5)

Based on background discussed, this research will answer some questions. Those are (1) Does the CSR influence the tax aggressiveness? (2) Does the size of the company can moderate the relationship between CSR and the tax aggressiveness? (3) Does the profitability influence the tax aggressiveness? (4) Does the size of the company can moderate the relationship between profitability and tax aggressiveness? (5) Does the leverage influence the tax aggressiveness? (6) Does the size of the company can moderate the relationship between leverage and tax aggressiveness?

Pradnyadari and Rohman (2015), Kuriah (2016), and Purwangonno and Rohman (2015) analyzed the influence of CSR on tax aggressiveness. The result showed that CSR significantly influenced tax aggressiveness negatively. This shows that the higher level of CSR disclosure of a company is, the lower the level of corporate tax aggressiveness will be. Therefore, the first hypothesis is:

H1 : CSR negatively affects tax aggressiveness

Kuriah (2016) stated that CSR influenced tax aggressiveness significantly and negatively. Meanwhile, Size of company had positive effect on tax aggressiveness. This implies that the bigger a company is, the better CSR is expected in the environment. Therefore, the researchers assume that size of company can moderate the relationship between CSR and tax aggressiveness. Thus, the second hypothesis is:

H2 : Size of company moderates the relationship between CSR and tax aggressiveness

Prasista and Setiawan (2016) analyzed the effect of profitability on tax aggressiveness. It resulted in profitability had negative influence on tax aggressiveness. Companies with low profitability will have a high probability of disobeying taxes. This is because companies with low profitability will choose to keep their financial and corporate assets rather than paying taxes, so the company becomes aggressive with taxes. Then, the third hypothesis of this research is:
H3: Profitability affects on the tax aggressiveness positively

Prasista and Setiawan (2016) examined the effect of profitability on aggressiveness. They showed that profitability had negative influence toward tax aggressiveness. Meanwhile, Kuriah (2016) analyzed the effect of size of company on tax aggressiveness. The size of company had a significant influence on tax aggressiveness positively. Profitability is the company’s ability to earn profits from the company’s operations. A high level of corporate profitability will encourage companies to pay taxes and not to do tax aggressiveness. In addition, the size of company has a relationship between profitability and tax aggressiveness. A company likely to have high profitability will have a low probability of disobeying taxes. The fourth proposed hypothesis is:

H4: Size of company moderates the relationship between CSR and tax aggressiveness

Nugraha and Meiranto (2015) analyzed the effect of leverage on tax aggressiveness. They suggested that leverage affected tax aggressiveness negatively. This shows that the higher the level of leverage is, the lower corporate tax aggressiveness is too. Companies tend to use debt for investments leading to higher interest costs arising from these debts. Thus, the fifth hypothesis is:

H5: Leverage affects tax aggressiveness negatively

Ozkan in Suyanto and Supramono (2012) said that companies having high tax liabilities would choose to reduce taxes. Then, Kuriah (2016) agreed that size of company had a positive relationship with tax aggressiveness. The association of size of company with leverage and tax aggressiveness is that a company has a debt depending on the size of the company. Hence, it can encourage the company to engage in tax aggressiveness. The researchers assume that size of company can strengthen or weaken a relationship between leverage and tax aggressiveness. The last hypothesis is:

H6: Size of company moderates the relationship between leverage and tax aggressiveness

The researchers use three independent variables which are CSR (X1), profitability (X2), and leverage (X3). Then, the moderating variable is size of company. Meanwhile, the dependent variable is tax aggressiveness (Y). Moderating variables used can weaken or strengthen the relationship between the dependent and independent variables. It is shown in Figure 1.
METHODS

This research uses quantitative method. The data are in the form of numbers or qualitative data that can be measured using statistical methods. The population in this research is all manufacturing companies listed in the Indonesia Stock Exchange (BEI) in 2010 to 2015. The selection of period of six years aims to compare the state of the company for six years and get the latest data that can explain the problem in this research. Manufacturing companies are selected because it refers to previous research and is expected to represent the entire companies in Indonesia.

The dependent variable used is tax aggressiveness. Meanwhile, the independent variables used are CSR, profitability, and leverage with a moderator variable, size of company. Aggressiveness is measured by Effective Tax Rate (ETR). ETR is a proxy that is widely used in previous researches. ETR illustrates total income and tax expense that will be paid by the company. It is taken from total of net profit before tax in a certain period. Moreover, CSR is measured by the index of GRI 3.1 using 84 measurement items. Profitability is measured by ROA with profit before taxes are divided by total assets. Leverage is measured by total of long-term debt divided by total assets. Next, size of company is measured by the natural log of total assets.

The sample is partially or representative of the studied population. The samples are companies listed in BEI in 2010 to 2015 that meet the criteria. Samples are selected by purposive sampling method. It selects a sample based on specific criteria in accordance with the purpose of research. There are several criteria used in this research. First, it is the manufacturing companies listed on Indonesia Stock Exchange from 2010 to 2015. Second, the manufacturing companies publish complete annual reports and audited financial statements as of December 31st, 2010 to December 31st, 2015. Third, the manufacturing companies publish financial statements using Indonesian Rupiah (RP) as the currency. Fourth, the manufacturing companies have no loss during 2010 to 2015. Fifth, the manufacturing companies disclose CSR report in their financial statements during the years studied.

Moderated Regression Analysis (MRS) is used to analyze the correlation between the variables. MRA uses an analytical approach that maintains sample and provides the basis to control the influence of moderator variables (Ghozali, 2016). The MRA uses the following equation.

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 Z + \]
\[ \beta_5 (X_1 X_4) + \beta_6 (X_2 X_4) + \beta_7 (X_3 X_4) + e \]  \hspace{1cm} (6)

Description:
\[ Y \]: Tax aggressiveness
\[ \alpha \]: Constants
\[ \beta_1 - \beta_7 \]: Regression Coefficients

RESULTS AND DISCUSSIONS

Figure 2 Histogram Graph Normality Test Result

Figure 3 P-Plot Normality Test Result

Normality test is a basic requirement that must be fulfilled within parametric analysis. It aims to test whether the model of regression or residual variable has a normal distribution. By looking at the normal graph histogram and P-Plot in Figure 2 and Figure 3, it can be said that the histogram graph shows the normal distribution pattern. On the normal plot charts, the visible dots are spread around the diagonal line and follow the direction.
Multicollinearity test is performed to determine whether the regression model finds a correlation between the independent variables. Multicollinearity can be seen from tolerance value and Variance Inflation Factor (VIF). If tolerance value is > 0.1 and VIF is < 10, the multicollinearity does not occur in regression model. Multicollinearity test results are presented in Table 2.

Table 2 Multicollinearity Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>0.825</td>
<td>1.213</td>
</tr>
<tr>
<td>CSR</td>
<td>0.792</td>
<td>1.262</td>
</tr>
<tr>
<td>ROA</td>
<td>0.754</td>
<td>1.326</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.797</td>
<td>1.254</td>
</tr>
</tbody>
</table>

Table 2 shows that the value of the variable tolerance is 0.10 and VIF is ≤ 10. It can be stated that there is no multicollinearity among independent variables in the regression model. Hence, the regression model is fit to be used in this research.

Autocorrelation test is to determine the presence or absence deviation of the classical autocorrelation assumption. The correlation occurs between residual and observation with other observations on the regression model. The prerequisite to be fulfilled is the absence of autocorrelation in regression model. This test can be calculated using the run test. If there is no correlation between residual, the residual is random. The run test is used to see if residual data occurs randomly or not. Autocorrelation test results are presented in Table 3.

Table 3 Autocorrelation Test Results

<table>
<thead>
<tr>
<th>Residual unstandardized</th>
<th>Test Value</th>
<th>0.01257</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases &lt; Test Value</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Cases &gt;= Test Value</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>total Cases</td>
<td>160</td>
<td></td>
</tr>
<tr>
<td>Number of Runs</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>Z</td>
<td>0.952</td>
<td></td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>0.341</td>
<td></td>
</tr>
</tbody>
</table>

This research uses run test for the presence of autocorrelation in a regression model. Table 3 shows the results of testing that it is -0.01257 with probability of 0.341 > 0.05. It means that the value of residual is random or there is autocorrelation between the residual values.

Moreover, heteroscedasticity test determines the presence or absence of deviation of the classical assumption in heteroscedasticity. It is the variant of inequality of the residual for all observations on the model regression. The prerequisite that must be fulfilled in the regression model is the absence of symptoms of heteroscedasticity (Priyatno, 2008). Heteroscedasticity test used in this research is Scatterplot chart. In this research, it uses a graphical method (see the pattern of dots in the regression graph). A good regression model is a regression model that does not contain heteroscedasticity. The results of the test using the chart can be seen in Figure 4.

![Figure 4 Heteroscedasticity Test Result](scatterplot.png)

Figure 4 shows that the dots are randomly spread above and below the number 0 on the Y axis. It can be suggested that there is no heteroscedasticity in regression models so that the decent regression model can be used.

Based on Table 4, the value of CSR is -0.256 and the significance value of 0.000 is smaller than the predetermined significance level of 0.05 (0.000 < 0.05). This implies that H1 is accepted. CSR has a significant and negative effect on the tax aggressiveness. This shows that the higher level of CSR disclosure in
a company is, the lower the level of corporate tax aggressiveness will be.

In Table 4, the obtained profitability value is -0.074 and significance value is 0.067. Those are greater than the predetermined significance level of 0.05 (0.067 > 0.05). Then, H2 is rejected. It can be concluded that the profitability variable does not affect tax aggressiveness. This shows that profitability in a company will not affect the level of tax aggressiveness.

Moreover, it shows the leverage value of -0.034 and the significance value of 0.000 in Table 4. It is smaller than the specified significance level that is 0.05 (0.000 < 0.05). Thus, it can be concluded that leverage has negative effect with on tax aggressiveness (H3). This indicates that the higher the leverage of a company is, the lower the tax aggressiveness of the company will be. The moderate regression test results are presented in Table 5.

Table 5 Moderate Regression Test Result

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Std. Error</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>0.575</td>
<td>0.189</td>
<td>3.038</td>
<td>0.003</td>
</tr>
<tr>
<td>CSR</td>
<td>-2.464</td>
<td>1.209</td>
<td>-2.038</td>
<td>0.043</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.216</td>
<td>0.666</td>
<td>-0.324</td>
<td>0.746</td>
</tr>
<tr>
<td>DER</td>
<td>-0.145</td>
<td>0.150</td>
<td>-0.964</td>
<td>0.337</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.009</td>
<td>0.007</td>
<td>-1.379</td>
<td>0.170</td>
</tr>
<tr>
<td>CSR*SIZE</td>
<td>0.078</td>
<td>0.043</td>
<td>1.811</td>
<td>0.072</td>
</tr>
<tr>
<td>ROA*SIZE</td>
<td>0.015</td>
<td>0.024</td>
<td>0.201</td>
<td>0.841</td>
</tr>
<tr>
<td>DER*SIZE</td>
<td>0.004</td>
<td>0.005</td>
<td>0.734</td>
<td>0.464</td>
</tr>
</tbody>
</table>

a. Dependent Variable: ETR

\[ Y = 0.575 - 2.464X_1 - 0.216X_2 - 0.145X_3 - 0.009Z + 0.078(X_1Z) - 0.015(X_2Z) + 0.004(X_3Z) + \epsilon \]  

(7)

Based on Table 5, the regression equation can be obtained. It is shown in equation (7). From the regression equation, the implications can be explained. First, the constant value of 0.575 indicates that CSR, profitability, leverage, and size of company have constant value of 0.000, and tax aggressiveness is 0.575. Second, the value of regression coefficient of CSR (\( \beta_1 \)) is -2.464. This shows that in every increase of CSR, there will be a decrease in tax aggressiveness about -2.464. Third, the value of regression coefficient of profitability (\( \beta_2 \)) is -0.216. This shows that each increase in profitability, then there will be a decrease in aggressiveness about 0.216. Fourth, the value of regression coefficient of leverage (\( \beta_3 \)) is -0.145. It means that in every increase of leverage, there will be a decrease in tax aggressiveness about -0.145. Fifth, the value of regression coefficient of size of company (Z) is -0.009. It implies that every increase of size of company will affect the decrease of tax aggressiveness about -0.009. Sixth, the value of moderate coefficient between CSR with size of company (\( \beta_5 \)) is 0.078. It means if the CSR with the size of company increases by one, then the tax aggressiveness of the will increase about 0.078. Seventh, the value of moderate coefficient between profitability with size of company (\( \beta_6 \)) is 0.005. It shows that the profitability interaction with the size of company increases, tax aggressiveness will also increase by 0.005. Eighth, the moderate coefficient value between leverage with size of company (\( \beta_7 \)) is 0.004. It means that leverage with size of company has increased by one, then the tax aggressiveness will increase by 0.004.

Based on Table 5, the results have shown that the value of coefficient value for CSR with size of company as the moderator is 0.078 and the significance value is 0.072. This suggests that significant value is above 0.005. It can be concluded that size of company is not a variable that can moderate the relationship between CSR and tax aggressiveness. Based on these test results, H4 is rejected.

Table 5 presents the results that the value of profitability and the size of company has the coefficient value of 0.015 and significance value of 0.464. This is above 0.005, so the H5 is rejected. Then, it can be concluded that size of company is not a variable that can moderate the relationship between profitability and tax aggressiveness.

Table 5 shows the value of coefficient for leverage with size of company as moderator is 0.004 and significance value of 0.464. This suggests that significant value is above 0.005. It can be concluded that size of company is not a variable that can moderate the relationship between leverage and tax aggressiveness. It can be concluded that size of company cannot moderate the relationship between leverage and tax aggressiveness. Based on these test results, H6 is rejected in this research.

CONCLUSIONS

There are several conclusions drawn from the results. First, CSR has a negative and significant impact on the tax aggressiveness. The companies conducting CSR activities will be responsible for paying tax. It means company will avoid tax aggressiveness because the company tries to build good relationship with the stakeholders. When the company cares about the environment, it tends to be responsible to fulfill its obligations in paying taxes to keep the reputation of the company. Second, size of company does not moderate the correlation between CSR and tax aggressiveness. Third, profitability has a negative and insignificant impact on the tax aggressiveness. The number of a company’s profits cannot affect the company in conducting tax aggressiveness. Companies that have large or small profits have the same opportunity in conducting tax aggressiveness. Fourth, size of company...
The study found that corporate social responsibility does not moderate the correlation between profitability and tax aggressiveness. Fifth, leverage has a negative and insignificant impact on the tax aggressiveness. The result of leverage that has a negative direction indicates that the company utilizes the debt to invest in the company’s use. The higher the interest expense arising from the debt is, the higher interest rates will affect the company’s tax expense. It can be said that the company uses debt to minimize the tax expense by the company by utilizing tax aggressiveness. Sixth, size of company does not moderate the correlation between leverage and tax aggressiveness.

This research still has some limitations. One of them is an element of subjectivity in determining the CSR disclosure indices and the lack of references on correlation between CSR, profitability, leverage, and tax aggressiveness with size of company as the moderating variable.

Based on the results obtained, the researchers suggest future research. It can use the other moderating variables that may have a correlation between CSR, profitability, leverage, and tax aggressiveness.

REFERENCES


