The Effect of Institutional Ownership on the Performance and Earnings Management as the Moderating Variable: Evidence from Indonesia

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Abstract
The aim of this study was to obtain empirical evidence on moderating role of the activity of revenue management practices affect the institutional ownership relationship with the firm performance. The sample used is 57 from 19 blue chip companies listed in Indonesia Stock Exchange during 2009-2011. Data was collected by purposive sampling method and analysis used was the OLS regression. The result showed that the higher institutional ownership shares in the firm, the higher is the firm performance. Further analysis the finding provided the empirical evidence that firms that engaged in earnings management practices have no effect on the activities of institutional ownership with the firm performance.

Keywords: Institutional ownership, earnings management, corporate performance.

1. Introduction
Institutional investors have become important players in financial markets today. Increasingly important in corporate governance in the United States (US), it can be observed from volume growth of equity firm owned. In 2003, institutional investors are expected to account for 60% of all outstanding shares in the United States (Hayashi, 2003), compared with 45% in 1990, 33% in 1980 and 8% in 1950 (Taylor, 1990). The growth of institutional share ownership in the equity market, the role of institutional investors has changed dramatically from which only a passive investor to monitor active. Traditionally, institutional investors are not directly involved in the management decision making; on the contrary, they just keep an eye on corporate activities. If the investor is not satisfied of the performance management, investors
will sell it shares (Bathala, Moon, & Rao, 1994; Graves and Waddock, 1990).

Institutional investors, different from non-institutional investors, are more likely to choose and engage in corporate management decisions because of their significant holdings of equity in the company (Brickley, Lease & Smith, 1998) and seek to influence the company top management to manage for the long-term interests of shareholders (Holdemess & Sheehan, 1988; Hoskisson, Johnson & Moesel, 1994). In other words, institutional investors may be taking a more effective supervisory role with collective capacity. Institutional investors have a fiduciary duty to its clients or beneficiaries, which requires them to act with loyalty and manage funds wisely. In other words, institutional investors, whether they have a short-term orientation or long term, should represent clients or beneficiaries and to maximize their interests in the companies they invest. Thus, these large corporate shareholders can be an effective monitor and can increase the value of the company (Agrawal & Rnoeber, 1996; Black, 1992; Pound, 1991). Institutional investment relationship that investing with the goal of influencing the management of the company in which the investment is made, it can serve as guidelines for a successful strategy and add value to the company. Under ERISA, investment relationships permitted by institutional investors if the investment strategy consistent with the fiduciary obligation to increase the value of the investment in the company's plan.

While investing in a company, institutional investors are basically a group of individual investors with a collective capacity and has the power of doing negotiation in a dispute with the management and to give an opinion to the management. Thus, one can say that the manager of the company is acting as an agent of institutional ownership. Theoretically, in the context of a principal-agent, agent (manager) should act as a shareholder for the benefit of shareholders. In other words, corporate managers have a fiduciary duty to maximize shareholder value and the firm value.

However, the problem is due to the separation of ownership and control in the company (Berle & Means, 1932; Jensen & Meckling, 1976). Agency problems arise in the company when the company managers pursue their own interests at the expense of shareholders or when the interests of both parties are not aligned. Agency costs, which originated from this problem, arise and it is costly to maintain their agents from doing activities that deviate (Jensen & Meckling, 1976).

Several mechanisms can reduce the agency problem, and one instrument is concentrated
Institutional investors are responsible for monitoring managerial from the perspective of corporate governance from their own fiduciary obligations to clients or beneficiaries. They are believed to help improve the performance of the company (Agrawal & Rnoeber, 1996; Black, 1992; Pound, 1991). Since Berle and Means (1932) first commented on the problems caused by the separation of ownership and control in the company, the impact of ownership structure on firm performance has been the object of debate. For the above has been done to examine the relationship between the two, no consensus has been reached by previous researchers, whether the ownership structure (e.g., ownership by institutions, firm’s management, etc.) affect the performance of the company. Also, the extent and the direction in which the effect, if any, were observed remains unclear (Clay, 2001; Han and Suk, 1998; Loderer & Martin, 1997; McConnell and Servaes, 1990).

Earnings management has become a common phenomenon that occurs in various countries. The practice of reaping a lot of discussion, research and also controversy. Disagreements between academics, practitioners, and regulators led to a very different perception of looking at the issue of earnings management. Academics tend to view earnings management as a logical and rational practice while practitioners and regulators tend to think of these practices is something to watch out for even worrying. Conflicts also arise when there is a conflict of interest between the internal (management) and external groups (shareholders, creditors, government, analysts, etc.), among others:

a) Management wants to increase their welfare while shareholder wants to increase his wealth.

b) Management intends to obtain the greatest possible credit with low interest rates, while lenders only want to give credit according to the ability of the company;

c) Management intends to pay taxes as small as possible while the government wants to raise taxes as high as possible.

About earnings management accounting research is done to provide a scientific explanation on earnings management practices by managers. Empirical evidence shows that managers perform earnings management with various patterns: taking a bath (Healy; 1985), income minimization (Cahan; 1992), income maximization (Dempsey; 1993), and income smoothing (Beattie; 1994). The motivation behind earnings management are also diverse, which manage bonuses,
avoid breach of contract debts and avoid or reduce the political cost. Other studies try to detect earnings management through variable discretionary accruals (Dechow 1995). Detection is very difficult because of diverse variations from year to year, which is strongly influenced by business conditions. These studies indicate only whether earnings management occurs or not, without giving an explanation for what had happened.

2. Theoretical framework and Hypotheses

2.1 Earnings Management

Earnings management is an action taken by the management of the company to affect earnings reported, which can provide information about the economic benefits (economic advantage) that are not really experienced by the company in the long run even it hurt the company. Earnings management usually occurs when managers use financial reporting policy and also when structuring transactions in financial reporting to obscure some stakeholders about the economic performance of the company or to influence the contract which depend on reported accounting numbers (Healy 1999). Another definition states that earnings management is "disclosure management" in the sense of a deliberate intervention in the financial reporting process to external parties who aim to obtain personal gain, the reverse of doing factualisation in the normal operation (Schipper 1989).

The definition is not based on the concept of a certain income but based on accounting numbers as information and stated that earnings management can occur in any part of the external disclosure process. Minor expansion of the definition includes "real" earnings management for the timing of the investment or financial decision to modify the financial statements or one of the sections. Finally, they will do the income smoothing in the sense of variability of earnings which are unnecessarily done. Many managers use financial reporting policies to do the earning management through, for example policies on estimated useful life, residual value of fixed assets, estimated losses on accounts receivable, the determination of asset valuation method, i.e., LIFO, FIFO or average. Other policies such decisions in the management of working capital management (inventory levels, time of purchase or delivery and policy lending), determine the cost of research and development, marketing/promotion and maintenance. In general, the methods used to perform earnings management, namely: 1. accrual management; 2. Time management to adopt accounting policies; 3. voluntary accounting
changes. The way is to manipulate the artificial variable (accounting) through the accounting method that allowed/permitted or through real variables (transactional) by manipulating revenues, expenses or abnormal activity of the company. A manager is responsible for the use of company resources to maximize the wealth of the owner (the value of the company or performance). As a manager, he must be rational and managers tend to make choices that maximize their personal profit.

However, when a manager having shares in the company, their will also work increases. The increase in ownership of these shares, resulting in a conflict of interest between managers and shareholders will be reduced (Warfield et al., 1995). With the rise of managerial ownership, then the decrease in discretionary accruals will occur and the company will be operating very well and in accordance with normal conditions. As in agency theory, it shows that these managers tend to maximising the value of the company and have less incentive to manipulate the company's profit if its stake in the company is high. When the manager has a large number of shares in the company, the goal of managers and shareholders will be one goal. Managers may want to maximize their own wealth, but at the same time maximize the wealth of the owner of the company.

The negative relationship between managerial ownership and agency conflicts, however, moderated by external monitoring by regulators (Warfield et al. 1995) that managerial ownership may emerge as an effective tool for reducing the agency conflict because companies will be monitored by regulators. With the involvement of the regulator, the agency conflict between management and shareholders have been reduced.

2.2 Institutional Ownership

Recent research shows that institutional ownership has a very strong monitoring control (La Porta et al., 1999; Holderness, 2009). In Canada, a company controlled by large shareholders who often use a control mechanism to increase the stock price such as: large class shares and pyramids stock to control the voting rights, while holders of minority rights, are only allowed to hold small portion of cash-flow rights (Morck et al. 2000; Ben-Amar and André, 2006; Bozec and Laurin, 2008). While previous research (Fan and Wong, 2002; Francis et al, 2005; Wang, 2006) showed that the concentration of voting rights and using this control mechanism will increase that can be attributed to accounting earnings quality in two ways.
First, the theory predicts that the excavation controlling shareholders have an incentive to engage in opportunistic earnings management. Given the significant ownership, the majority shareholders will achieved their great personal benefit, both when they use the boost control mechanisms such as dual class shares and pyramids stock to maintain control over small companies fraction of ownership (Bebchuk et al., 2000). They showed that the majority of such institutional shareholders have an incentive and power, with the majority of the voting rights, to pursue their personal interests at the expense of minority shareholders. In such a case, they can reduce the quality of accounting information generated by the company through earnings management to cover wealth effects of their takeover activity (Fan and Wong, 2002; Wang, 2006).

In contrast, alignment theory predicts that the concentration of ownership creates incentives for institutional controls to report earnings of high quality (Wang, 2006). Controlling shareholders have an incentive to monitor managers and remain within the limits of the right, to preserve a large stake in the company. In general, large shareholders, particularly family, has a long-term investment and is actively involved in the management of their company (Villalonga and Amit, 2006). The managers of these companies usually tend to focus on short-term profit of the company managers widely held and consequently more prone to use earnings management as a tool to increase short-term profits.

2.3 Company Performance

Firm performance is the ability of the work done by the company by showing the work achieved in the form of a rise in operating profits or rising stock prices stock market. Hawkins (1979) put forward the definition of performance as: (1) the process or manner of performing, (2) a notable action or achievement, and (3) the performing of a play or other entertainment.

Performance of the company is something that is produced by a company in a given period with reference to established standards. Performance of the company should be measurable results and describe the actual condition of a company of any size agreed. To determine the performance achieved we need to do the performance assessment. In accordance with the definition mentioned above, the company's performance appraisal implies a process or system work ability assessment of the implementation of an enterprise (organization) based on certain standards (Kaplan and Norton, 1996; Lingle and Schiemann, 1996; Brandon & Drtina,
Pound (1988) finds that institutional investors can contribute to support management in decision making. Both Brickley et al. (1988), and Agrawal and Mandelker (1990) found that institutional investors to monitor managers in the application of anti-takeover amendments. Impact of institutional ownership in a company is strongly influenced by whether institutional shareholders involved in activities of the firm. Some literature is consistent with institutional investors become a better monitoring than general investors. Cornett et al. (2007) found in their study that there is a positive correlation between the number and percentage of ownership of institutional investors and large companies operating performance. However, this relationship exists only for pressure-sensitive institutions. Chen et al. (2007) found that ownership is concentrated by independent institutes long-term (DLTIs) positively correlated with the post-merger performance (a proxy for monitoring effort). ELTIS benefit of their personal information as a result of their monitoring efforts, but they do not engage in short-term trading, they made adjustments to the long-term portfolio. Gao and Mahmudi (2008) find that firms with higher institutional ownership achieve better SEO results, issued smaller size of the equity, and there are more chances that they will complete SEO announced. Jiambalvo, Rajgopal and Venkatachalam (2002) find that stock prices lead to greater revenues as far as higher institutional ownership. Dart (2002) found that institutional ownership is positively correlated with the value of the company, and this relationship is stronger.

Nesbit (1994) found that firms targeted for monitoring by the California Public Hiring CalPERS Retirement outperformed the S & P index by 41% over a period of five years. While Smith (1996) detects a positive stock price reaction to the news of the settlement between CalPERS and the company targeted the shareholder proposal, he failed to notice an improvement in the operating performance of the company. Wahal (1996) says that the impressive success rate of 40% for corporate governance proposals sponsored by the pension fund, he reported no change in the company's stock price performance. Thus, 

**H1. The influence of institutional ownership has positive effect on firm performance.**

**The Influence of Institutional Ownership on Firm Performance: The Moderating Role Earnings Management.**

Theoretical arguments on the relationship between ownership structure and accounting information based on agency theory (Firth et al., 2006). Jensen and Meckling (1976) argued that
the separation of ownership and control results in agency costs because of a conflict of interest between managers and shareholders. When there is a diffusion of ownership, high agency costs resulted in high demand for informative disclosure to monitor managers (Fama and Jensen, 1983). As a result, the level of disclosure is likely to be greater in the widely-held but not near to the company-held. Wang (2008) considers a majority shareholder have the right to demand more accounting information and also the right to regulate and control the quality of accounting information. The second hypothesis is:

**H2:** The higher the earnings management, the negative effects arising between institutional ownership and firm performance.

### 3. Research Method

#### 3.1 Population and Sample

The population in this study is a LQ 45 listed company on the Indonesia stock exchanges from 2009-2011 and the number of population was 57.

#### 3.2 Measurement

Operational research variables described above are three parts, namely the dependent variable, independent variable, and the moderating variable.

#### 3.3 Dependent variable

The dependent variable namely: institutional ownership; Institutional ownership is the percentage of voting rights held by the institution/company. The variable is measured by the number of shares owned by the institutions/companies of the entire outstanding share capital. The measurement is in the ratio scale.

#### 3.4 Independent variable

The independent variables are: Firm Performance

Firm performance is the size which can measure the success of a company in generating profits. Performance reflects the company's fundamental performance of the company. To measure the performance of a company it can be done by using the cash flow return on assets (CFROA). In calculating CFROA can be done with a profit before tax and interest plus
depreciation is then divided by total assets. The measurements were performed using a nominal scale with the formula:

\[
\text{CFROA} = \frac{\text{EBIT} + \text{DEPRECIATION}}{\text{ASSET}}
\]

CFROA: Cash Flow Return on Assets
EBIT: Earnings before interest and tax
Depreciation: Depreciation
Assets: Total Assets

### 3.5 Variable Moderating

Earnings management is a particular intervention against external financial reporting process with the purpose to gain some personal profit management. Use proxy discretionary accruals as a proxy of earnings management with modified Jones method, with the following formula:

a. Calculating Total Accruals

Total accruals are applied uses the data of cash flows from operating activities directly taken from the cash flow statement, with this approach, the total accruals can be calculated as follows:

\[
\text{TACC}_{it} = \text{NI}_{it} - \text{OCF}_{it}
\]

**NI**_{it} = net profit of firm i for period t

**OCF**_{it} = operating cash flow of the company i for period t

b. Calculate Nondiscretionary Accruals

In calculating the nondiscretionary accruals with the regression equation are as follows:

\[
\frac{\text{TACC}_{it}}{\text{TA}_{I, t-1}} = \alpha_1 \left( \frac{1}{\text{TA}_{i, t-1}} \right) + \alpha_2 \left( \frac{\Delta \text{REV}_{it} - \Delta \text{REC}_{it}}{\text{TA}_{I, t-1}} \right) + \alpha_3 \left( \frac{\text{PPE}_{it}}{\text{TA}_{I, t-1}} \right) + \epsilon_{it}
\]

**TACC**_{it} = total accruals for firm i in period t

**TA**_{I, t-1} = total assets of firm i at the end of year t-1

**ΔREV**_{it} = earnings of firm i in year t minus the income year t-1
\( \Delta \text{REC } it = \text{accounts receivable firm } i \text{ in year } t \text{ minus receivables } t-1 \)

\( \text{PPE } it = \text{fixed assets of firm } i \text{ in year } t \)

Total accruals from above equation were estimated by the method of ordinary least squares (OLS) are a model that is used to regress from one independent variable. Calculated \( \alpha_1, \alpha_2 \) and \( \alpha_3 \) obtained from OLS regressions are use to calculate the nondiscretionary accruals by the following equation:

\[
\text{NDACC } it = \alpha_1 \left( \frac{1}{\text{TA } i, t-1} \right) + \alpha_2 \left( \frac{\Delta \text{REV } it - \Delta \text{REC } it}{\text{TA } i, t-1} \right) + \alpha_3 \left( \frac{\text{PPE } it}{\text{TA }} \right)
\]

c. Calculate the discretionary accruals

To calculate discretionary accruals can be determined by the following formula:

\[
\text{DACC } it = \left( \frac{\text{TACC } it}{\text{TA } i, t-1} \right) - \text{NDACC } it
\]

### 3.6 Methodology

Testing these hypotheses by using OLS regression. The first hypothesis is:

\[
\text{CFROA}_{it} = \alpha + b_1 + b_2 \text{ own } _\text{inst} \text{ earn } _\text{mgt} + \varepsilon
\]

The test results of the first hypothesis is based on a positive and significant coefficient, this test means that the larger institutional ownership the greater the company's performance.

Furthermore, for the second hypothesis test used the model as follows:

\[
\text{CFROA} = \alpha + b_1 + b_2 \text{ own } _\text{inst} \text{ own } _\text{inst} \text{ earn } _\text{mgt} + b_3 * \text{ earn } _\text{mgt} + \varepsilon
\]

The test result of the second hypothesis is based on the negative and significant coefficient which indicates the effect of a moderate role of earnings management between institutional ownership and corporate performance. The higher earnings management, the effect of institutional ownership on firm performance would be lower.

### 4. Result

#### 4.1 Data Analysis

The results from normality test of the data show that they normally distributed (Asymp value. Sig. for 0214> 0.05). Then we test for multicollinearity among other independent variable. The value of VIF for all independent variables is lower than 10. It can be concluded that the regression model is free of multicollinearity. Heterocedasticity test was done using scatter plot, the pattern data showed do not experience heterocedastity. Finally the autocorrelation testing using Watson durbin test. Based on the results, value of \( d_{\text{count}} \) (Durbin
Watson) is 1,764 to the value of $dL = 1.5363$ and $dU = 1.6075$, so that the value of DW above $dU$ then there is no autocorrelation.

### 4.2 Result Analysis

1. The effect of institutional ownership on firm performance

<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>.544 ^a</td>
<td>.296</td>
<td>.283</td>
<td>2.81923</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), CFROA  

b. Dependent Variable: inst

From the above models it can be explained that the magnitude of the adjusted R square of 0.283 or 28.3% is a variable financial performance can be explained by variable institutional ownership, while the remaining explained by other causes beyond the model.

**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>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>183 422</td>
<td>1</td>
<td>183 422</td>
<td>23 077</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>437 145</td>
<td>55</td>
<td>7948</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>620 566</td>
<td>56</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), CFROA  

b. Dependent Variable: inst

ANOVA test performed or obtained F test calculated F value of 23.077 with a probability of 0.000, the regression models can be used to predict that institutional ownership affects the firms performance.

2. Impact of institutional ownership on firm performance and earnings management as a moderator.
Variables Entered / Removed

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Moderating, Own_Inst, Abs_Earn_Mgt</td>
<td>.</td>
<td>Enter</td>
</tr>
</tbody>
</table>

a. All requested variables entered.
b. Dependent Variable: CFROA

Model Summary

<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>.352</td>
<td>.124</td>
<td>.075</td>
<td>.261039891</td>
<td>1.547</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), moderating, Own_Inst, Abs_Earn_Mgt
b. Dependent Variable: CFROA

From the table above magnitude models adjusted R-square is 0.075, the two variables are own_inst and earn_mgt can only be explained by 7.5% while others explained beyond the model.

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>
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</thead>
<tbody>
<tr>
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<td>Regression</td>
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<td>3</td>
<td>.171</td>
<td>2.504</td>
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<tr>
<td></td>
<td>Residual</td>
<td>3,612</td>
<td>53</td>
<td>.068</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4,123</td>
<td>56</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), moderating, Own_Inst, Abs_Earn_Mgt
b. Dependent Variable: CFROA

ANOVA F test obtained calculated F value of 2.504 with 0.069 probability, greater than 0.05, thus the regression model can be used to predict CFROA or it can be said that own_inst and
5. Conclusion

The objectives of this paper to investigate the role of moderating variable of earnings management on institutional ownership affect firm performance. Using the sample data from Indonesia Stock Exchange from 2009 to 2011 and run an analysis using an OLS regression. The result showed that the higher institutional ownership shares in the firm, the higher is the firms performance. However, when earnings management acting as a moderating variable on institutional ownership and relate to firm performance, the higher institutional ownership or entity, then followed by increase in earnings management, the company's performance will decrease and vice-versa. Thus, in this case, the monitoring role played by institutional ownership is not effective. However, the result showed not significant.

References


Chambers, D. J. (1999). Earnings management and capital markets misallocation. Working paper (*University of Illinois at Urbana-Champaign*).


Zhuang (2000). Corporate governance and finance in East Asia: A study of Indonesia, Republic of Korea, Malaysia, Philippines and Thailand. *Asian Development Bank, 1,*