The Influence of The Firm’s Size on Income Tax with The Disclosure of Corporate Social Responsibility as Mediating Variable

Fransiskus Xaverius Arista Narakisna
Alumnus of Universitas Atma Jaya Yogyakarta, Indonesia
Email: arista.krisna@gmail.com

Anna Purwaningsih
Lecturer of Universitas Atma Jaya Yogyakarta, Indonesia
Email: annapurwaningsih1977@gmail.com

Abstract
This research aims at finding the empirical proof of the firm’s size impact on income tax, by considering CSR as mediating variable. This research is crucial to conduct since Juli 2007 Indonesia became the first country to introduce mandatory legal requirements for CSR when the Indonesia parliament passed Law 40/2007. Based on this Law, CSR turns into the company’s expense. Meanwhile, in taxation principles, the are types of expense which can be reduced to minimize the company’s tax. Therefore, this research is directed to answer if CSR is closely related to company’s tax planning.

The research samples were manufacture companies listed in Indonesia Stock Exchange in 2011. The total numbers are 79 companies. This research employed a model wherein independent variable (firm size) did not show direct connection with dependent variable (income tax). The test of the hypothesis employed regression and Sobel tests. The variable of firm’s size was proxied with the value of market capitalization. CSR variable was measured based on the numbers of report on company’s social and ecological responsibility which was in line with economic performance indicator GRI 3.1. which was revealed in annual report and/or sustainability report. The variable of the income tax was proxied by CTTOR (Corporate Tax to Turn Over Ratio). This ratio was used to know the unpaid income tax in one year relative to the sale performed by the company.

The result shows that (1) the firm’s size influences CSR disclosure; (2) CSR disclosure influences the income tax; and (3) CSR disclosure is a mediating variable in term of firm’s size to income tax. This means that CSR realization is not independent from company’s tax planning. In other words, the realization of CSR considers taxation principles related to deductible and nondeductible expenses.

Key words: Corporate Social Responsibility (CSR), Firm Size, Income Tax, Deductible Expenses, and Tax Planning

INTRODUCTION
Central Statistics Agency (BPS) said Indonesia's GDP first half of 2012 compared with the first half of 2011 showed an increase of 6.3 percent and occurred in all
sectors (BPS, 2012). The increase in GDP growth would be supported by the company/firm. The growth of corporate performance affects the emergence of social and environmental problems, such as pollution, depletion of natural resources, waste, quality, and safety products. Social and environmental problems that have consequences for the company, that is, the company is obliged to carry out activities of social and environmental responsibility (Corporate Social Responsibility/CSR).

CSR is the implementation of the principle of sustainable development which requires the company to make decisions based not only on financial factors, like: profit and dividends, but also requires companies to consider the impact of the medium and long-term social and environmental sustainability business activities while maintaining confidence and stakeholder loyalty firm (Effendi, 2008). This is consistent with stakeholder theory in which the company is seen not as an entity that not only operates for its own sake but also for the benefit of stakeholders (Lubis et al., 1987 in Mangoting, 2007).

The importance of CSR is not only realized by the company, but also by the government. This is realized by the issuance of Government Regulation (PP) of the Republic of Indonesia Number 47 Year 2012 regarding the social and environmental responsibilities of a limited liability company, the Act (UU) No. 25 of 2007 Section 15 of the Investment Act, Act No. 40 of 2007 Article 74 of the limited company and Kep-134/BL/2006 on the obligation to submit annual reports for issuers and public companies. The regulations make CSR is no longer voluntary but became mandatory.

Although CSR has become a mandatory program, it is possible that some companies still implement deviant CSR practices by utilizing existing incentives, such as Law No. 36 of 2008 Section 6 regulating the load which may reduce the tax burden calculations and Government Regulation No. 93 Year 2010 on national disaster donations, donations of research and development, education facility donations, donations of sports coaching, and social infrastructure development which costs can be deducted from gross income. This deviant practice to transform the company expenses may not be deducted from income to expenses deductible in computing taxable income, such as costs for research and development, education and training personnel costs, office repair costs, and marketing costs, (Suandy, 2011).

Most of the multinational companies in Indonesia are indicated to aggressive tax planning by using operational networks. For example, set the parent company as a profit center and its subsidiaries as a cost center. In this way, the company will benefit by spreading income into income for some taxpayers in the group, as well as to the cost, so as to obtain benefits on tax shifting, which avoids the highest rates, the maximum, and the results used as funds in its social responsibility activities (Rusydi, 2009). Therefore, the authors are interested in proving whether the firm size affect
income tax burden by CSR disclosure. Formulation of the problem in this study, among other things: (1) Does firm size affect the disclosure of CSR? (2) Does CSR affect income tax? and (3) Does firm size affect the income tax with CSR as a mediating variable?

PREVIOUS RESEARCH AND HYPOTHESIS DEVELOPMENTS

Previous Research

Utami (2011) conducted a study to determine the effect of firm characteristics (as seen through the net profit margin, firm size, firm age, leverage, management and ownership) for social disclosure. The results showed that the firm size positively affect CSR disclosure on high-profile companies in 2006-2008.

Companies that belong to the high-profile companies have characteristics, such as: having the consumer visibility, the level of political risk, and high levels of competition (Hasyir, 2009). If it is associated with firm size, the big companies that have greater agency costs. Therefore, a larger company will reveal wider social information in order to receive a positive assessment of the owners. Agency costs above include: monitoring costs incurred by the principal to oversee the activities and behavior of managers, bonding costs borne by the manager to give assurance to the owner that the manager does not perform actions that hurt the company, and the residual loss/cost to the principal to influence decisions managers in order to improve the welfare principal (Haryono, 2005). Thus, management can demonstrate that managers not only use the assets for his own benefit, but also for the interests of investors through social disclosure in annual reports. Instead, the company is small and medium, still revealing social information, but only limited to meet government regulations that require companies whose line of business related to natural resources to implement social and environmental responsibility.

Another study to examine the effect of firm size on CSR disclosure made by Kamil et al. (2012), Apriwenni (2009), and Marzully & Priantinah (2012). The results of these studies indicate that firm size has a positive effect on CSR disclosure in financial reporting of public companies on the Stock Exchange. The results are consistent with the results of Utami’s research (2011).

Implementation of CSR programs relies on the company’s CSR perspective. This next perspective will affect the practice of CSR undertaken by the company and will also have an impact on the formulation of CSR disclosure. There are three ways of how companies view CSR, namely: as a corporate strategy that ultimately brings benefits, as a liability because there are laws that will force the application, and who do so beyond compliance because the company felt as a part of the community (Pambudi, 2006 in Yuliana, 2008).
Hypothesis Development

Earnings information in the financial statements are important information mindless that information management is seen as a representation of the performance of a given period. Additionally, earnings information for the parties concerned is the basis in calculating company's tax liability (Ahmed et al., 2000 in Handayani et al., 2009). Furthermore, the agency theory with the information imbalance in the relationship between principal and agent is possible to raise or lower the reported earnings units which are the responsibility of the units.

One of the motivations that may encourage management to engage in the practice of earnings management is politically motivated (Yushita, 2010). Large companies that dominate the lives of many people will tend to reduce the earnings. The incentives that may be used in carrying out tax obligations, can lead managers for earnings management by minimizing taxes or total tax to be paid by the company to the state. Motivation is related to the political cost. Political cost is the cost to be incurred related to government regulatory policies, such as taxes. Firm size is a proxy recommended in this framework (Watts & Zimmerman, 1986).

The Company has dual dependence on stakeholders. First, the products and services that constitute the firm's output are consumed by the consumer. Second, companies also get a variety of inputs for operational activities where stakeholders (Lubis et al., 1987 in Mangoting, 2007). The company's survival depends on the support of stakeholders and support should be sought (Septiana et al., 2012). Companies must maintain relationships with stakeholders to accommodate the wants and needs of stakeholders, especially the stakeholders who have power on the availability of the resources used for the operational activities of the company, for example: the labor market and the company's products.

CSR is a form of organizational responsibility towards society and the environment through behavior which is transparent and ethical, consistent with sustainable development and social welfare, as well as the interests of the stakeholders, according to law and consistent with international norms, and integrated in all activities of the organization (ISO 26000, 2010). CSR is simply the reciprocal of the company to the community and the surrounding environment because the company has taken advantage of the community and the surrounding environment (Septiana et al., 2012). CSR is primarily a concern for business organizations to act in their own ways to serve the public interest and the interests of external organizations (Schermherhorn, 1993 in Tanudjaja, 2006).
The larger the company, the company would pay more attention to social programs and CSR disclosure (Indrawati, 2008). Large companies will reveal wider social information in order to seek the support of stakeholders and to get a positive assessment of capital owners (Utami, 2011).

Law No. 40 of 2007 Article 74 paragraph (2) and Regulation No. 47 of 2012 Article 5 paragraph (2) broadly regulates the accounting treatment for the costs of doing CSR. This fee is charged as an expense of the company. Liability for the company's CSR report also encouraged the emergence of large corporate trend to provide a lower profit than smaller companies because the size of the larger companies spending money on CSR disclosure is greater than the small firms.

Perception of political motivation on earning management will encourage large companies, in particular the management, to express greater CSR. It is intended that the political cost incurred becomes smaller. Political cost refers to the cost to be incurred related to the company's policy of government regulations, such as taxes. To minimize the political cost, management will maximize the incentive to do the CSR-related liability according to the rules of applicable legislation in Indonesia. It has arranged in Article 6 of the Law No. 36 Year 2008 on the costs that may be a deduction in the calculation of the tax burden and Government Regulation No. 93 Year 2010 concerning the national disaster donations, donations of research and development, education facility donations, donations of sports coaching and social infrastructure development costs which can be deducted from gross income.

Ha1: Firm size affects the company's CSR disclosure,
Ha2: Disclosure of CSR affect company’s income tax,
Ha3: Firm size affects the company's income tax, with CSR disclosure as a mediating variable.

RESEARCH METHOD

Samples

This is a sample research companies listed in Indonesia Stock Exchange (IDX) in the manufacturing industry for the period 2011. Sampling technique used was purposive sampling. Sampling criteria include (1) The company publishes the annual report and audited financial statements; (2) CSR program the company revealed in a report in the annual report or corporate sustainability report in 2011; and (3) The company did not fiscal loss for the 2011 or doing compensate the fiscal loss carry forwards the previous tax year. Fiscal losses will effect to the calculation the Corporate Tax to Turn Over Ratio (CTTOR) so the income tax is worth 0. Sampling of the obtained samples are 79 companies.
Research Model

Modeling in this study is as follows:

**Figure 1. Research Model**

![Diagram of Research Model 1](image)

There are two alternative forms of mediation relationship models, namely: the model without the mediating relationship showing a direct relationship between the dependent and independent variables and the model showing the relationship of mediation with the direct relationship between the dependent and independent variables. Model chosen is mediating the relationship without showing a direct relationship between the dependent and independent variables (Hartono, 2010).

Regression analysis techniques for mediating variables in this study using the product of coefficient (Sobel test). Testing variables with this method is done by testing the strength of the indirect effect of independent variables on the dependent variable through the mediating variable. Therefore, the modeling is as follows:

**Figure 2. Research Model 1**

![Diagram of Research Model 2](image)

**Figure 3. Research Model 2**

![Diagram of Research Model 2](image)

Research Variables

In the research model 1 the firm size becomes an independent variable. There are three alternative proxies that can be used to determine the firm size, namely: the size of assets, net sales, and market capitalization (Utami, 2011). Proxy for firm size in this study is the market capitalization. Capitalization value was obtained by the
number of outstanding shares multiplied by the market price per share December 31, 2011. To prevent the occurrence of abnormal distribution of data which can be due to a large difference in capitalization between large companies and small companies, then market capitalization was transformed into the natural logarithm (Ln). Meanwhile, the disclosure of CSR became the dependent variable. Measurement of CSR as a mediating variable in this study refers to the approach used by Oeyono et al. (2011). CSR disclosure was measured by using a content analysis of the information content of annual reports or corporate sustainability report on the presence of CSR items from GRI. Each item was given a score of 1 if there is CSR information in the annual report/sustainability report and the entity was given a score of 0 if there are no CSR information in the annual report/ sustainability report.

In the research model 2, CSR disclosure becomes the independent variables and income tax becomes the dependent variable. Income tax variable is measured by the CTTOR. This ratio is calculated by income tax divided by the sales reported in the income statement for 2011. CTTOR shows the amount of income tax in a year relative to company’s sales. The larger CTTOR shows the greater proportion of company sale used to pay income tax.

This research focuses on the measurement of CSR disclosure on indicators of economic performance because an indicator of economic performance becomes one form of CSR, as well as appropriate indicators to refer to Article 6 of Law No. 36 Year 2008 on the costs that may be a deduction in the calculation of income tax and PP No. 93 of 2010 about activities cost which can be deducted from gross income.

Data Analysis

Before testing the hypothesis, the authors conducted some preliminary testing, among others: the normality and heterokedastisitas test. Test for normality in this study using the Kolmogorov-Smirnov test. Heteroscedasticity test uses Glejser test. Autocorrelation test was not performed in this study because the time dimension used in this study is the cross section. The study also does not require multicollinearity test because both models in the study involve only one independent variable (simple regression).

Testing hypothesis uses a simple regression model. Regression equations in this study are as follows:

Equation I  :  CSR = a1 + a. Firm Size + e
Equation II :  Income Tax = a2 + b. CSR + e

Description:
CSR : Disclosure of CSR,
Firm Size : Firm Size by market capitalization,
Income tax: Income tax in 2011,
α1, α2: intercept of the model
a, b: regression coefficient, e: residual variable/error

Analysis of mediating variables uses Sobel test. Sobel test methods in this study replicate Siswanto’s et al., (2012). Sobel test steps are as follows: (1) creating independent variable regression equation (firm size) on mediating variables (CSR); (2) creating a mediating variable regression equation (CSR) on the dependent variable (income tax); (3) conducting an analysis of mediating variables with the following formula:

\[ S_{ab} = \sqrt{\left( b^2 \times s_{a}^2 \right) + \left( a^2 \times s_{b}^2 \right) + \left( s_{ab} \right)^2} \]

\[ T \text{ value} = \frac{ab}{S_{ab}} \]

Description:

ab: indirect effect coefficients from the multiplication direct effect of a and b,

a: coefficient direct effect the dependent variable to the mediating variable,

b: coefficient direct effect the mediating variable to the dependent variable,

sa: standard error of the coefficients a,

sb: standard error of the coefficient b.

The last step is getting conclusions by comparing t value to t table, with a significance of 0.05. If, t value greater than t table it can be concluded that CSR variables mediate the relationship between variable of firm size and income tax.

EMPIRICAL RESULTS

Descriptive Statistics

The average market capitalization of the entire study sample was 7.11. The average number of disclosures of CSR in economic indicators is as much as 2.95 points. The average income tax (CTTOR) is 2.68. Standard deviation of firm size is 2.18, CSR is 1.7, and income tax is 2.27. The number of samples in the study was 79. The data can be seen in table 1 and table 2.

<table>
<thead>
<tr>
<th>Table 1. Descriptive Statistics Research Model 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>CSR</td>
</tr>
<tr>
<td>Firm Size</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 2. Descriptive Statistics Research Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>Income tax</td>
</tr>
<tr>
<td>CSR</td>
</tr>
</tbody>
</table>

R-square values in model 1 and 2 can be seen in Table 3 and Table 4 below:
Table 3. Determination Coefficient ($R^2$) Model 1

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.591(^*)</td>
<td>.349</td>
<td>.341</td>
<td>1.382</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Firm Size  
b. Dependent Variable: CSR

c. Predictors: (Constant), CSR

Table 4. Determination Coefficient ($R^2$) Model 2

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.251(^*)</td>
<td>.063</td>
<td>.051</td>
<td>2.214534</td>
</tr>
</tbody>
</table>

Total determination coefficient approach is used to measure the ability of our model to explain variation in the independent variable. R-square value in testing the model 1 is 0.349 and the value of R square in the testing model 2 is 0.063. Furthermore, the calculation to determine the influence of error as follows:

\[ P_{e1} (the\, value\, of\, error\, on\, testing\, model\, 1) = \sqrt{1 - R_1^2} = 0.807 \]

\[ P_{e2} (the\, value\, of\, error\, on\, testing\, model\, 2) = \sqrt{1 - R_2^2} = 0.968 \]

Based on the influence the calculation of the above error, then calculated the total value of the coefficient of determination ($R^2_m$) as follows:

\[ R^2_m = 1 - P_{e1}^2 P_{e2}^2 \]
\[ = 1 - (0.651)(0.937) \]
\[ = 1 - 0.61 \]
\[ = 0.39 \]

The calculations show that the total coefficient of determination is equal to 0.39. This means the 39% income tax variables can be explained by the variable firm size and CSR disclosure. Meanwhile, 61% is explained by other variables not examined in this study and error.

**Normality and Heteroscedasticity Test**

Results of normality test data on models 1 and 2 shows that all the data are normally distributed. P value of Kolmogorov-Smirnov test 0.525 (Model 1) and 0.125 (Model 2), so the residual value is normally distributed. Heteroscedasticity tested using a Glejser test. Result of heteroscedasticity test shows the p value of 0.698 (> 0.05) in model 1 and p value of 0.337 (> 0.05) in model 2. Thus heteroscedasticity does not occur in model 1 and model 2.

**Model Testing (F Test)**

Results of ANOVA or F test (table 5) shows that the p value of 0.000 (<0.05). This suggests that model 1 can be used to predict the effect of firm size on CSR.
Hypothesis Testing

Results of hypothesis testing using simple linear regression on the model 1 and model 2 are as follows:

Table 7. Result of Regression - Model 1

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig. 2-tail</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-.328</td>
<td>.533</td>
<td>-.616</td>
<td>.540</td>
</tr>
<tr>
<td>Firm Size</td>
<td>.461</td>
<td>.072</td>
<td>.591</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 7 shows that the p value of 0.000 (<5%). The results show that firm size variables affect the company's CSR disclosure. Thus, the first hypothesis is accepted. Model 1 can be formulated into a linear regression equation form, as follows:

$$CSR = -0.328 + 0.461 \text{Firm Size} + e$$

The results of regression test of model 2 (table 8) show that p value of 0.026 (<5%). This proves that CSR disclosure variables affect the income tax. Thus the second alternative hypothesis is accepted. Thus, model 2 can be formulated into a model of linear regression equation as follows:
\[ \text{Income Tax} = 1,689 + 0.335 \cdot \text{CSR} + e \]

Table 8. Result of Regression - Model 2

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.689</td>
<td>0.501</td>
</tr>
<tr>
<td>CSR</td>
<td>0.335</td>
<td>0.147</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Income Tax

**Sobel Test**

Sobel test was conducted to test the influence of mediating variables in a model. Sobel test results can be seen as follows:

\[ S_{ab} = \sqrt{\left(b^2 \times sa^2\right) + \left(a^2 \times sb^2\right) + \left(sa^2 \times sb^2\right)} \]
\[ = 0.075 \]

Sobel test results of the calculations are then used to calculate the value of \( t \) statistic, namely:

\[ T \text{ value} = \frac{ab}{S_{ab}} \]
\[ = 2.059 \]

Computed \( t \) values \( t \) compared with \( t \) table. \( T \text{ value} \) is 2.059, while the \( t \) table \((1/2 \times 0.05, (79-2)) = 1.99 \). Thus, it can be concluded that the disclosure of CSR mediate the relationship between firm size and income tax.

**SUMMARY AND CONCLUSIONS**

**Summary**

Regression results in model 1, the effect of firm size on the disclosure of CSR programs based on economic indicators GRI 3.1 shows the significance of 0.000 (lower than \( \alpha = 0.05 \)). This means that alternative hypothesis is accepted. Thus, firm size affects CSR disclosure. The results support the research that done before by Utami el al. (2011), Kamil et al. (2012), Apriwenni (2009), and Nur et al. (2012).

Agency theory stated that the agency relationship occurs when the principal (shareholders) delegate the authority to make decisions to the agent (management). To oversee the activities of agents, agency cost will display. Therefore, if it is associated with firm size, the large firms have greater agency cost. Conducted under the supervision of a principal to an agent, the agent will respond to this by revealing the broader CSR in order to get a positive assessment of the principal. Thus, management can demonstrate that they not only use company assets for their own benefit, but also for the interests of capital owners through CSR disclosure in annual reports. It is intended to reduce the agency conflict.
The results of regression test of model 2, the effect of CSR on corporate income tax shows p value 0.026 (lower than $\alpha = 0.05$). This means alternative hypothesis 2 is accepted, namely: CSR disclosure effect on income tax. These results indicate that although there is a political motivation to minimize the political cost and in the implementation of CSR, companies as samples of this study conduct and disclose CSR by considering not only Article 6 of the Law No. 36 Year 2008 on the costs that may be a reduction in calculation of income tax, but also the PP No. 93 Year 2010 concerning the national disaster donations, donations of research and development, education facility donations, donations of sports coaching, and social infrastructure development costs which can be deducted from gross income.

Sobel test results show that the disclosure of CSR mediate firm size effect on income tax, ie $t$ value = 2.059 greater than $t$ table 1.99. Thus, the alternative hypothesis 3 is accepted, that there are significant effects of CSR disclosure on firm size against income tax.

Thus, the results of this study were in line with the regulations in Indonesia. PP issuance of the Republic of Indonesia Number 47 Year 2012 on social and environmental responsibility limited company reiterated that the characteristic of CSR, both the implementation and the disclosure is mandatory. This regulation is related to the improvement of the previous rule CSR obligations, among others, the Act (Act) No. 25 of 2007 Section 15 of the Investment and Law Number 40 Year 2007 Article 74 of the limited liability company. Articles 3, 4, and 5 in PP No. 47 of 2012 to the mandatory nature of CSR affirmation of the Law No. 40 Year 2007

Conclusions

Based on the results of the testing that has been done, it can be concluded that (1) Firm Size affects CSR disclosure, (2) disclosure of CSR affects income tax, and (3) Firm size affects the income tax with the disclosure of CSR as a mediating variable. This proves that companies do CSR with regard to tax regulations. Thus, the selection of CSR activities reduces income tax as well. Income tax expense decreases due to the fact that the expenses of the selected CSR activities are deductible expenses) so that income as a basis for calculation of income tax will be smaller. If Earning a company’s earning gets smaller, then income tax also gets smaller.

Limitations of this study lays on research sample limited on the companies which only run the business activities related to natural resources (manufacturing) and not covering companies that carry out business activities directly on the management and utilization of natural resources. Thus the results cannot be generalized.
REFERENCES


