The Moderating Effect of Managerial Ownership and Institutional Ownership on the Relationship between Control Right and Earnings Management

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Abstract
The objective of this paper is to examine how control right affect earnings management in pyramid company ownership. In this study, we proposed that the effect of control right on earnings management is moderated by managerial ownership and institutional ownership. A model was developed and tested using a sample of 108 pyramidal structure companies from 2007 to 2011, listed on Indonesian Stock exchange. Data collected analysis using least square regression. The result showed that there is a significant association between control right and earnings management, and also managerial ownership moderates the association between control right and earnings management. However, the role of institutional ownership as a moderating variable cannot be supported. Overall findings are expected to serve as the basis for more effective corporate performance or effective way to find what factor that affect earnings management practice. Especially managerial ownership is effective to control earnings management practice.

Keywords: Earnings management, Pyramidal structure, Control right, Institutional ownership, Managerial ownership.

1. Introduction
A variety of companies in Indonesia can be controlled by the same controlling shareholder because of various mechanisms of ownership, in particular, pyramid ownership and cross-ownership. According to Berle and Means (1932), the structure of the pyramid is the most
common expedient way done to control a company without having a direct stake in the company that controlled. In fact, according to some researchers in the field of management accounting, pyramid structure can create a wedge between ownership and control. This will provide opportunities for controlling shareholders to control a wide range of activities that maximize the amount of resources they can manage.

Through a series of pyramid ownership, controlling shareholders can use the cash flow rights and control rights to expropriate against minority shareholders. Control rights are voting rights to participate in decisions about the important policy of the company (La Porta et. al, 1999; Siregar, 2008). So with its control rights, controlling shareholders can expropriate against minority shareholders.

The role of control right as a variable that is directly affecting earnings management has been proved by prior researchers such as Sanjaya (2011). However so far there is no other researcher has done on the role of managerial ownership and institutional ownership as a moderating variable on the relationship of control right and earnings management. Thus, there is a need to examine the potential moderating variables that may better explain the relationship between control right and earnings management. So far no moderating variables have been studied to explain the relationship between control right and earnings management.

This study will investigate the moderating effect of managerial ownership and institutional ownership on the relationship between control right and earnings management. It is crucial to understand the moderating effects of managerial ownership and institutional ownership on the relationship between control right and earnings management. Since managerial ownership and institutional ownership also have an important role to earnings management practices. To date, only a few studies examined control right about earnings management (Sanjaya, 2008). In fact, empirical evidence on control right, managerial ownership, institutional ownership, and earnings management are limited.

2. Literature Review and Hypotheses Development

2.1 Control right and earnings management

Control right is the voting rights that allow participating in the determination of the company's policy (La Porta et al., 1999 and Siregar, 2007). This is similar to the opinion of Shleifer and Vishny (1997) opinions which states that the Control Right has the power to
influence company policy. This situation will cause the expropriation by controlling shareholders to minority shareholders. According to La Porta et al. (2002), the control rights can explain the negative relationship between the concentrations of ownership in the firm’s value (Siregar, 2008).

Based on voting rights to participate in the policy making company that owned by the controlling shareholder will be free to participate in the decisions that suit their personal interests. This is consistent with a negative argument entrenchment effect (NEE) which states that the higher control rights owned by the controlling shareholder, the greater the desire to expropriate the firm under his control. Based on this NEE’s argument the controlling shareholder will be keen to use its control right to expropriate, in order to achieve their private benefits.

This argument is consistent with Shleifer and Vishny (1997), La Porta et al. (1999), and Claessens et al. (2000a), that the concentration of control rights by controlling shareholders could result in the expropriation of the minority shareholders. It caused more attraction to the controlling shareholders to gain private benefit that were not achieved by the minority shareholders.

Their findings stated that at the time when the shareholders with majority ownership (later referred to as the controlling shareholder) control the company, their policies will lead to the expropriation of the minority shareholders. One possible way is the accounting policies that will affect corporate profits by the majority shareholders want. They would have an incentive to influence any policy that would affect the company's profit by what they want. Thus, it can be said that the controlling shareholders have an incentive to undertake earnings management practices, to meet their private benefit.

The negative effect of earnings management, control rights is similar to the argument that the majority shareholders can control the company to obtain private benefits under their control. When the private benefits of control over who owned a large controlling shareholder, then the controlling shareholders will attempt to allocate company resources to generate the private benefits. While the majority shareholder controls the company, the majority shareholder will tend to expropriate the minority shareholders. Thai is the controlling shareholders can use the policy as well as incentives to obtain private benefits over the control. Sanjaya (2011) found that the control right has a positive effect on earnings management. The higher the control rights are owned by the controlling shareholder, the higher the earnings management practices (Sanjaya,
Based on the above, we can be built the following alternative hypothesis as follows:

**Hypothesis 1**: Control right affect earnings management.

### 2.2 The Role of Managerial Ownership as a Moderating Variable in the Control Right and Earnings Management Relationship:

From the viewpoint of the accounting theory, earnings management is determined by the motivation of the company managers. Different motivations will produce a different amount of earnings management, such as between a manager who also serves as shareholders and managers are not as shareholders. Two things that will affect earnings management practices because the ownership of a manager will also determine the policy and decision-making of the accounting methods applied to the companies they manage. In general it can be said that a certain percentage of stock ownership by management are likely to affect earnings management practices (Gideon, 2005).

Jensen and Meckling (1976) showed that managerial ownership can be used as a mechanism to reduce the agency problem by creating an alignment between the interests of managers and owners or shareholders. Their findings indicate that the interests of managers and shareholders can be synchronized externally by increasing ownership by managers. With greater ownership of managers, the managers will be motivated not to not earnings manipulation. Low managerial ownership will increase the willingness of managers to behave opportunistically (Shleifer and Vishny 1986). Watfield et al (1995), which examines managerial ownership with discretionary accruals and earnings information content also found evidence that managerial ownership negatively associated with the discretionary accrual.

Other research conducted by Midiastuty and Machfoedz (2003) found that managerial ownership is a mechanism that can limit opportunistic behavior of managers in earnings management practices, although according Wedari (2004), managerial ownership also have other motives (Herawaty, 2008). Herawaty studies (2008) stated that managerial ownership can serve as a corporate mechanism governance. Therefore, managerial ownership can reduce the manager's actions in manipulating earnings. This means that managerial ownership is negatively related to earnings management.

Warfield et al. (2005) also found a negative relationship between managerial ownership and discretionary accruals as a measure of earnings management, and positive relation between
managerial ownership with the earnings information content. Similar results were obtained by
Jensen and Meckling (1976), Dhaliwal et al. (1982), Morck et al. (1988), and Primary and
Mas'ud (2003). The studies mentioned above in general carried out in companies with direct
ownership structure (immediate), while our focus in this study related to pyramid structure
companies.

As mentioned earlier, the control rights owned by the controlling shareholder offered an
opportunity for controlling shareholders to earnings management practice. With the control
right, controlling shareholders will have the opportunity to do adverse expropriation by
controlling shareholder, among others, with earnings management practices. In other words, the
control right positively affects earnings management. The greater the control right, the greater
the possibility of earnings management practices by the controlling shareholder.

Controlling shareholders may consist of managers, institutions, families, and the public,
or other owners. Previous findings that suggest that managerial ownership affect earnings
management practices (Yang et al. 2008). The findings of the previous studies are mixed. Yeoh
et al (2002), found that the practice of earnings management will be reduced if the managerial
ownership is less than 25%, and instead will increase if the managerial ownership exceeds 25%.
Based on these findings it can be concluded that a high managerial ownership will illustrate the
power of the voice (voting power) to ensure the protection of the interests of the managers in the
future.

These conditions will have consequences, that decision is not effective (Yang et al.
(2008). The findings of Yang et al. (2008) showed that discretionary accrual (which describes
the earnings management), has a positive influence on the ownership and blockholder director.
The findings indicate that the higher managerial ownership, the higher the likelihood of earnings
management practices. If the manager is also a shareholder in the company in the final series on
the ownership structure of the pyramid, the greater the possibility of controlling shareholders
have access to the company's internal data. Based on these descriptions, it can be concluded that
the presence of managerial ownership in the pyramid structure company will result in the higher
magnitude of earnings management practices. The higher the control rights of the controlling
shareholder, the higher the likelihood of earnings management practices. If no managerial
ownership in the pyramid structure company, the greater the possibility of earnings management
practices.
La Porta et al. (1999), states that the agency conflict between controlling shareholders to minority shareholders will be higher if the controlling shareholder is also involved in management. Controlling shareholder involvement in the management of public companies in Asia, Europe, and America is quite high, which is averaged at 69% (Siregar, 2007). La Porta et al. (1999) also found that 57% of public companies in Asia are controlled by the controlling shareholder, who is also involved in the management. According to Faccio and Lang (2002), in Europe the controlling shareholder involvement in management is higher than in Asia, which is about 68%. Controlling shareholders are no longer just being able to influence the management, but also a part of the management itself, which makes it possible to take action in accordance with their interests (Siregar 2007). Thus, the controlling shareholders have the opportunity to expropriate against minority shareholders, for example by performing earnings management practices.

In type II agency conflict, Leuz et al (2003) and Sanjaya (2010) argues that to hide her private benefit, the controlling shareholder may be motivated to perform earnings management. Thus, the earnings management practices in pyramid ownership structure can occur because the intervention of the controlling shareholder. Sanjaya (2010) argues that managers can be individual, professional, or family members of the controlling shareholder. Possibility manager will be motivated to perform earnings management may occur, although the manager is an individual, professional and family controlling shareholder.

Managers are individuals who carry out its operations directly. As an operational executive, a manager can manage the company's financial reporting process, as well as controlling shareholder. In the context of the pyramid ownership, controlling shareholders can create the occurrence of earnings management practices by managers. Although the manager is not part of the controlling shareholder, the manager can freely perform earnings management practices. One possible reason the manager will follow the controlling shareholder wishes to perform earnings management practices are fears his career in the future. It is very reasonable because the controlling shareholder has the authority to dismiss the manager if the manager can not or do not want to carry out the will of the controlling shareholder, although the manager is a professional individual.

As mentioned previously, with the control right, the controlling shareholders can freely expropriate against minority shareholders to obtain private benefits, for example, ordered the
manager to perform earnings management practices. As mentioned earlier, when the company at the end of a series of pyramid ownership has managerial ownership, the greater the likelihood of earnings management practices. This happens because in addition to controlling shareholders also wanted to practice earnings management to meet his private benefit, managers also want the same thing. This indicates that managerial ownership in the pyramid company will increase the likelihood of earnings management practices. It can be concluded that managerial ownership in the pyramid structure will affect the relationship between control rights to earnings management. The arguments above leads to following hypothesis:

**Hypothesis 2**: The relationship between control right and earnings management is moderated by managerial ownership.

### 2.3 The Role of Institutional Ownership as a Moderating Variable between Control Right and Earnings Management Relationship:

Institutional ownership has the ability to control the effectiveness of the management through the monitoring process of the company. The effective monitoring process will affect the reduction of earnings management practices. A certain percentage of shares owned by institutions may affect the financial reporting process, which does not rule out the presence of Accrued for the benefit of management itself (Gideon, 2005). This is because in general, institutional investors are sophisticated investors. Therefore, institutional investors will be able to utilize this information to predict the current period earnings as compared to other investors.

In addition, institutional investors have access to quality information, which is timely and relevant. The qualified information will be able to inform the existence of earlier earnings management practices earlier. Jiambavo et al (1996) found a negative relationship between institutional ownership to the absolute value of discretionary. These findings indicate that the higher institutional ownership, the lower the absolute value of discretionary. It is concluded that institutional ownership can reduce the practice of earnings management.

Institutional ownership has a feedback effect that can reduce earnings management practices in the company. It is known that earnings management practices can be efficient or opportunistic. If the earnings management practices are efficient, then the existence of high institutional investors will increase the likelihood of earnings management practices. Conversely, if opportunistic earnings management practices, the presence of institutional
investors may reduce the occurrence of earnings management practices.

Institutional investors play an important role in monitoring the companies in which they invest. It certainly would be able to reduce the occurrence of earnings management practices in the company. A company with lower institutional ownership will be a greater likelihood of earnings management practices by raising earnings on earnings. This is due to the lack of monitoring (Yang et al., 2013). Therefore, institutional ownership will have a negative influence on earnings management. Although the effect of monitoring conducted by the shareholders of this institution does not indicate that the institution as a whole is able to control the behaviour of opportunistic earnings manipulation, the greater institutional ownership, the smaller possibility of earnings management practices is.

McConell and Servaes (1990), Nesbitt (1994), Smith (1996), Del Guercio and Hawkins (1999), and Hartzell and Starks (2003) in Cornett et al. (2006) found an empirical evidence, that the control measures carried out by a company and institutional investors can restrict the behaviour of managers. Cornet et al. (2006) concluded that the measures of control of the company by the institutional investors may encourage managers to focus more attention on the performance that will reduce opportunistic behaviour or selfish. It applies when potential conflicts of interest arising from the agency problem of type I, the agency problems that arise between managers and shareholders or owners. In type II agency problems, conflicts of interest between controlling shareholders or majority shareholders and minority shareholders. With concentrated ownership companies, which raises the problem of agency type II, controlling shareholders will attempt to expropriate that emphasizes the achievement of personal well-being, but it would be detrimental to the minority shareholders. Company with the pyramidal ownership structure, the controlling shareholders have the control right in excess of its cash flow, controlling the company without having to have a majority ownership in the company. Even controlling or expropriation can be done without having a direct shareholding in the controlled company.

In company with pyramidal ownership structure, controlling shareholders can expropriate through control rights held by the controlling shareholder, against the pyramid structure company, which can be controlled without having to have direct ownership. With its ability to expropriate, it will be possible for the controlling shareholder to practice earnings management to meet their private interests (Type II Agency Problem). While the previous findings as has
been described previously (Type I Agency Problem), the existence of institutional ownership in the company indirectly controlled earlier will reduce the occurrence of earnings management practices. So it is expected the presence of institutional ownership directly to the company at the end of the series, will be able to limit the need for controlling shareholders to expropriate through earnings management practices.

So based on the above explanation can be concluded that the effect of control right to the earnings management in companies with pyramid structures will be affected by the presence of institutional ownership. This indicates that the presence of institutional ownership in the company will affect the relationship between the control right to the earnings management.

**Hypothesis 3:** The relationship between control right and earnings management is moderated by Institutional ownership.

3. **Research Method**

3.1 **Earnings Management**

The following model is model to estimate *non-discretionary accrual* cross-sectional

The Jones model:

\[
NDA_{ijt} = \alpha_0^{it} \left( \frac{1}{TA_{ijt-1}} \right) + \alpha_1^{it} \left( \frac{\Delta REV_{ijt}}{TA_{ijt-1}} \right) + \alpha_2^{it} \left( \frac{PPE_{ijt}}{TA_{ijt-1}} \right) \]  

\ldots (1)

In which:

- \( \Delta REV_t \) = earnings changes for period t and t-1
- PPE\(_t\) = the fixed assets of firm i in year t divided by total assets of firm i at the end of year t-1
- \( TA_{t-1} \) = total asset at the end of the year t-1 period
- i = industry
- J = the sample of companies
- \( \alpha_0, \alpha_1 \) and \( \alpha_2 \) = company-specific parameters, obtained from the following models:

\[
TACC_{ijt} = \alpha_0^{it} \left( \frac{1}{TA_{ijt-1}} \right) + \alpha_1^{it} \left( \frac{\Delta REV_{ijt}}{TA_{ijt-1}} \right) + \alpha_2^{it} \left( \frac{PPE_{ijt}}{TA_{ijt-1}} \right) + \varepsilon_{ijt} \]  

\ldots (2)

\[
DACC = TACC_{it} - NDACC_{it}
\]

3.2 **Control Right**

Control rights consist of the direct and indirect control rights. Direct control right is the
percentage of shares owned by the controlling shareholder on behalf of himself at a company. While indirect control rights is the sum of the minimum control in each chain of ownership (La Porta, 1999; Siregar, 2008). Thus, the control right is the sum of the weakest relationships in every chain of ownership.

3.3 Techniques of data Analysis
To test the hypothesis used multiple regression analysis to the equation:
For hypothesis 1 : \[ DACC = \alpha + \beta_1 CR + \varepsilon \]
For hypothesis 2 : \[ DACC = \alpha + \beta_1 CR + \beta_2 MGR + \beta_3 MgrOwn*CR + \varepsilon \]
For hypothesis 3 : \[ DACC = \alpha + \beta_1 CR + \beta_2 InstOwn + \beta_3 InstOwn*CR + \varepsilon \]

\[ DACC = \text{Discretionary Accrual} \]
\[ CR = \text{Control Right} \]
\[ MgrOwn = \text{Managerial Ownership} \]
\[ InstOwn = \text{Institutional Ownership} \]

Normality of Data: The normal distribution in this study detected using normal probability plot analysis. Normality test results in this study can be seen that the points spread around the diagonal line and the distribution follows the direction of the diagonal line. Thus it can be stated that the transmission of data is approximately normal or meet the assumption of normality.

Testing Multicollinearity: The VIF independent/explanatory variable is found to be less than 4 suggesting that determine there is no multicollinearity among the independent/explanatory.

Table 1: Relationship between managerial ownership, institutional ownership on the earnings management

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>t-Value</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-1.781</td>
<td>(-34.192)</td>
<td>***</td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td>0.499</td>
<td>(2.190)</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>CRMGR</td>
<td>0.046</td>
<td>(2.408)</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>CRINS</td>
<td>-0.238</td>
<td>(0.511)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Autocorrelation Testing

The Durbin-Watson value of 1.878 and the value is among the values DW -2 to +2, which means there is no autocorrelation. Thus concluded that there is no problem of auto correlation in the regression model formed in this study.

Heterocedastisity Testing

The results are shown in the image above can be seen that the points on the image does not form a specific pattern and the data spread above and below the number 0 on the Y axis, where this indicates that the model did not experience heterocedastity, which means that the sample variance of the observation residuals to other observations have in common that can be said to be efficient. Thus, based on the assumptions of classical test result that the model is free of autocorrelation, multicollinearity and heterokedasticity, thus this model fit for use in this study.

3.4 Hypothesis Testing

Testing Hypothesis 1: Based on the regression results as shown in the above table I it is known that the value of t-test for the first hypothesis is equal to 2.190. T-table value is 1.965. Thus the value of t count> t-table, this means that the hypothesis H0 is rejected and the alternative hypothesis (H1) is accepted. From column sig. (significance) obtained the value of 0.029. This figure is smaller than α, ie 0:05. It can be concluded that the control right has a significant effect on earnings management in the pyramid company in Indonesia. This indicates that with his control right, controlling shareholders can affect earnings management practices. With its control rights, shareholders can freely expropriate minority shareholders against, among others, by performing earnings management practices.

Testing Hypothesis 2: Based on the regression is known that the value of t-test for the hypothesis is of 2,408. T-table value is 1.965. Thus the value of the t-count count> t-table, this means that the hypothesis is H0 is rejected and the alternative hypothesis (H2) is accepted. From column sig. (significance) obtained the value 0.016. This figure is smaller than α are used, i.e. 0:05. It can be concluded that the managerial ownership moderate the relationship between control rights and earnings management. The results of significance test (Test F) shows on the
Table 3: AnnoVA

<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>
<tbody>
<tr>
<td>Regression</td>
<td>5.616</td>
<td>3</td>
<td>1.872</td>
<td>3.466</td>
<td>.016</td>
</tr>
<tr>
<td>Residual</td>
<td>292.745</td>
<td>542</td>
<td>.540</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>298.361</td>
<td>545</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors, CRINS, CRMGR, CR
b. Dependent Variable: LNEM

**Testing Hypothesis 3**: Based on the regression is known that the value of t-test for the hypothesis ketigayaitu of -0.658. T-table value is 1.965. Thus the value t count <t-table, this means accepting the hypothesis H0 and the alternative hypothesis (H3) is rejected. From column sig. (significance) obtained the value of 0.511. This figure is greater than α, ie 0.05. It can be concluded that institutional ownership doesn’t moderate the relationship between control rights with earnings management. The results of significance test (Test F) shows calculated F value of 3.466 with 0.016 interactions significance probability (Table III). The significance value less than 0.05. This means that the regression model can be used to predict the relationship between the rights to control the earnings management with institutional ownership as a moderating variable.

5. Conclusion.

The results of this study can help institutions such as the Indonesia Stock Exchange and investors to know that the company in Indonesia in general has pyramidal ownership structure, so it needs to trace ownership until the end of the series. This is so that users can get to know the actual performance of the company. Besides, from the theoretical aspect, the results of these findings will give us a better understanding of the agency theory more broadly, through expropriation process undertaken by controlling shareholder. In this research, the company with
the ownership structure of the pyramid. This is important because there are in general many Indonesian companies in the pyramid structure.

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