Stock Ownership Structure and Capital Structure in Tax Reform: Evidence from Indonesian Capital Market

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Abstract

Indonesian government has reformed the taxation law in 2007. One form of this reform is ratification the new income tax law, Act No. 36 of 2008. This regulation is revealed that companies listed on capital market can obtain reduced income tax rate by 5%. Decrease in income tax rates is granted to domestic corporate taxpayers listed on capital market that have public ownership over 40% of the total paid shares and the shares owned by at least 300 party. The purpose of this research is to analyze the differences of stock ownership structure and capital structure before and after the ratification of Act No. 36 of 2008. This research used property, real estate, and building construction companies listed on Indonesia Stock Exchange (IDX) as a sample. Sample selection is performed based on purposive sampling method. The result indicates that government regulation related to tax incentives which was aimed to increase the proportion of public ownership is still less effective. In addition, this study also showed that the proportion of public ownership has no significant effect on firm performance.

Keywords: Government regulation; stock ownership structure; capital structure.

1. Introduction

In 2007 Indonesian government has changed the taxation law. One form of such change is Act No. 36 of 2008 on The Fourth Change of Income Tax. In Article 17 Paragraph 2b this regulation revealed that companies listed on capital market can obtain reduced of income tax rate by 5%. The decrease in income tax rates is granted to domestic corporate taxpayers listed on capital market that have public ownership over 40% of the total paid shares and shares owned by at least 300 party. The decrease in income tax rate is expected to increase public ownership. The implementation of this policy can certainly influence the decisions concerning stock ownership structure and capital structure of firms. In fact stock ownership structure consists of three types, namely managerial ownership, institutional ownership, and public ownership. While capital structure often identified with corporate debt policy. Managerial and institutional ownership affect corporate debt policy, either partially or simultaneously [12]. The relationship between the institutional ownership with capital structure based on the vary level of managerial ownership [9].

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At low levels of managerial ownership, the relationship between institutional ownership with the capital structure is positive. At high levels of managerial ownership, the relationship between institutional ownership with capital structure is negative. This condition suggests that the stock ownership structure and capital structure has relationship. Consequently if there is a change in any of these things then it can affect other things.

However, recent studies about reduction in tax rates or tax reform show that tax incentives (tax rate reduction) had no significant effect on the decision of the company. The effect of tax rate reduction of founders’ shares to the decision of the release of founder shares at initial public offering [8]. The results show that the reduction in tax rates of founders’ shares indicated that there is no effect on the decision of founding shareholders to remove its shares at the IPO. Tax reform of 2000 did not significantly influence the cost structure, capital expenditures, and company profitability [12].

Therefore the analyzed of difference between stock ownership structure and capital structure needs to be investigated. This study indicates the effectiveness of fiscal stimulus issued by Indonesian government to encourage the development of capital markets in Indonesia. In addition, this study also analyzed the effect of public ownership on the performance of companies listed on capital market.

2. Literature Review

2.1. Corporate Income Tax in Indonesia

One form of Indonesian tax reform of 2000 is ratification of the new income tax law, Act No. 36 of 2008. Section 17 of this act revealed that in 2009 the income tax rate for the company is 28%, whereas in 2010 and subsequent years income tax rate is 25%. Companies that have public ownership of at least 40% of the total number of shares and owned by more than 300 parties can enjoy reduced income tax rate by 5%. According to this act, companies that have public ownership 40% or more are subject to income tax rates by 23% for 2009 and 20% for 2010.

2.2. Pecking Order Theory

Theoretically, the structure of corporate ownership related to corporate finance. One of the theories underlying the company's funding decisions is pecking order theory. There is a tendency of companies to determine sources of funding on the basis of risk hierarchy (pecking order theory). Funding decision follows a hierarchy in which the funding source from within the company (internal financing) more precedence than the funding sources from outside the company (external financing). In the case of companies are using external funding, loans (debt) take precedence over funding with additional capital from new shareholders (external equity). Equity financing will only be used in very urgent, that is if the costs resulting from financial distress became so high and the company's debt capacity has been exceeded [4].

Permanent financing undertaken by the company which is consists of long-term debt, preferred stock and stockholders' equity called capital structure. Capital structure decisions relating to the selection of funding sources, whether from within or from outside, can greatly affect the value of the company. According to the author in [7] one of the determinant factor is the cost of capital structure which is brings tax advantages for
companies. In this case the company tends to use the financing option that would bring tax advantages. This is due to the tax advantages a company can increase profits which in turn will increase the value of the company.

2.3. Previous Studies

Previous studies did not specifically link between tax reform with stock ownership structure and capital structure of firms. But there are a lot of researches related to effects of changes in tax rates on decisions taken by the company in Indonesia. The author in [8] also examined the effect of tax rate reduction of founder shares to the decision of the release of founder shares at initial public offering (IPO). The tax rate reduction is stipulated in Government Regulation (PP) No. 14 of 1997, which reduced tax rates founders’ shares from 5% to 0.5%. This study examined 91 companies that conducted IPOs from 1995 to 2004 by using binary logistic regression. The research results show that the reduction in tax rates shares of founders indicated no effect on the decision of founding shareholders to remove their shares at the IPO.

Researches related to tax reform have also been done. The author in [12] conducted a study related to the impact of tax reform of 2000 on cost structure, capital expenditure, and firm profitability. The study examined manufacturing companies listed on the Jakarta Stock Exchange by using multiple regression and T-test. In his research he revealed that there was no difference in cost structure, capital expenditure, and firm profitability before and after tax reform of 2000. It indicated that tax reform have not been able to encourage the development of economic sector of Indonesia.

2.4. Hypothesis Development

Taxes may affect companies’ decision. But based on previous studies Indonesia tax reform does not impact on companies’ decision. The author in [12] mentioned that there was no difference in cost structure, capital expenditure, and firm profitability before and after tax reform of 2000. It indicated that tax reform have not been able to encourage the development of economic sector of Indonesia. This leads to the following hypotheses:

H1: There is no difference in stock ownership structure before and after tax reform of 2007.

H2: There is no difference in capital structure before and after tax reform of 2007.

3. Research Method

3.1. Sample Selection

The population of this study is companies listed on Indonesia Stock Exchange. Sample selection is based on purposive sampling. Some of the criteria set for obtaining the sample include:

- The companies are property, real estate, and building construction;

- There is available information about list of shareholders’ proportionate shares of the companies;
3.2. Variable Identification and Measurement

This study has two variables. The first variable is stock ownership structure, consist of managerial ownership, institutional ownership, and public ownership. Managerial ownership is the proportion of stock ownership by management of a company. This is measured by using the ratio of total manager’s share to total outstanding share [12]. Institutional ownership is the proportion of stock ownership by institution on a firm. This is measured by using the ratio of total institution’s share to total outstanding share [12]. Public ownership is the proportion of stock ownership by public o a firm. This is measured by using the ratio of total public’s share to total outstanding share [12].

The second variable is capital structure. Permanent financing undertaken by the company which is consists of long-term debt, preferred stock and stockholders’ equity called capital structure. In this research capital structure is measured by debt ratio, which is ratio of total liabilities to total asset [12].

3.3. Research Model

There are two models used to test the research hypotheses. The first model is binary logistic regression based on research conducted by author in [8], which examined the effect of tax rate reduction of founders’ shares to the decision of the release of founders’ shares at initial public offering (IPO). Based on literature review and the development of hypotheses that have been previously described, the model used in this study are as follows:

\[
\pi(PO) = \frac{\exp(\beta_0 - \beta_1 TAX_{it} + \beta_2 SIZE_{it} + \beta_3 AGE_{it} + \beta_4 LEV_{it})}{1 + \exp(\beta_0 + \beta_1 TAX_{it} + \beta_2 SIZE_{it} + \beta_3 AGE_{it} + \beta_4 LEV_{it})}
\]

where:

\[\begin{align*}
PO &= \text{Public ownership} \\
TAX &= \text{Income tax} \\
SIZE &= \text{Firm size} \\
AGE &= \text{Firm age} \\
LEV &= \text{Leverage}
\end{align*}\]

The second model is multiple regression. This model is based on research conducted by the author in [11], which examined the influence of the proportion of public shares of the company's performance. Based on
literature review and the development of hypotheses that have been previously described, the model used in this study are as follows:

\[ ROI = a + b_1PO + c_3SL + c_5SIZE \]  \hspace{1cm} (2)

Where:

ROI = Return on investment

PO = Public ownership

SL = Firm sales

SIZE = Firm size

4. Result and Discussion

4.1. Sample Selection Process

The sample in this study is the rights offerings companies in 2009 until 2010. This research used purposive sampling. The rights offerings company in 2009 until 2010 was 42 companies. Based on purposive sampling method there are five companies that are not included in the sample because the financial statements were not published. Information on sample selection can also be seen in the following table:

Table 1: Sample Selection Process.

<table>
<thead>
<tr>
<th>Panel A: Sample selection</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The right offerings companies in 2009 until 2010</td>
<td>42</td>
</tr>
<tr>
<td>deduct:</td>
<td></td>
</tr>
<tr>
<td>The financial statements were not published</td>
<td>5</td>
</tr>
<tr>
<td>Total sample</td>
<td>37</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B: Composition of sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies that have public ownership of less than 40%</td>
</tr>
<tr>
<td>Companies that have public ownership of more than 40%</td>
</tr>
<tr>
<td>Total sample</td>
</tr>
</tbody>
</table>

4.2. Descriptive Statistic

Public ownership (PO)

The proportion of public ownership is a dummy variable. If the company has proportion of public ownership 40% or more then the value is 1. If the company has proportion of public ownership under 40% then the value is
0. Here are the results of descriptive statistics on the PO variable.

Based on the descriptive statistics results we can see that the proportion of public ownership almost entirely less than 40%. This indicates that during 2009-2010 there was no increase in public ownership. Imposition of tax incentives for companies starting in 2009 was not encouraging increased public ownership.

**Firm performance (ROI)**

In general, the average of ROI of the company in 2009 is 3.15%, whereas in 2010 increased to 5.79%. This condition is shown in Figure 2, which indicated that in general the performance of companies listed on Indonesia Stock Exchange has not reflected good performance, since the ROI was still within the range of 3% to 5%.

### 4.3. The Result of Feasibility Testing on Regression Model

The results of feasibility testing on regression model using Hosmer and Lemeshow Goodness of Fit Test can be seen in Table 2. The rate of probability by using Hosmer and Lemeshow Goodness of Fit Test is 0.794 (greater than 0.05). This result indicates a binary regression model fit for use for further analysis because there is no difference between the predicted and observed classifications.
Table 2: Hosmer and Lemeshow Test.

<table>
<thead>
<tr>
<th>Step</th>
<th>Chi-square</th>
<th>Df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3.875</td>
<td>7</td>
<td>.794</td>
</tr>
</tbody>
</table>

4.4. The Effect of Income Tax on Public Ownership Program

The binary logistic regression analysis is given in Table 3. From the four independent variables (income tax, company size, company age, and leverage) that are used in this study, we found that four variables did not significantly affect the dependent variable (public ownership). It can be seen at Wald significance value indicating that all independent variables is greater than 0.05.

Table 3: Binary Logistic Regression Result.

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>Df</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1*</td>
<td>TAX</td>
<td>.000</td>
<td>.000</td>
<td>.447</td>
<td>1</td>
<td>.504</td>
</tr>
<tr>
<td></td>
<td>SIZE</td>
<td>.000</td>
<td>.000</td>
<td>.564</td>
<td>1</td>
<td>.453</td>
</tr>
<tr>
<td></td>
<td>AGE</td>
<td>.304</td>
<td>.203</td>
<td>2.239</td>
<td>1</td>
<td>.135</td>
</tr>
<tr>
<td></td>
<td>LEV</td>
<td>-1.525</td>
<td>3.456</td>
<td>.195</td>
<td>1</td>
<td>.659</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>-6.047</td>
<td>4.008</td>
<td>2.277</td>
<td>1</td>
<td>.131</td>
</tr>
</tbody>
</table>

This result is consistent with the Pecking Order Theory. Corporate financing decisions follow a hierarchy in which the sources of funding from within the company (internal financing) are more precedence than the funding sources from outside the company (external financing). When companies use external funding, loans (debt) are more precedence over funding with additional capital from new shareholders (external equity). Equity financing will only be used in a very urgent situation, when the costs of financial distress due to be so high and the company's debt capacity has been exceeded [4]. Therefore, leverage does not affect the shareholding public.

In addition, tax incentives in the form of reduced corporate tax rate of 5% is not effective to attract corporate taxpayers to increase the proportion of public ownership. This is due to the costs borne by taxpayers if the company decided to go public or to increase the number of shares outstanding.

The size of the company also had no effect on the public ownership. According to the author in [3], firm size has no influence on the structure of the ownership company. The author in [5] revealed in his research that the size of the company are assessed into the structure of assets and have a positive influence on capital structure. This influence is based on the research of author in [5], which stated that the amount of fixed assets owned by companies can be used as collaterals for debt. This is consistent with the Pecking Order Theory which argue that firm's financing decisions follow a hierarchy in which the sources of funding from within the company (internal financing) more precedence than the funding sources from outside the company (external financing). Therefore, firm size has no effect on the public ownership.

Company’s age also does not affect public ownership. This is due to the confidence of the public against
companies is not based on firm age, but more on financial performance and financial prospects of the company.

4.5. The Effect of Public Ownership on Firm Performance

The test results of multiple regression analysis are described in Table 4. From the three independent variables (public ownership, firm size, and sales) used in this study, we found that these three variables did not significantly affect the dependent variable (firm performance). It can be seen at a significance value which indicates that all independent variables is greater than 0.05.

Table 4: Multiple Regression Result.

<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>1</td>
<td>(Constant)</td>
<td>.051</td>
</tr>
<tr>
<td>PO</td>
<td>.023</td>
<td>.084</td>
</tr>
<tr>
<td>SIZE</td>
<td>-3.809E-16</td>
<td>.000</td>
</tr>
<tr>
<td>SL</td>
<td>2.316E-15</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Dependent variable: ROI

These results are consistent with research conducted by the author in [11] which revealed that less than 40% proportion of public ownership had no effect on firm performance. The descriptive statistics results show that almost all companies have public ownership less than 40%. Therefore, the proportion of public ownership has no effect on company performance.

5. Conclusion

Currently the proportion of public ownership in Indonesia can be considered as low. This condition indicates that tax incentives to increase the proportion of public ownership is still ineffective. Statistical test results also show that income tax has no effect on the proportion of public ownership in Indonesia. The high cost to be borne by taxpayers when the company decided to go public or to increase the number of shares outstanding may be one factor affecting the low proportion of public ownership in Indonesia.

In addition, this study also showed that the proportion of public ownership has no significant impact on firm performance. These results are consistent with research conducted by author in [11], which revealed that the proportion of public ownership of less than 40% has no significant effect on company performance. The company's performance will get better when the proportion of publicly owned stock improved.

The implications of this study emphasize that the provision of tax incentives in increasing the proportion of public ownership is still not effective. This can be caused by the high costs that must be issued by the company to increase the shares outstanding or do an IPO. On the other hand, the proportion of public ownership in Indonesia does not affect the company's performance. The author in [11] revealed that company's performance will increase when the proportion of publicly owned stock improved. Based on this result, government should
not only provide tax incentives to increase the proportion of public ownership, but also provide a cheaper cost for the activity of the addition of the outstanding shares.

6. Limitation

This study is only limited to analyzing the differences in stock ownership structure and capital structure before and after tax reform in 2007. Further research can analyze the effect of stock ownership structure and capital structure. Further research can also add another variable, namely profitability.

References


