Tax Incentive, Public Share Proportion, and Firm Performance: Evidence from Indonesian Capital Market

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Indonesian government has changed the taxation law in 2007. The regulation revealed that companies listed on capital market can obtain reduced income tax rate by 5 percent. Decrease in income tax rates is granted to domestic corporate taxpayers listed on capital market that have public ownership over 40 percent of the total paid shares and the shares owned by at least 300 parties. The purpose of this research is to analyze the effectiveness of government regulation (PP) No. 81 of 2007. This research used companies listed on Indonesia Stock Exchange (IDX) which have right offering in 2009-2010 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, public share proportion, firm’s performance

Introduction

In 2007, Indonesian government has changed the taxation law. One form of such change is Government Regulation (PP) No. 81 of 2007 on Decrease of Income Tax Rate for Companies Listed on Indonesia Stock Exchange. This regulation revealed that companies listed on capital market can obtain reduction in income tax rate by 5 percent. The decrease in income tax rates is granted to domestic corporate taxpayers listed on capital market that have public ownership over 40 percent of the total paid shares and shares owned by at least 300 parties. These regulations also set forth in Act No. 36 of 2008 Article 17 Paragraph 2b. The decrease in income tax rate is expected to increase public ownership.

Purba (2004) found that the current proportion of public ownership in Indonesia is still low. The results of statistical testing indicate that if the proportion of public shares is more than 40 percent, the public shares will be positively related to company performance. This conclusion can also explain that poor company performance and corporate governance in Indonesia are caused by the low public ownership.

However, recent studies about reduction in tax rates or tax reform show that tax incentives (tax rate reduction) had no significant effect on the action or condition of the company. Mujahid (2008) examined the effect of tax rate reduction of founders’ shares to the decision of the release of founder shares at initial public offering (IPO). 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. Setyawan (2004) also provided empirical evidence that tax reform of 2000 did not significantly influence the cost structure, capital expenditures, and company profitability.

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Therefore the effectiveness of the policy of granting tax incentives in the form of reduced income tax rate for domestic corporate taxpayers which have more 40 percent of public ownership needs to be investigated. This study aimed to test the impact of the reduction in income tax rates, including factors that encourage increase in public ownership in companies listed on capital market. Such information 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.

Literature Review

Corporate income tax in Indonesia

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

Tax incentive

Tax incentive is an instrument of taxation systems that can be used to influence economic activity. Provision of tax incentives is a government policy. According to Wirahman (2008), tax incentives are tools that can be used by governments to influence investors’ behavior in determining their business activities. International Monetary Fund (IMF) cited in Wirahman (2008) revealed that there are several reasons for a country to give tax incentives:

- **Industrial policy**
  Tax incentives are granted to encourage the advancement of existing industries in a country. With the tax incentives, the big industry players are keen to invest in that country.

- **Transfer of proprietary knowledge or technology**
  Tax incentives are expected to bring large industrial investors so that the knowledge and technologies used by the investors could be transferred to local investors, governments, and communities. This condition can increase knowledge and technology in that country.

- **Employment objective**
  Tax incentives are expected to encourage investors to invest in a country so as to create new jobs for people, especially if such investment is an investment that absorbs a lot of manpower.

- **Training and human capital development**
  Tax incentives are expected to encourage the transfer of knowledge and technology to improve the quality of human resources in that country.

- **Economic diversification**
  Tax incentives are expected to encourage economic diversification for the country to increase the possibility of adding new industrial sectors.

- **Access to overseas market**
  Tax incentives are expected to encourage foreign investors to make investments so that investors would be likely to make international trade with that country. This condition gives access to international markets and encourages the export of that country.

- **Regional objective**
  Tax incentives are expected to drive growth of certain locations in a country so that those locations can have good level of economic growth.

Easson cited in Hartono (2007) revealed that in formulating policy options one should consider the positive and negative sides. The positive side of tax incentives is a stimulus to the investors to invest so that the number of incoming investment would increase economic growth and improve people’s welfare. However, there are several negative impacts of the tax incentives:

- **Tax incentive potentially creating corruption**
  Provision of tax incentives is a policy that
does not apply to all business sectors taxpayers. Determination of business sector that receives incentive depends on government at a certain period.

- **Tax incentives are considered ineffective and inefficient**
  Tax incentives are not effective because the major factors that determine investment decision is not tax incentives. Hartono (2007) revealed that based on research in many countries, macroeconomic and infrastructure condition factor are more considered in determining investment decision than tax incentives. Inefficiency of tax incentives related to the cost that should be sacrificed is greater than tax benefits.

- **Tax incentives lead to injustice**
  Tax incentives do not apply to all taxpayers, so that taxpayers who do not enjoy the tax incentive were treated unfair.

- **Tax incentives cause distortion**
  The purpose of tax incentive policy is to influence investment decisions. Therefore, the distortions arise as a result of tax incentives. It can be justified when market conditions are not able to produce socially optimal level of investment.

**Previous studies**

Previous studies did not specifically link taxes to public ownership. But there are a lot of researches related to effects of changes in tax rates on decisions taken by companies. Padago et al. (1998) conducted a study on the determinants of the decision Italian companies to go public using probit model from 1982 to 1992. This study analyzed the effect of tax incentives in 1984-1986 on the new company listings. The result shows that IPO within three years increased as a result of tax incentives.

Mujahid (2008) 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 percent to 0.5 percent. 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 public ownership structure have also been done. Purba (2004) conducted a study related to the influence of the proportion of public shares of the company's performance. The study examined companies listed on the Jakarta Stock Exchange by using multiple regression. In his research he revealed that the proportion of ownership of shares of public companies in Indonesia is still low. It indicated that companies’ performance in terms of good corporate governance implementation is still weak. The results of statistical tests show that large proportion of public shares has positive relationship with company performance. Proportion of public shares that is more than 40 percent of the public shares will be positively related to company’s performance. This conclusion can also explain that companies’ low performance and poor corporate governance in Indonesia are caused by low public ownership.

**Hypotheses development**

Taxes may affect companies’ decision. Reduction in tax rates is expected to encourage increased public ownership. Pagano et al. (1998) mentioned that tax incentives would increase the probability of IPO. Thus, tax incentives influence the decisions of a company. Decrease in income tax rates shows a decrease in the cost to the company. According to Harris and Raviv (1991), a company tends to use financing option that would bring tax advantages. This is due to the notion that tax advantages enjoyed by a company can increase profit which in turn will increase the value of the company. This leads to the following hypothesis:

H1: Income tax affect the proportion of public ownership in companies listed on IDX.

According Ittuiraga and Saz (1998) cited in Nur’aeni (2010), agency problems arise because of conflicts of desires between company
owners (shareholders majority of shares) with the managing partner. Therefore, ownership structure is considered as being crucial to overcome the agency problems since good ownership structure is materialized a decent company's performance. Purba (2004) conducted a study related to the influence of the proportion of public shares of companies' performance. The results of statistical tests show that the large proportion of public shares have a positive relationship with company performance. If the proportion of public shares is more than 40 percent, public shares will be positively related to company performance. This leads to the following hypothesis:

H2: The proportion of public ownership affect the publicly-listed companies performance.

Research Method

Sample selection

The population of this study is companies listed in Indonesia Stock Exchange. Sample selection is based on purposive sampling. Some of the criteria set for obtaining the sample include:
- The rights offering companies in 2009-2010;
- There is available information about list of shareholders' proportionate shares of the companies;
- There is available information about company's financial statements in 2009-2010.

Variable identification and measurement

This study has two hypotheses. In the first hypothesis, the dependent variable is public ownership (PO). This variable is measured using dummy variables:
- 0 = if the proportion of public ownership of the company is less than 40 percent;
- 1 = if the proportion of public ownership of the company is 40 percent or more.

Independent variable used in the first hypothesis is the income tax (TAX). Variable income tax represents the amount of income tax paid by the company. The first hypothesis also used control variable. Control variables used in this study are firm size, firm age, and leverage. Firm size is measured by using the company's total assets. Company age is computed from a company doing IPO until 2010. Leverage variable is measured using the ratio of total debt to total assets of the company.

The second hypothesis used company's performance as dependent variable. This variable is measured using return on investment (ROI). The ROI is measured by dividing the profit after tax by total assets. The independent variable is public ownership (PO). This variable is measured using dummy variables:
- 0 = if the proportion of public ownership of the company is less than 40 percent;
- 1 = if the proportion of public ownership of the company is 40 percent or more.

Similar to the first hypothesis, the second hypothesis also used the control variable. Control variables used in this study are sales and firm size. Sales variable is the amount of sales obtained by the company. Firm size was measured by using the company's total assets.

Research model

There are two models used to test the research hypotheses. The first model is binary logistic regression based on research conducted by Mujahid (2008), 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 is as follows:

$$\pi(PO) = \frac{\exp(\beta_0 + \beta_1TAX + \beta_2SIZE + \beta_3AGE + \beta_4LEV)}{1 + \exp(\beta_0 + \beta_1TAX + \beta_2SIZE + \beta_3AGE + \beta_4LEV)}$$

where:

- PO = Public ownership
- TAX = Income tax
- SIZE = Firm size
- AGE = Firm age
- LEV = Leverage
The second model is multiple regression. This model is based on research conducted by Purba (2004), 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 is as follows:

\[
ROI = a + b_1PO + c_1SL + c_3SIZE
\]

where:
- \(ROI\) = Return on investment
- \(PO\) = Public ownership
- \(SL\) = Firm sales
- \(SIZE\) = Firm size

**Result and Discussion**

**Sample selection process**

The sample in this study is the rights offerings companies in 2009 until 2010. This research used purposive sampling. The number of 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 1.

**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: 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>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies that have public ownership of less than 40 percent</td>
<td>40</td>
</tr>
<tr>
<td>Companies that have public ownership of more than 40 percent</td>
<td>3</td>
</tr>
<tr>
<td>Total sample</td>
<td>37</td>
</tr>
</tbody>
</table>

**Descriptive statistic**

Public ownership (\(PO\))

The proportion of public ownership is a dummy variable. If the company has proportion of public ownership 40 percent or more, then the value is 1. If the company has proportion of public ownership under 40 percent, 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 is almost entirely less than 40 percent. 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**

In general, the average of \(ROI\) of the company in 2009 is 3.15 percent, whereas in 2010 increased to 5.79 percent. 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 percent to 5 percent.

**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>
<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>0.794</td>
</tr>
</tbody>
</table>

**Table 2. Hosmer and Lemeshow test**

Source: SPSS output

The effect of income tax on public ownership proportion

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.

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 precedent than the funding sources from outside the company (external financing). When companies use external funding, loans (debt) are more precedent 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 (Darminto, 2007). Therefore, leverage does not affect public shareholding.

In addition, tax incentive in the form of reduced corporate tax rate of 5 percent 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 Artini (2009), firm size has no influence on the structure of the ownership company. Hadianto (2008) 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 Sartono in Hadianto (2010), 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 argues that firm’s financing decisions follow a hierarchy in which the sources of funding from within the company (internal financing) are more precedent 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.

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 are greater than 0.05.

These results are consistent with research conducted by Purba (2004) which revealed that less than 40 percent 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 percent. Therefore, the proportion of public ownership has no effect on company performance.

**Conclusion**

Currently the proportion of public ownership in Indonesia can be considered as low. This condition indicates that tax incentive 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 Purba (2004), which revealed that the proportion of public ownership of less than 40 percent 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 to increase 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. Purba (2004) 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.

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**Table 4. Multiple regression result**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>0.051</td>
<td>0.021</td>
<td>2.419</td>
</tr>
<tr>
<td></td>
<td>PO</td>
<td>0.023</td>
<td>0.084</td>
<td>0.051</td>
</tr>
<tr>
<td></td>
<td>SIZE</td>
<td>-3.809E-16</td>
<td>0.000</td>
<td>-0.160</td>
</tr>
<tr>
<td></td>
<td>SL</td>
<td>2.316E-15</td>
<td>0.000</td>
<td>0.084</td>
</tr>
</tbody>
</table>

a. Dependent variable: ROI
Source: SPSS output
References


