



Analysis of Corporate Income Tax Rate Changes and Earnings Management

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Abstract

It is known that tax is one of the biggest contributor to state income all over the world. For Indonesia, income tax contribute an average of 36% to the state's income. With the high contribution of tax, government could adjust the income tax rate in order to increase the tax income. However, the high rate of income tax would have an impact to investment decision as tax will reduce the net income. Usually the taxpayer will apply an earnings management in order to avoid high tax payment. Several previous research have been analyzed the determinants of earnings management and correlation between corporate income tax rate changes and earnings management. This research will be focused on Indonesian listed corporations and several events of corporate income tax rate changes in the last five years. Using discretionary accrual as an earnings management measurement, we found there is a significant impact of corporate income tax rate changes to corporate earnings management with the evidence of income minimization practice. While for earnings management determinant, we only found one variable out of four variables we tested in this research: earnings pressure which is significant in 10%.

Keywords: *tax; corporate income tax rate changes; earnings management; discretionary accrual; income minimization.*

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1. Introduction

Tax is a compulsory contribution to the state which is payable by any individual or entity that is enforced based on the law, without any direct benefit in return and is used for maximum welfare of the people (Government of the Republic of Indonesia, 2007). In Indonesia, income tax contribute more than 50% from any kind of tax payment received by Indonesian Directorate General of Taxes. As for the state, income tax contribute a 36% to the state's income (based on average of 2007 to 2012 state budget or draft of state budget).

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With tax (more specifically income tax) as one of the biggest contributor to the income in state budget, there is a tendency for government to change the tax rate in order to increase income. However, in the other side, tax also affected investment decision as tax have an indirect impact to investor's return. The high tax rate will reduce corporate net income. In order to adjust tax payment, taxpayer usually apply an earnings management to avoid high tax payment. There are a lot of corporate earnings management determinants, ie: corporate governance, tax planning, earning pressure, leverage, corporate size, etc. (Dechow et al., 1995; Burgstahler and Dichev, 1997; Xie et al., 2003; Liu and Ju, 2007; Cohen and Zarowin, 2010).

Guenther (1994); Yamashita and Otagawa (2008); and Slamet and Wijayanti (2012) have conducted the research in order to find the evidence earnings management indication in response of the corporate income tax rate increase/decrease. This research will study the determinants of earnings management and correlation between corporate income tax rate changes and earnings management in Indonesian listed corporation.

2. Literature Review

2.1. Indonesian corporate income tax rate

There have been several change in Indonesian corporate income tax (CIT) rate. In 2008, progressive CIT rate was applied with the tax rate range within 10% to 30%. Starting 2009, a single tax rate was applied. In 2009, the CIT rate was 28% and starting 2010 to date there is a 25% CIT rate (Government of the Republic of Indonesia, 2008).

As an addition to a single tax rate which was applied in 2009, there are several other incentives of CIT rate. For a publicly listed corporation, which at least 40% of its shares were publicly held, there is a 5% reduction to the applied CIT rate. Moreover, for a corporation which has less than IDR 50 billion of sales will got a reduction of their CIT rate (with the lowest CIT rate is 12.5%).

2.2. Indicator of earnings management

Accrual basis are used in accounting report preparation, in which revenue and expenses are recognized when are earned and incurred. Moreover, there is also a revenue-expenses matching concept in this accrual basis. As a contrary to an accrual basis, there is a cash basis (which is not used in accounting report preparation). In this cash basis, revenue and expenses will be recognized when there is a cash inflow or outflow.

There are two concept of accrual basis: non discretionary accrual and discretionary accrual (Dechow et al., 1995). Non discretionary accrual is an accrual income recognition in accordance to the accounting standards (GAAP/IFRS). While a discretionary accrual is an accrual income recognition based on management policy. In this discretionary accrual, corporation could conduct an earnings management in which they can recognize expenses in accordance to management interest to adjust the net income.

2.3. Previous research and hypotheses development

There are a lot of earnings management determinant from the evidence of previous research (Dechow et al., 1995; Burgstahler and Dichev, 1997; Xie et al., 2003; Liu and Ju, 2007; Cohen and Zarowin, 2010). Based on their research, in this research we use tax planning, earnings pressure; debt to equity ratio; and corporate size to test whether these variables are earnings management determinant in Indonesian listed corporation. As for earnings management, we use a discretionary accrual. Moreover, we also test whether the corporate income tax rate changes affected earnings management practice.

Therefore, we formulate the following hypotheses to be tested in this research: there is a significant impact of (1) corporate income tax rate changes; (2) tax planning; (3) earnings pressure; (4) debt to equity ratio; and (5) corporate size to corporate earnings management practice.

3. Research Methodology

The following research methodology is used in this research.

$$DA_{i,t} = \alpha + \beta_1 TAX_{i,t} + \beta_2 EP_{i,t} + \beta_3 DER_{i,t} + \beta_4 SIZE_{i,t} + \varepsilon$$

where:

$DA_{i,t}$ = discretionary accrual of i-corporation at t-time;

$TAX_{i,t}$ = tax planning of i-corporation at t-time;

$EP_{i,t}$ = earnings pressure of i-corporation at t-time;

$DER_{i,t}$ = debt to equity ratio of i-corporation at t-time;

$SIZE_{i,t}$ = size (log of sales) of i-corporation at t-time.

The following calculation/models are used to calculate the variables used ($DA_{i,t}$, $TAX_{i,t}$ and $EP_{i,t}$) in the above research methodology.

$$TA_{i,t} = N_{i,t} - OCF_{i,t}$$

$$TA_{i,t} = NDA_{i,t} + DA_{i,t}$$

$$TA_{i,t} / A_{i,t-1} = \alpha (1/A_{i,t-1}) + \beta_1 (\Delta REV_{i,t} - \Delta REC_{i,t}) / A_{i,t-1} + \beta_2 (PPE_{i,t} / A_{i,t-1}) + \varepsilon$$

$$DA_{i,t} = TA_{i,t} / A_{i,t-1} - (\alpha (1/A_{i,t-1}) + \beta_1 (\Delta REV_{i,t} - \Delta REC_{i,t}) / A_{i,t-1} + \beta_2 (PPE_{i,t} / A_{i,t-1}))$$

$$TAX_{i,t} = (\sum_t^{t-1} CIT_{i,t} (PTI - CTE)) / A_{i,t}$$

$$EP_{i,t} = (N_{i,t} - N_{i,t-1}) / A_{i,t-1}$$

where:

$TA_{i,t}$ = total accruals of i-corporation at t-time;

$N_{i,t}$ = net income of i-corporation at t-time;

- $OCF_{i,t}$ = operation cash flow of i-corporation at t-time;
- $NDA_{i,t}$ = non discretionary accrual of i-corporation at t-time;
- $DA_{i,t}$ = discretionary accrual of i-corporation at t-time;
- $A_{i,t}$ = total assets of i-corporation at t-time;
- $\Delta REV_{i,t}$ = revenue difference of i-corporation at t-time and t-1-time;
- $\Delta REC_{i,t}$ = receivables difference of i-corporation at t-time and t-1-time;
- $PPE_{i,t}$ = total of property, plant and equipment of i-corporation at t-time;
- $TAX_{i,t}$ = tax planning of i-corporation at t-time;
- $CIT_{i,t}$ = corporate income tax rate of i-corporation at t-time;
- PTI = pretax income;
- CTE = current portion of total tax expenses;
- $EP_{i,t}$ = earnings pressure of i-corporation at t-time.

The sample used in this research is listed corporation in Indonesia stock exchange which has been listed since 2007 and its sales are more than IDR 50 billion.

4. Discussion and analysis

Table 1 provide paired samples T-test to test our first hypothesis (whether there is a significant impact of corporate income tax changes to corporate earnings management practice or not).

Table 1. Testing of first hypothesis

Period	2007-2008	2008-2009	2009-2010	2010-2011
Coefficient	0.000*	0.000*	0.000*	0.000*

* Significant in 1%

From table 1, we conclude that there is a significant impact of corporate income tax changes to corporate earnings management practice. This means Indonesian corporation used the CIT rate changes event to adjust their reported income (conduct an earnings management). From our calculation of discretionary accrual, we found that 92% corporation from our sample have a negative discretionary accrual. A negative discretionary accrual indicate income minimization, one method of earnings management.

The regression result to test second to fifth hypotheses is available at table 2. From table 2, it is evident that there is only one variable which has a significant impact to corporate earnings management: earnings pressure (significant in 10%).

Table 2. Testing of second to fifth hypotheses

Variable	TAX	EP	DER	SIZE
Coefficient	1.348	-2.207***	-0.035	-0.027

*** Significant in 10%

From table 2, we found the evidence that earnings pressure has a significant negative impact to corporate earnings management. Similar with our first finding, we can conclude that income minimization earnings management is in effect in the tested corporation.

5. Conclusion

From our research, we can conclude that there is a significant impact between corporate income tax rate changes and corporate earnings management. While in our research of corporate earnings management determinants, we only found earnings pressure that has a significant impact to corporate earnings management. Furthermore, we also conclude that there is an evidence of income minimization practice we have found in this research.

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