THE RELATIONSHIP BETWEEN FINANCIAL LEVERAGE, DEBT COVENANT AND DIVIDEND PAYOUT RATIO TO INCOME SMOOTHING PRACTICES
(Empirical Study On Companies Listed In Indonesia Stock Exchange On 2006-2011)

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Abstract: This research aims to analyze the relationship between financial leverage, debt covenant, and dividend payout ratio to income smoothing practices on companies listed on Indonesia Stock Exchange (IDX) on 2006-2011 periods. The amount of samples for the observation as the results of Eckel Index is 18 companies. Hypothesis tested by t-test to test regression partially and F-test to test regression simultaneously. The regression model used is multiple regression. The results of research show that financial leverage, debt covenant and dividend payout ratio do not significantly influence income smoothing practices partially and simultaneously. This caused by many limitation of this research such as the amount of variables are few and the amount of samples are only 18 samples because the delimitation of companies observed which excludes manufacturing and banking companies and lists on IDX.

Background

Financial statement provides information for the owner and the stakeholder in order to making decision. For example, investors examine whether the company is trustworthy in making high profit or not from the financial statement. Meanwhile, the owner can use financial statement to evaluate the management’s work and the company’s financial performance. One of the parameter used in evaluating company’s performances is earnings. Management uses many ways in making the company could face the globalization such as expanding the business with short and long term business strategy. In this day, there are a strategy trends to expand the company by joining the stock exchange (go public). Based on Indonesia Stock Exchange, in early 2000, there were 259 companies listed go public (Wangi, 2010). It gradually increases until in 2012, there are 453 companies (www.idx.co.id).

This study focuses on the practice of opportunistic earnings management, one of the ways that can be used in the practice of earnings management is to use income smoothing technique (income smoothing). Belkaoui (2000, in Amanza 2012) suggests that income smoothing understanding by management is a deliberate effort in order to minimize fluctuations in the rate of profit according to the company are considered normal. Because the investors prefer the stable profit. The stable the profit, the stable dividend and wealth will be gained. For the management, the stable profit shows good signal to the creditor that the management performance is on stable state.

There are many factors that affect management practice income smoothing. But for this study, there are financial leverage, debt covenant and dividend payout ratio. When the earnings manipulated, the financial ratios in the financial statements will also be manipulated. Finally, when a user of financial statements is using the information that has been manipulated for the purpose of decision making, the decision is manipulated indirectly. On the other hand, the financial statements are used by investors in making economic decisions.

According to Sartono (2001 in Budiasih 2009) financial leverage shows proportion of debt to finance its investment. Another leverage ratio is debt equity ratio or debt covenant. It illustrates company’s capability to guarantee the debt with its own equity and the proportion of company’s expenditure which is financed by shareholders (equity) and loans. High Leverage
Company has big risk to suffer losses because the higher leverage causes the higher financing proportion of a company from debt or loans. So it tends to break loan’s agreement because company cannot pay the debt on due date. The larger the firm's debt, the greater the risk faced by investors so that investors will ask for higher profits. Due to these conditions companies tend to practice income smoothing.

Joining the Indonesia Stock Exchange means companies sell the shares or obligations to public. Instead, the companies have to pay dividend to shareholders. The Dividend Policy set dividend distribution to investors or shareholders. The amount of the dividend depends on the amount of profits. From the dividend ratio, investors probably interest to invest. One of dividend policy is constant dividend payout ratio. The DPR imply the amount of dividend may be changed according to the earnings with constant dividend ratio. Investor typically assume the stable profit will effect to the stable dividend (Hepworth (1953, cited Rachmawati 2002). So companies tend to do income smoothing practices in order to make the fluctuation of earnings is stable.

**Theoretical Views and Hypothesis Development**

1. **Agency Theory**
   This theory assumes that the respective individuals motivated solely by self-interest that is a conflict of interest between principal and agent. Shareholders as the principal want high profitability every year to increase the wealth. Managers as agents are motivated to maximize economic needs by doing disfunctional behaviors. Because each individual has a tendency to maximize its own interests, information asymmetry comes out. It is possible for the management (agent) to hide information from the principals primarily related to management performance within the company even though it does not show the real condition of the company. One of the way used by managers is income smoothing. So this theory supports the income smoothing practices.

2. **Signalling Theory**
   The signaling theory explains why the company has encouragement to provide information on external financial reports so there is asymmetry of information between company and external parties. Signalling theory describes how companies give signal to the investor that the companies have good future by disclosure the information in financial statement. So the financial statement that published in Indonesia Stock Exchange must give relevant, complete and accurate information in order to persuade the investors. Giving good signal to investors by disclose the ratio of financial statement in order to pull investors attention. For example, the leverage ratio consists of financial leverage and debt covenant or debt to equity ratio. In order to show a good ratio probably manage practices income smoothing.

**Income Smoothing**

Income smoothing can be defined as an effort to minimize the number of reported earnings if actual income is greater than normal profits, and efforts to increase the number of reported earnings if actual earnings are smaller than normal profits (Amanza, 2012). Belkaoui (2000) defines as income smoothing is a deliberate attempt made to try to reduce the management of abnormal variations in the company's profits in order to achieve a normal level for the company. So it means income smoothing is one of earnings management efforts by reduce the fluctuation in the company’s profit.

According to Eckel research (1981, in Dewi 2011) income smoothing can be caused by two types, namely:
1. Natural Smoothing
   Stating that income smoothing process is inherently generate a stream of flat income. It means the income will be smooth by itself without the intervention of other parties.

2. Intentional Smoothing/Designed Smoothing
   Stating income process is influenced by other parties’ actions, such as management. Designed smoothing is divided into two, there are artificial smoothing and real smoothing. Artificial smoothing is income smoothing process from doing such manipulating the accounting. Real smoothing is the process how management’s actions to control the economy activities.

Some Reasons Management Conduct Income Smoothing
   There are some reasons management conduct income smoothing. Hepworth (1953, cited Rachmawati 2002) states motivation that pushing for income smoothing is to improve relations with creditors, investors, and employees as well as smoothing the business cycle through a psychological process. Hepworth (1953, cited Rachmawati 2002) said income smoothing is used to:
   1. Reduce the tax
   2. Enhance investor confidence, as investors typically assume that stability of income will affect the stability of the dividend.
   3. Maintain good relations between managers and workers. If the company reported a sharp increase profits, they (workers) will demand higher wages and salaries.

Factors Influence Income Smoothing
   Financial leverage is defined by debt to total assets. It is calculated by dividing total debt to total assets. The indications of income smoothing practices could exist because the companies avoid debt infringement that implied from the capability of paying debts with the assets. A high leverage company is expected doing income smoothing due to the default possibility. So, management makes strategy in order to increase the profit.

H1: The financial leverage significantly influences the income smoothing practices

Debt Covenant or debt equity ratio implies the capability of company in paying debt with the equity. The higher the DER, the higher proportion of company finance from debt. It dispose company breaks the loan’s agreement due to cannot pay debt on due date. So company practices income smoothing to showing that the company has stable and good profit. According to Rahmawati (2002), debt equity ratio has a positive relation with income smoothing.

H2: The debt covenant significantly influences the income smoothing practices

Investors choose the company to invest by considering the dividend. Company decides the amount of dividend (dividend per share) that will be given to shareholder by making dividend policy. To enhance investors’s confidence, company should show a stable profit that results stable dividend. Because of that, managers could do strategy such income smoothing in stabilizing income.

H3: The dividend payout ratio significantly influences the income smoothing practices

Population And Sample
   The population of study is all public companies listed on the Indonesia Stock Exchange excluding manufacturing and banking companies. The companies will be observed are agriculture, forestry and fishing, mining and mining services, constructions, securities, insurance, real estate and property, transportation services, telecommunication, whole sale and...
retail trade, hotel and travel services, holding and other investment companies, and also others sectors. The total of the companies are 143 of 453 companies.

**Variables And Measurements**

**Variable Dependent**

Dependent variable in this study is income smoothing. Author classify if there are income smoothing practices or not in a company using Eckel index (1981). Eckel index is chosen as the most effective to measure income smoothing because most of the previous research also use it. Eckel used *Coefficient Variation* (CV) of income variables and net income variables. Income smoothing is calculated as follows (Eckel, 1981):

\[ IS = \frac{CV\Delta I}{CV\Delta S} \]

and where \( IS < 1 \)

Where:
- \( IS \) : Income Smoothing
- \( \Delta I \) : Change in net income in a period
- \( \Delta S \) : Change in sales/revenue in a period
- \( CV \) : Coefficient Variation of variables, i.e. the standard deviation divided by the average change in earnings(I) or sales/revenue (S).
- \( CV\Delta I \) : Coefficient Variation of change in net income
- \( CV\Delta S \) : Coefficient Variation of change in sales/revenue

\( CV\Delta I/ CV\Delta S \) is calculated as follow:

\[ CV\Delta I \text{ or } CV\Delta S = \sqrt{\frac{\text{Variance}}{\text{Expected Value}}} \]

or:

\[ CV\Delta I \text{ or } CV\Delta S = \sqrt{\frac{\sum (\Delta x - \bar{\Delta x})^2}{n-1}} / \Delta \bar{x} \]

\( \Delta x \) : change in net income or sales/revenue

\( \Delta \bar{x} \) : the average change in net income or sales/revenue

\( n \) : the number of years observed

**Variables Independent**

**Financial Leverage**

Financial leverage is proxied by debt to total assets acquire by total debt divided by total assets (Budiasih, 2009).

\[ \text{Debt to assets ratio} = \frac{\text{total debt}}{\text{total assets}} \]

**Debt Covenant**

Debt Covenant (Rahmawati, 2002) is measured by debt to equity ratio, by the formula:
Debt to equity ratio = \( \frac{\text{total debt}}{\text{total equity}} \)

**Dividend Payout Ratio**

Similar with Budiasih (2009) and Kustono (2009), this variable is measured by the ratio of the scale, using the formula Dividend Payout Ratio by comparing the dividend per share by the earnings per share by the formula:

\[ \text{DPR} = \frac{\text{Dividend per share}}{\text{Earning per share}} \]

**Data Collection Methods**

The data used in this study is secondary data. The source of data in this study is annual financial statement for 2006-2011 periods on Indonesia Stock Exchange. The data is obtained from ICMD and website link [www.idx.co.id](http://www.idx.co.id). It also uses information taken from some literatures, book, and websites accordance the topic research.

**Techniques Analysis**

The method of analysis used in this study is the method of quantitative data analysis using SPSS 17 as a tool for test data. There are several tests for analyzing, there are normality tests, multicollinearity tests, heterocedacity tests, autocorrelation tests, determinant coefficient tests, and some descriptive statistics tests. In analyzing the hypothesis, this study uses t-test for tests regression partially and F-test for test regression simultaneously. The model regression of this research is multiple regressions, as follows:

\[ \text{IS} = \alpha + \beta_1 \text{DARit} + \beta_2 \text{DERit} + \beta_3 \text{DPR} + \varepsilon_{it} \ldots \]

Where:
- \( \text{ISit} \): Income Smoothing Ranks based Eckel index on firm i in year t
- \( \beta_1 \text{DARit} \): Financial Leverage Ratio on firm i in year t
- \( \beta_2 \text{DERit} \): Debt Covenant (Debt to Equity Ratio) on firm i in year t
- \( \beta_3 \text{DPRit} \): Dividend PayOut Ratio on firm i in year t
- \( \varepsilon_{it} \): error term

**Description of Research Samples**

This research observed all companies listed in *Indonesia Stock Exchange* but manufacturing and banking companies. According to *Indonesia Stock Exchange*, there are 453 companies joining IDX. The total of companies observed are 145 companies. So the companies observed are agriculture, forestry and fishing, mining and mining services, constructions, securities, insurance, real estate and property, transportation services, telecommunication, whole sale and retail trade, hotel and travel services, holding and other investment companies, and also others sectors. To classify the samples, this research uses Eckel Index. As results, the table below shows the list of companies as the samples that do income smoothing.

**Table 1**

<table>
<thead>
<tr>
<th>No.</th>
<th>Code</th>
<th>Name of Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IIKP</td>
<td>Inti Kapuas Arowana (Inti Indah Karya Plasindo) Tbk</td>
</tr>
<tr>
<td>2</td>
<td>BFIN</td>
<td>BFIN Finance Tbk</td>
</tr>
<tr>
<td>3</td>
<td>CFIN</td>
<td>Clipan Finance Indonesia Tbk</td>
</tr>
</tbody>
</table>
In table 1, we can see there are 26 companies do income smoothing from Eckel Index results. Companies from number 19 until 26, they are DART, MDLN, RBSM, ALKA, IDKM, INDX, ITTG, TMPO are excluded because some of data, that is dividend data, for this research is unavailable. So, the total of research samples are 18 companies.

Results
Normality Tests
Normality test is used for examine the distribution of data. In this study, to detect whether or not residual normal distribution, it uses Kolgomorov-Smirnov (KS Test). If the significance probability value of more than 0.05($\alpha >0.05$), then the data are normally distributed. If the probability value of less significance than the value of 0.05 ($\alpha<0.05$), the data are not normally distributed. If the data are not normally distributed, it is necessary to transform the logarithm (Ln) of the regression model, so that the data can be distributed normally. The KS-Tests is conducted by SPSS 17 for windows as seen on Table 3 below.

<table>
<thead>
<tr>
<th>Companies</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>LPPF</td>
</tr>
<tr>
<td>5</td>
<td>TRUS</td>
</tr>
<tr>
<td>6</td>
<td>APIC</td>
</tr>
<tr>
<td>7</td>
<td>ARTA</td>
</tr>
<tr>
<td>8</td>
<td>TRIM</td>
</tr>
<tr>
<td>9</td>
<td>ABDA</td>
</tr>
<tr>
<td>10</td>
<td>AMAG</td>
</tr>
<tr>
<td>11</td>
<td>MREI</td>
</tr>
<tr>
<td>12</td>
<td>PNIN</td>
</tr>
<tr>
<td>13</td>
<td>PNLF</td>
</tr>
<tr>
<td>14</td>
<td>GMTD</td>
</tr>
<tr>
<td>15</td>
<td>LAMI</td>
</tr>
<tr>
<td>16</td>
<td>PUDP</td>
</tr>
<tr>
<td>17</td>
<td>SONA</td>
</tr>
<tr>
<td>18</td>
<td>CENT</td>
</tr>
<tr>
<td>19</td>
<td>DART</td>
</tr>
<tr>
<td>20</td>
<td>MDLN</td>
</tr>
<tr>
<td>21</td>
<td>RBSM</td>
</tr>
<tr>
<td>22</td>
<td>ALKA</td>
</tr>
<tr>
<td>23</td>
<td>IDKM</td>
</tr>
<tr>
<td>24</td>
<td>INDX</td>
</tr>
<tr>
<td>25</td>
<td>ITTG</td>
</tr>
<tr>
<td>26</td>
<td>TMPO</td>
</tr>
</tbody>
</table>

Table One-Sample Kolmogorov-Smirnov Test

<table>
<thead>
<tr>
<th>N</th>
<th>Standardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>

Normal Parameters$^{a,b}$ Mean .000000
From the table above, the Kolgomorov-Smirnov Z is 0.519 and Asymp.Sig (2-tailed) is 0.950 which means the Kolgomorov-Smirnov has significance level for 0.950. So it is more than 0.05 which means the data is normally distributed. Therefore, to test the hypothesis, it uses t-test.

**Multicollinearity Tests**

Multicollinearity Tests is used to examine whether there is any correlation among the independent variables. For this study, to test the correlation among independent variables, it uses Variance Inflation Factor (VIF). The method is examining each independent variables values to dependent values. If the VIF values is less than 10, it shows there is no multicollinearity. The other method is correlating each independent variables. If the coefficients among independent variable less than 0.5, it means there is no multicollinearity as well. The Multicollinearity tests is conducted by SPSS 17 for windows as seen on Tables below.

**Table Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 DAR</td>
<td>.137</td>
<td>7.279</td>
<td></td>
</tr>
<tr>
<td>1 DER</td>
<td>.143</td>
<td>6.979</td>
<td></td>
</tr>
<tr>
<td>1 DPR</td>
<td>.863</td>
<td>1.158</td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: IS

**Table Coefficient Correlations**

<table>
<thead>
<tr>
<th>Model</th>
<th>DPR</th>
<th>DER</th>
<th>DAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Correlations</td>
<td>1.000</td>
<td>-.306</td>
<td>.362</td>
</tr>
<tr>
<td>DER</td>
<td>-.306</td>
<td>1.000</td>
<td>-.925</td>
</tr>
<tr>
<td>DAR</td>
<td>.362</td>
<td>-.925</td>
<td>1.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Covariances</th>
<th>DPR</th>
<th>DER</th>
<th>DAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 DER</td>
<td>.049</td>
<td>-.016</td>
<td>.062</td>
<td></td>
</tr>
<tr>
<td>1 DAR</td>
<td>-.016</td>
<td>.056</td>
<td>-.169</td>
<td></td>
</tr>
<tr>
<td>1 DPR</td>
<td>.062</td>
<td>-.169</td>
<td>.598</td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: IS

From Table , the VIF values of each DAR, DER and DPR are 7.279; 6.979 and 1.158. It shows each VIF values of independent variables are less than 10, which means there are no
multicollinearity among them. From Table 5, the correlation values of each DAR, DER and DPR is less than 0.5 which means there is no correlation as well.

**Heterocedacity Tests**

A model has heterocedacity problems if there is variance of variables of different model. This means in the model exist different variance of the residuals of regression models. This tests is used to examine whether the problems is exist or not. This study use Gletjer test by correlating the absolute residual values of each independent variables. If the probability has significant values is more than the alpha values (0.05), so there is no heterocedacity. The results is presented on Table below.

<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></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>-1.511E-16</td>
<td>.179</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>DAR</td>
<td>.000</td>
<td>.773</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>DER</td>
<td>.000</td>
<td>.236</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>DPR</td>
<td>.000</td>
<td>.222</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Abresid

The table above shows the significant values of each variables are 1.000. The correlation between DAR and Unstandardized Residual is 0.773. The correlation between DER and Unstandardized Residual is 0.236. The correlation between DPR and Unstandardized Residual is 0.222. In other word, the correlation of each residual variables are more than the alpha. It means there is no heterocedacity problems on the models.

**Autocorrelation Tests**

Autocorrelation Tests is used to examine whether there is correlation among observed data by analyzing with cross section or time series. This test usually use Durbin-Watson method as seen on Table below.

<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>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.504a</td>
<td>.254</td>
<td>.094</td>
<td>.254649899</td>
<td>1.875</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), DPR, DER, DAR
b. Dependent Variable: IS

Simply, a model of research contains no autocorrelation, if the probability of DW values > 0.05. From the table, the Durbin-Watson values is 1.875. It shows there are no autocorrelation on the model of this research because the DW values is more than 0.05.

**Determinant Coefficients Tests**

The coefficient of determination ($R^2$) was essentially measure how far the model's ability to explain variation in the dependent variable. The coefficient of determination ($R^2$) is between zero and up to one. Adjusted $R^2$ value means the ability of the independent variables
provides almost all the information needed to predict the variation in the dependent variable. The Determinant Coefficient Test results can be seen on Table 8 below.

### Table Determinant Coefficients Tests

<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>.504&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.254</td>
<td>.094</td>
<td>.25469899</td>
</tr>
</tbody>
</table>

* a. Predictors: (Constant), DPR, DER, DAR

From the table above, the value of R square ($R^2$) is 0.254. The Adjusted R square is 0.094 which indicate the contribution of independent variables (DAR, DER, and DPR) is only 9.4% in affecting the Income Smoothing practices. The rest of 90.6% are influenced of others factors out of observed variables. The standard error of the estimate is 0.25469899.

### Descriptive Statistics

The descriptive statistics describe collected and summarized data as an overview of variables data. It usually consists of mean, deviation standard, maximum and minimum. It includes Income Smoothing (IS) as results from Eckel Index, Financial Leverage (DAR), Debt Convenant (DER) and Dividend Payout Ratio (DPR).

### Table Descriptive Statistics for IS, DAR, DER and DPR

<table>
<thead>
<tr>
<th></th>
<th>IS</th>
<th>DAR</th>
<th>DER</th>
<th>DPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Valid 18</td>
<td>18</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Missing 0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>.62359050</td>
<td>.437789</td>
<td>1.044411</td>
<td>.233044</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.267504367</td>
<td>.2155513</td>
<td>.6907409</td>
<td>.2997292</td>
</tr>
<tr>
<td>Minimum</td>
<td>.163133</td>
<td>.0083</td>
<td>.0083</td>
<td>-.3031</td>
</tr>
<tr>
<td>Maximum</td>
<td>.994841</td>
<td>.8251</td>
<td>2.2320</td>
<td>.9456</td>
</tr>
</tbody>
</table>

From the table, it shows some values for all variables data for six years period (2006-2011). The N is the amount of 18 samples with 0 missing. For IS, The standard deviation is 0.267504367 which indicate the deviation of data span from -0.267504367 to 0.267504367. Meanwhile, for DAR, the standard deviation is 0.2155513, which indicate the deviation of data span from -0.2155513 to 0.2155513. In the part DER, the standard deviation is 0.6907409, which indicate the deviation of data span from -0.6907409 to 0.6907409. Meanwhile, for DPR, the standard deviation is 0.2997292, which indicate the deviation of data span from -0.2997292 to 0.2997292. The more detail will be explained on discussion part.

### Hypothesis Testing

#### Partial Regression Test (t-test)

Statistical t-test basically shows how much influence an individual independent variable in explaining the dependent variable. If the significant values is less than 0.05, the hypothesis is accepted. If the significant is more than 0.05, the hypothesis is rejected. The other method is looking at the t test values compared to the t table. If the t value is more than the values on t table, the hypothesis is accepted, and vice versa. The t-test can be seen on Table 10 below.

This study is used multiple regression model to examine the relationship among variables as follows:
IS = α + β1 DARit + β2DERit + β3 DPRit + εit.....

Where:
ISit : Income Smoothing Ranks based Eckel index on firm i in year t
β1 DARit : Financial Leverage Ratio on firm i in year t
β2 DERit : Debt Covenant (Debt to Equity Ratio) on firm i in year t
β3 DPRit : Dividend PayOut Ratio on firm i in year t
εit : error term

**Table Coefficients**

<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>.429</td>
</tr>
<tr>
<td>DAR</td>
<td>.044</td>
<td>.773</td>
</tr>
<tr>
<td>DER</td>
<td>.179</td>
<td>.236</td>
</tr>
<tr>
<td>DPR</td>
<td>-.049</td>
<td>.222</td>
</tr>
</tbody>
</table>

a. Dependent Variable: IS

The interpretation of partial regression tests (t-Test) as follows:

**H1 : The financial leverage significantly influences the income smoothing practices**

Based on Table above, the regression coefficient of DAR (X1) is 0.36 which show a positive value. But the significant value is 0.955 which mean the DAR value is more than 0.05 which mean the hypothesis is rejected. Therefore, the financial leverage is not significant influencing the income smoothing practices.

**H2 : The debt covenant significantly influences the income smoothing practices**

Based on Table above, the regression coefficient of DER (X2) is 0.463 which show positive value. But the significant value is 0.461 which mean the DER value is more than 0.05 which mean the hypothesis is rejected. Therefore, the debt covenant is not significant influencing the income smoothing practices.

**H3 : The dividend payout ratio significantly influences the income smoothing practices**

Based on Table above, the regression coefficient of DPR (X3) is -0.055 which show negative value. The significant value is 0.827 which mean the DPR value is more than 0.05 which mean the hypothesis is rejected. Therefore, the dividend payout ratio is not significant influencing the income smoothing practices.

**Simultaneous Regression Test (F-test)**

F-test basically shows whether all the independent variables are defined in the study have a simultaneous effect on the dependent variable. If the significant values is less than 0.05, the hypothesis is accepted. If the significant is more than 0.05, the hypothesis is rejected. The other method is looking at the F test values compared to the F table. If the F value is more than the values on F table, the hypothesis is accepted, and vice versa. The simultaneous regression tests of this study use ANOVA as seen on table 10 below.

**Table ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
</table>

10
The interpretation of hypothesis testing simultaneously are:

**H4: Financial Leverage, Debt Covenant and Dividend Payout Ratio significantly influences the Income Smoothing Practices simultaneously.**

Based on the Table, the significant value is 0.237. It is more than 0.05 which mean the hypothesis is rejected. It shows the all independent variables (DAR, DER and DPR) simultaneously are not influencing the dependent variables (IS).

**Analysis**

**Descriptive Statistics**

The descriptive test results is showed on Table 2. For IS, The standard deviation is 0.267504367 which indicate the deviation of data span from -0.267504367 to 0.267504367. The minimum values of IS is 0.163133 that is owned by PT. Inti Kapuas Arowana (Inti Indah Karya Plasindo) Tbk. The maximum values of IS is 0.994841 that is owned by PT. Asuransi Bina Dana Arta Tbk. The mean is 0.62359050 which means the average IS values for the samples is about 62.36%.

Meanwhile, for DAR, the standard deviation is 0.2155513, which indicate the deviation of data span from -0.2155513 to 0.2155513. The minimum value of DAR is 0.0083 that is owned by PT. Inti Kapuas Arowana (Inti Indah Karya Plasindo) Tbk. The maximum values of DAR is 0.8251 that owned by PT. Pacific Utama Tbk. The mean of DAR is 0.437789 which mean the average DAR values for the samples is about 43.78%.

In the part DER, the standard deviation is 0.6907409, which indicate the deviation of data span from -0.6907409 to 0.6907409. The minimum value of DAR is 0.0083 that is owned by PT. Inti Kapuas Arowana (Inti Indah Karya Plasindo) Tbk. The maximum values of DER is 2.2320 that owned by PT. Asuransi Bina Dana Arta Tbk. The mean of DER is 1.044411 which mean the average DER values for the samples is about 104.44%.

Meanwhile, for DPR, the standard deviation is 0.2997292, which indicate the deviation of data span from -0.2997292 to 0.2997292. The minimum value of DPR is -0.3031 that is owned by PT. Pacific Utama Tbk. The maximum values of DPR is 0.9456 that owned by PT. Pudjiadi Prestige Limited Tbk. The mean of DPR is 0.233044 which mean the average DPR values for the samples is about 23.30%.

**Hypothesis Tests with Partial Regression Test (t-test)**

Based on the t-test have been conducted to model of this research, the independent variables do not significantly influence the dependent variables partially. In other word, all independent variables have no relationship to the dependent variables.

**First Hypothesis**

For the first hypothesis, it examines the influences of financial leverage to income smoothing practices. From the Table 10, the significant value of DAR (Financial Leverage) is 0.955 which is bigger than 0.05. It means Financial Leverage has no relationship to the Income Smoothing Practices. Financial Leverage is measured by using Debt to Assets Ratios.

Debt to Assets ratio shows how much assets of a company is funded by loan or debt. The higher DAR means the higher the amount of debt that used for the investment in order to earn company’s profit. Investors/Creditur usually prefers smaller debt ratio because of the the
bigger of confidence or trust of investors in liquidation time. Similar to Jusuf and Soraya (2004), Widyaningdyah (2001) and Subekti (2007, cited from Kustono, 2011) research that DAR was significantly influence the income smoothing.

Jusuf and Soraya (2004) examines the factors influence income smoothing, the factors are size, profitability, leverage and the status of companies on companies listed on JSX. The samples were divided to domestic and foreign companies. The model of the research is logistic regression. The results show leverage has correlation with the income smoothing. In addition, the leverage has significant influence to income smoothing if it is not combined with another variable such as size, profitability and status of the company.

Widyaningdyah (2001) examines the factors influence earning management, those are auditor reputation, board directors, leverage and the stock on the IPO (Initial Public Offering) to earning managements on JSX for 1994-1997 periods. The model is used multiple regressions. This results show only leverage significantly influence earnings management which mean earnings related to the external source of the funds especially debts.

But the results of the t-test show the opposite way. The debt to assets ratio does not influence the income smoothing practices. This is supported by Budiasih (2009). Budiasih (2009) researched about factors influence income smoothing on manufacturing companies listed on Indonesia Stock Exchange in 2002-2006. The analyzed factors are company size, profitability, financial leverage and dividend payout ratio. The research used Eckel index to measure income smoothing. The results showed that company size, profitability and dividend payout ratio has influences to income smoothing and only financial leverage was not affecting. Jusuf and Soraya (2004) and Widyaningdyah (2001), and Budiasih (2009) have a logit regression of their model research. This research model is multiple regression because this research samples are only companies do income smoothing.

This research’s first hypothesis is also opposite with debt covenant hypothesis which interpose that company in bad financial position and do loan agreement tends to do earnings management by increasing the income. It is also contrast with the signaling theory which describes company would show good signal to the outsider that company has stable profit from the financial ratio such as the financial leverage. The financial leverage does not significantly influence income smoothing practices done by management because of the proportion of the debt of companies is still proper and the debt controlling of management might be work well. It means management work well in getting good performance for the owner (agent) which support the agency theory.

Second Hypothesis

For the second hypothesis, it examines the influences of debt covenant to income smoothing practices. From Table 10, the significant value of DER (Debt Covenant) is 0.461 which is bigger than 0.05. It means Debt Covenant has no relationship to the Income Smoothing Practices. Debt Covenant is measured by using Debt to Equity Ratios.

Debt to Equity Ratio shows how much the proportion of equity of company from the loan/debt. The higher the ratio, the bigger the creditor/investors’ disadvantage because the capital warrant of the owner is getting smaller. The research supported that debt to equity ratio or debt covenant does influence the income smoothing significantly are Masodah (2007) and Rachmawati (2002). The differences are Rachmawati and Muid (2012) used logistic regressions, while Masodah (2007) and this research is multiple regressions because this research samples are only companies do income smoothing.

studied about factors that influence income smoothing and the comparison between return stock of company who do income smoothing and company who do not. The title is “Analisis Faktor-Faktor Yang Mempengaruhi Praktik Perataan Laba dan Hubungannya dengan Return Saham Perusahaan Yang Melakukan dan Tidak Melakukan Perataan Laba Pada Perusahaan Yang Listing Di Bursa Efek Jakarta”. With Eckel index, Rachmawati differentiate company who did income smoothing or not on 1997-2000. The factors are firm size, winner/loser stock, debt to equity and sectoral group. The study shows that debt to equity and sectoral group influence significantly while the others do not.

On the contrary, the results of t-test on Table 10 show DER does not influence income smoothing. This might be happened because of the DAR level of samples is too low. The companies observed are on secondary data which mean those have insignificant growth as well. In other word, companies do not depend much to debt in financing the capital, because of the facilitation given by capital market in paying debt. It is also contrast with the signaling theory which describes company would show good signal to the outsider that company has stable profit from the financial ratio such as Debt Covenant (debt to equity ratio).

Companies listed on Indonesia Stock Exchange have facilitation to get loan from PT. Kliring and KPEI (Pinjaman Efek di Indonesia) under Bapepam controls, issue the Surat Utang Negara (SUN) and obligation easier which cause the risk of debt is smaller. DER in this study does not show the management performance but the proportion of debt to finance the investment. Masodah (2007) and Rahmawati (2002) researched on manufacturing and banking companies which those are on primary sectors of industries. Those companies have significant growth which mean the assets, debts and equity level are higher than secondary sectors. Rachmawati and Muid (2012) is also supported that debt covenant (DER) does not significantly influence income smoothing practices.

**Third Hypothesis**

For the third hypothesis, it examines the influences of dividend payout ratio to income smoothing practices. From Table 10, the significant value of DPR (Dividend Payout Ratio) is 0.827 which is bigger than 0.05. It means Dividend Payout Ratio does not influence to Income Smoothing Practices. Dividend Payout Ratio is measured by dividing dividend per share and earnings (loss) per share.

Dividend Payout Ratio is used for seeing how to distribute dividend in amount and form. Investors choose the company to invest by considering the dividend. Company decides the amount of dividend (dividend per share) that will be given to shareholder by making dividend policy. To enhance investors’s confidence, company should show a stable profit that results stable dividend. Because of that, managers could do strategy such income smoothing in stabilizing income. This means Dividend Payout Ratio significantly influences Income Smoothing Practices which supported by Budiasih (2009).

The other way, this research results that Dividend Payout Ratio does not significantly influences Income Smoothing Practices. This is supported by Kustono (2009). Both Kustono (2009) and Budiasih (2009) used logit model of regression. This research used multiple regressions as research model but it shows different results from Budiasih (2009).

Budiasih (2009) studied factors influencing the practices of income smoothing in manufacturing and financial firms listed on the IDX during 2002-2006. The title is The title is “Faktor-Faktor Yang Mempengaruhi Praktik Perataan Laba”. The factors are companies sizes, profitability, financial leverage and dividend payout ratio. Samples consists of 84 firms. The results showed all those factors have positive and significant impact on income smoothing practices which mean the dividend payout ratio has significant influence to income smoothing.

Kustono (2009) research’s title is “Pengaruh Ukuran, Dividend Payout, Risiko Spesifik, dan Pertumbuhan Perusahaan terhadap Praktik Perataan Laba pada Perusahaan
The first, second, third, fourth hypothesis assumed firm size, dividend payout ratio, firm specific-risk, and growth of firm influenced income smoothing. The results showed only growth of firm that influenced the income smoothing practical. Instead, the others factor haven’t influenced it.

The Dividend Payout Ratio of this research samples are also too low. The companies observed are on secondary data which mean those have insignificant growth as well. This results also might be happened because of the dividend payout ratio is on stock holders general meeting (RUPS) that management cannot detect yet. It is also contrast with the signaling theory which describes company would show good signal to the outsider that company has stable profit from the financial ratio such as Dividend Payout Ratio.

Hypothesis Tests with Simultaneous Regression Test (F-test)

The model regression is also tested simultaneously by using F-test. This test is used for examining the relationship of independent variables (DAR, DER and DPR) to the dependent variable (IS). The simultaneous tests for the model used ANOVA as seen on Table 11. The results shows the significant value of F-test is higher than 0,05, that is 0,273. This means Financial Leverage, Debt Covenant and Dividend Payout Ratio simultaneously does not influence the Income Smoothing Practice significantly as well.

It also does not harmonize with the signaling theory which describes company would show good signal to the outsider that company has stable profit from the financial ratio such as the financial leverage, debt covenant and dividend payout ratio. It also shows that financial ratio might be not the most influence factors to income smoothing practices.

Conclusion

This research examined the relationship between Financial Leverage, Debt Covenant and Dividend Payout Ratio to Income Smoothing Practices on companies listed in Indonesia Stock Exchange from 2006 until 2011. This research exclude manufacturing and banking companies so the rest are agriculture, forestry and fishing, mining and mining services, constructions, securities, insurance, real estate and property, transportation services, telecommunication, whole sale and retail trade, hotel and travel services, holding and other investment companies, and also others sectors. The companies observed are 145 companies. In classifying the samples, this research used Eckel Index and it results 26 companies do income smoothing. But some data of 8 companies are not available so the total samples become 18.

Based on the analysis and discussion on Chapter IV, all the hypothesis are rejected. None of financial leverage, debt covenant and dividend payout ratio significantly influence the income smoothing practices partially and simultaneously. The conclusion as follows:

1. Financial Leverage presented as debt to assets ratio does not significantly influence Income Smoothing on the 18 samples might be cause of the samples are on the secondary samples and those still have small growth. It also may because of the management has worked well controlling the assets and debts of companies.

2. Debt Covenant presented as debt to equity ratio does not significantly influence Income Smoothing practices. The reason might be cause of the facilitation given by PT. Kliring under Bappepam controls in loaning and issuing obligations or shares.

3. Dividend Payout Ratio does not significantly influence Income Smoothing practices because it may be dividend cannot detect by management yet before the general meeting of stock holders (RUPS).

Limitation

This study has many limitation in some aspects that could influence the results obtained. The limitation are:
1. This research only examined three factors which influence income smoothing practices. They are Financial Leverage, Debt Covenant and Dividend Payout Ratios. There are so many others factors could influence the income smoothing.

2. The samples of this research are companies listed on Indonesia Stock Exchange excluding manufacturing and banking companies. So they are agriculture, forestry and fishing, mining and mining services, constructions, securities, insurance, real estate and property, transportation services, telecommunication, whole sale and retail trade, hotel and travel services, holding and other investment companies, and also others sectors. Even though the population is 145 companies, those classified by Eckel Index are only 26 samples with 8 samples do not require dividend data. So there are only 18 samples for this research which means this research has few samples.

**Suggestion**

In order to overcome the limitation, this research offer some suggestion, as follows:

1. Analyze others factors that influence income smoothing beside financial leverage, debt covenant and dividend ratio. The next researchers can put other factors such as bonus plan, tax policy, and stock return. The other factors could be not financial ratio because of the financial ratio used in this study do not significantly influence income smoothing. Those could be a CSR (Corporate Social Responsibility) or GCG factors.

2. Analyze all companies listed in Indonesia Stock Exchange with no exception and also if there is chance, in other country. So the samples are many in amount. The next researcher can analyze not only companies do income smoothing, but also those do not. For the regression, the logistic binary regression can be used.

**REFERENCES**


Rachmawati, Windasari. 2002. Analisis Faktor-Faktor Yang Mempengaruhi Perataan Laba dan Hubungannya Dengan Return Saham Perusahaan Yang Melakukan dan Tidak


