Effect of Ownership Types on Informative Earnings Management

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Abstract
This research is aimed to examine (1) effect of managerial ownership on informative earnings management, (2) effect of institutional ownership on informative earnings management, (3) effect of foreign ownership on informative earnings management. Research sample are 123 manufacture companies listed in Indonesian Stock Exchange 2013-2017. Ownership measured by proportion of company’s share held by management, institution, and foreign shareholders. Informative earnings management is dummy variable which measured by comparing discretionary accruals and earnings growth. Data analysis uses logistic regression test. Results show that managerial ownership has no effect on informative earnings management, indicates that there is still agency conflict between owner-manager as minority shareholders with majority shareholders. Institutional and foreign ownership has effect on informative earnings management, indicates that institution and foreign shareholders have effective monitoring to reduce opportunist earnings management and increase informative earnings management. As expected, shareholders will reduce opportunist earnings management and increase informative earnings management, because informative earnings management reduces information asymmetric and increases share value.

Key words
Managerial ownership, Institutional Ownership, foreign ownership, Informative Earnings Management, Indonesian Stock Exchange

1. Introduction
Earnings information is one of important information provided in financial statement. Earnings information describe financial stability and power (Tabassum et al., 2014). It refers to bottom line of income statement that shows company’s ability to give benefits and value added for shareholders as well as predicts future performance. Earnings also can be used to evaluate how management manages company. Importance of earnings information make management has big interest on it (Tabassum et al., 2014). It leads management behavior to do earnings management.

In US, Enron case happens in 2002. Enron bankrupt because manipulates earnings by covering losses and financial problems (Shirur, 2011). In Indonesia, earnings management by Toshiba has been happened in 2015. Toshiba boosts its earnings up about US$ 1.2 billion in 7 years and leads to decreasing of investor financing (Prasetya and Gayatri, 2016). Based on survey by PWC audit firm, companies in Indonesia are more likely to engaged in earnings management (Purwanto, 2012).

In agency theory context, earnings management happens because there is conflict between management and shareholders because of interest conflict and information asymmetric. In order to reduce earnings management, role of shareholders is important to monitors management behavior.
Effectiveness of shareholders monitoring depends on share ownership type. Managerial ownership can be used as effective monitoring and agency conflict decreasing. Managerial ownership makes management become owner-manager. Owner-manager will behave as shareholders interest, include in earnings management monitoring.

Institutional ownership can also be used as effective monitoring. Institutional shareholders have more knowledge of business industry than individual shareholders (Man and Wong, 2013). It can help monitors management behavior, include in earnings management monitoring.

Foreign ownership is effective monitoring mechanism as well. Foreign shareholders more sophisticated than local one, because they have wider international capital network (Jiang and Kim 2004). Foreign shareholders have obligation to implement good corporate governance to reduce reputation and legal risks (Klapper et al., 2006). It shows that foreign shareholders can reduce opportunist management behavior, such as earnings management.


In the other hand, Thesima and Shuto (2008) finds that managerial ownership has non-linear effect on earnings management. Lin and Manowan (2012) finds that short term institutional shareholders increase earnings management, while long term institutional shareholders have no effect on earnings management. Paik and Koh (2014) finds that foreign shareholders increase earnings management.

Inconsistent results of previous researches because it do not split earnings management up in to informative and opportunist context. Scott (2014) states that earnings management can be seen as opportunist one or efficient contract (informative). In informative context, earnings management helps to increase earnings power to reflect economics value and predict future performance (Subramanyam, 1996). Stock market has positive responses on earnings management (Siregar and Utama, 2009; Subramanyam, 1996), because it can be used as signaling (Simamora, 2018) and evaluate management performance better (Gunny 2010). In opportunist context, earnings management is used to covers bad condition (Cohen et al., 2011).

Shareholders will reduce opportunist earnings management and increase informative earnings management, because informative earnings management reduces information asymmetric and increases share value. Lin et al. (2016) finds that monitoring function by shareholders only reduces opportunist earnings management and increases informative earnings management. This research is aimed to examine (1) effect of managerial ownership on informative earnings management, (2) effect of institutional ownership on informative earnings management, (3) effect of foreign ownership on informative earnings management. This research contributes to split earnings management up in to opportunist and informative context, so it answers inconsistent results of shareholders monitoring function on earnings management.

2. Literature review

2.1. Agency Theory

Jensen and Meckling (1976) explains agency relationship as contract between principal and agent where principal gives authority to agent to manage companies activities. Focus of agency theory is agency conflict of these two parties because of interest difference. Conflict of interest rises from different goals and imperfect information between one to another party (Abdolkhani and Jalali, 2013). Agency conflict relates to information asymmetric where principal have less information about company than agent because principal do not involve directly to daily business activities. This conflict leads to opportunist earnings management.

2.2. Signaling Theory

Signaling theory is aimed to compares between high quality and low quality companies (Kirman and Rao, 2000). Different with agency theory, signaling theory focuses on decreases information asymmetric where companies give signal to external parties about its quality. Connely et al. (2011) states that main focus of signaling theory is private information providing by companies.

Management uses informative earnings management to give signal to external parties.
2.3. Informative vs Opportunist Earnings Management

There are two perspectives of earnings management; which are as opportunist behavior to maximize management utility in compensation, debt, and political cost; and as efficient contract to gives management the flexibility to cover company from unexpected events for stakeholders benefit purpose (Scott 2014). Some researches prove that informative earnings management exists. Subramanyam (1996) finds that accrual management increases earnings ability to reflect economics value and predicts future cash flow, revenues, and dividend. Lipe (1990) finds that earnings management is used to reduces uncertainty and increases future earnings predictability. Liu (2016) finds that earnings management gives value added for companies in ASEAN. Gunny (2010) finds that earnings management can increases future performance and reflect good management competences.

Previous researches also find earnings management as opportunist behavior. Cohen et al. (2011) finds that management manage revenues opportunistically to beat earnings target. Irani and Oesch (2016) shows that management uses earnings management to increases short term performance as response to analyst pressure. Opportunist earnings management also done to cover bad performance in seasoned equity offering (SEO) to increases share price (Kothari et al. 2016). Nuryaman (2013) states that opportunist earnings management has negative effect on share value because it can reduces information credibility.

2.4. Ownership

Agency theory shows that the more impact given by owner the bigger performance will be (Jensen and Meckling, 1976). It shows that owner has big impact on company’s management, include in monitoring of management behavior.

In context of go public companies, owner refers to shareholders. Gugong et al. (2014) states that shareholders are one of corporate governance principles to ensure that management act according to shareholders’ interests. There are some types of share ownership by shareholders. First, managerial ownership is share ownership by management. It is believed to align interest gap between management and shareholders. Second, institutional ownership is share ownership by institution. Institution shareholders have more business knowledge than individual one, so they can implement effective monitoring to management. Third, foreign ownership is share ownership by foreign parties, either institution or individual. Foreign shareholders indicated have wider knowledge of international capital network than local one (Jiang and Kim, 2004), so they can implement effective monitoring to management.

2.5. Hypotheses Development

Managerial ownership can align interest between management (agent) and shareholders (principal) (Abdolkhani and Jalali, 2013; DeFond, 1992; Jensen and Meckling, 1976). Interest alignment makes management make suitable decision with shareholders interest. Managerial ownership is mechanism of conflict reducing (Jensen and Meckling, 1976; Jusoh, 2016), Owner-manager have direct monitoring of earnings reporting and ensure financial statement has high quality information to fulfill shareholders interest in decision making. Owner-manager maintains financial statement quality by reducing opportunist earnings mangement and increasing informative earnings mangement.

Previous research shows that managerial ownership has effect on earnings mangement (Aryanti et al., 2017; Teshima and Shuto, 2008; You et al., 2003). In the other hand, Gabrielsen et al. (2002) finds that there is no significant effect of managerial ownership on earnings management. Lin et al., (2016) finds that managerial ownership only reduces opportunist earnings mangement and increases informative earnings mangement.

H1: Managerial ownership has effect on informative earnings mangement.

Institution shareholders spend more time to do research on company and its industry than individual shareholders (Man and Wong, 2013). Institution shareholders can give more pressure to company if it experiences bad performance (Man and Wong, 2013). Jusoh (2016) also states that institution shareholders have strong relationship to the company that they invested. Institution shareholders have better monitoring because they have more industry business knowledge than individual shareholders (Kiaemehr et al., 2015). Institutional shareholder can reduce opportunist earnings management that can give bad effect
to financial information quality. In the other hand, institution shareholders will increases informative earnings to helps earnings information to have more predictability power. Koh (2003) finds that institutional ownership reduces aggressive earnings management. Lin and Manowan (2012) finds that short term institutional shareholders increase earnings management, while long term institutional shareholders have no effect on earnings management.

**H2: Institutional ownership has effect on informative earnings mangement.**

Foreign shareholders are more sophisticated than local one, because they can processes public information into private one, so it have value-relevant in decision (Jiang and Kim 2004). It happens because foreign shareholders have wider international capital network. Foreign shareholders also have obligation to implement good corporate governance in other countries because they have pressure of reputation and legal risk (Klapper et al., 2006). By having sophisticated ability and obligation of good corporate governance implementation, foreign shareholders provide effective monitoring to management, especially monitoring of financial reporting. Foreign shareholders will increase informative earnings management that can increase information quality, while they will decrease opportunist earnings management.

Guo et al. (2015) finds that foreign ownership has negative effect on earnings management, while Paik and Koh (2014) finds that foreign ownership increases earnings management. Jiang and Kim (2004) finds that foreign shareholders in Asia only interested in information-rich companies with low information asymmetric.

**H3: Foreign ownership has effect on informative earnings mangement.**

3. **Methodology of research**

3.1. **Sample**

Research sample are manufacture companies listed in Indonesian Stock Exchange in 2013-2017. Selection of manufacture companies as sample because manufacture companies have more experience about earnings and revenues uncertainties (Ahmed and Azim, 2015). Rasmussen (2013) also states that manufacture companies face low performance because these uncertainties. It leads to engaging in earnings management (Ahmed and Azim, 2015). Result of sample selection is as followed.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacture companies listed in Indonesian Stock Exchange 2013-2017</td>
<td>128</td>
</tr>
<tr>
<td>Incomplete data</td>
<td>2</td>
</tr>
<tr>
<td>Change financial reporting period</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>123</strong></td>
</tr>
<tr>
<td><strong>Total year-companies for 2013-2017</strong></td>
<td><strong>615</strong></td>
</tr>
</tbody>
</table>

3.2. **Variable and Operational Definition**

Dependent variable is informative earnings management. This research uses discretionary accrual as proxy of earnings management because management commonly uses accounting policy and estimation to manage earnings (Z. Lin et al., 2016). Discretionary accrual measured by modified Jones model as followed (Dechow et al., 1995).

\[
\frac{T\text{Ac}}{T\text{At-1}} = \beta_0 + \beta_1 \frac{\text{Sales}}{A\text{t}} + \beta_2 \frac{\Delta\text{Sales}}{A\text{t}} + \beta_3 \frac{\Delta\text{Receivable}}{A\text{t}} + \beta_4 \frac{\text{PPB}}{A\text{t}}
\]

(1)

\[
\text{NDAC}_t = \beta_0 + \beta_1 \frac{1}{A\text{t}} + \beta_2 \frac{\Delta\text{Sales}}{A\text{t}} + \beta_3 \frac{\Delta\text{Receivable}}{A\text{t}} + \beta_4 \frac{\text{PPB}}{A\text{t}}
\]

(2)

\[
\text{DAC}_t = \frac{T\text{Ac}}{A\text{t}} - \text{NDAC}_t
\]

(3)

Where,

\[
T\text{Ac} = \text{Net income after tax} - \text{Operation cash flow}
\]

(4)
In order to determine informative and opportunist earnings management, discretionary accrual compared to earnings growth as followed (Lin et al., 2016).

Table 2. Informative and Opportunist Earnings Management

<table>
<thead>
<tr>
<th>Earnings Growth (+)</th>
<th>Discretionary Accruals (+)</th>
<th>Discretionary Accruals (-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings Growth (-)</td>
<td>Informative</td>
<td>Opportunist</td>
</tr>
<tr>
<td></td>
<td>Opportunist</td>
<td>Informative</td>
</tr>
</tbody>
</table>

Source: Lin et al. (2016)

If discretionary accrual is positive (income maximization) and earnings growth is positive; or discretionary accrual is negative (income minimization) and earnings growth is negative; then it is informative earnings management. For example, if decreasing of bad debt expenses (income maximization) followed by positive earnings growth; or increasing of bad debt expenses (income minimization) followed by negative earnings growth; then management gives signal about ability of receivable collection.

If discretionary accrual is positive (income maximization) and earnings growth is negative; or discretionary accrual is negative (income minimization) and earnings growth is positive; then it is opportunist earnings management. For example, if decreasing of bad debt expenses (income maximization) followed by negative earnings growth, then management try to cover performance decreasing that motivated by compensation or debt contract. If increasing of bad debt expenses (income minimization) followed by positive earnings growth, then management try to cover performance increasing that motivated by compensation or debt contract political cost, tax expenses, or share buyback. This research measures informative earnings management as dummy variable. Score 1 if informative earnings management is occurred, score 0 otherwise (Lin et al., 2016).

Independent variable is share ownership. Share ownership is measured by three types of ownership, which are managerial, institutional, and foreign ownerships. Managerial ownership measured by portion of company’s share held by management. Institutional ownership measured by portion of company’s share held by institution. Foreign ownership measured by portion of company’s share held by foreigner.

3.3. Analysis Model

Hypotheses test is done by logistic regression test. This research runs tests of overall fit, goodness of fit, nagelkerke R square, and matrix classification before hypotheses test. Logistic regression model is as followed.

\[
Logistic (\hat{Y}) = \ln \frac{Y}{1-Y} = \alpha + b_1X_1 + b_2X_2 + b_3X_3 + e
\]

\[
\frac{Y}{1-Y} = \text{Informative earnings management Manajemen laba informatif}
\]

\[
\ln \frac{Y}{1-Y} = \text{Probability of informative earnings management occurred}
\]

\[
X_1 = \text{Managerial ownership Kepemilikan Manajerial}
\]

\[
X_2 = \text{Institutional ownership}
\]

\[
X_3 = \text{Foreign ownership}
\]
4. Result and Discussion

4.1. Descriptive Statistics

Table 3. Descriptive Statistics

<table>
<thead>
<tr>
<th>Earnings Management</th>
<th>Managerial Own.</th>
<th>Institutional Own.</th>
<th>Foreign Own.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>286</td>
<td>286</td>
<td>286</td>
</tr>
<tr>
<td>% of Total N</td>
<td>46.5%</td>
<td>46.5%</td>
<td>46.5%</td>
</tr>
<tr>
<td>Mean</td>
<td>0.047156</td>
<td>0.645572</td>
<td>0.298729</td>
</tr>
<tr>
<td>Informative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>329</td>
<td>329</td>
<td>329</td>
</tr>
<tr>
<td>% of Total N</td>
<td>53.5%</td>
<td>53.5%</td>
<td>53.5%</td>
</tr>
<tr>
<td>Mean</td>
<td>0.022522</td>
<td>0.735096</td>
<td>0.408888</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>615</td>
<td>615</td>
<td>615</td>
</tr>
<tr>
<td>% of Total N</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Mean</td>
<td>0.033978</td>
<td>0.693464</td>
<td>0.357660</td>
</tr>
</tbody>
</table>

Source: proceed data, 2019

Table 3 shows that based on 615 samples, there are 286 sample engaged in opportunist earnings management or 46.5% of total sample. There are 329 sample engaged in informative earnings management or 53.5% of total sample. Average management have company’s share is 33.39% ownership. Average institution have company’s share is 69.34% ownership. Average foreigner have company’s share is 35.76% ownership.

4.2. Preliminary Test

Table 4. Preliminary Test

<table>
<thead>
<tr>
<th>Test</th>
<th>Result</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall fit</td>
<td>-2LogL decrease 35.269, and its decreasing has significance value 0.000 (&lt;0.05)</td>
<td>Model fitted with data</td>
</tr>
<tr>
<td>Goodness of fit</td>
<td>Significance value of Hosmer and Lemeshow’s Goodness of Fit Test is 0.339 (&gt;0.05)</td>
<td>Model is suitable with observed data</td>
</tr>
<tr>
<td>Nagelkerke R Square</td>
<td>Nagelkerke R Square value is 0.074</td>
<td>Explanatory power of model is 7.4%</td>
</tr>
<tr>
<td>Classification matrix</td>
<td>Overall Percentage Correct is 60.5%</td>
<td>Prediction accuracy of model is 60.5%.</td>
</tr>
</tbody>
</table>

Source: proceed data, 2019

Table 4 shows that model fitted with data since there is decreasing of 2LogL value and its decreasing is significant. Significance of Hosmer and Lemeshow’s Goodness of Fit Test is 0.339 (>0.05) indicates that model is suitable with observed data. Nagelkerke R Square value is 0.074 shows that independent variables can explain dependent variable 7.4%, while 92.6% dependent variable explained by other variables. Classification matrix shows that model can predict probability of dependent variable about 60.5%.

4.3. Hypotheses test

Table 5. Hypotheses test

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Significance</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-1.193</td>
<td></td>
</tr>
<tr>
<td>Managerial Ownership</td>
<td>-0.981</td>
<td>0.404</td>
</tr>
<tr>
<td>Institutional Ownership</td>
<td>1.662</td>
<td>0.001</td>
</tr>
<tr>
<td>Foreign Ownership</td>
<td>0.605</td>
<td>0.030</td>
</tr>
</tbody>
</table>

Dependent Variable  
1 = informative earnings management
0 = opportunist earnings management

Source: proceed data, 2019
Table 5 shows that managerial ownership has coefficient value -0.981 with significance value 0.404 (above 0.05). It shows that first hypothesis is rejected. Managerial ownership has no effect on informative earnings management. Institutional ownership has coefficient value 1.662 with significance value 0.001 (below 0.05). It shows that second hypothesis is accepted. Institutional ownership has effect on informative earnings management. Foreign ownership has coefficient value 0.605 with significance value 0.030 (below 0.05). It shows that third hypothesis is accepted. Foreign ownership has effect on informative earnings management.

4.4. Discussions

Managerial ownership has no effect on informative earnings management. This result is not consistent with Lin et al. (2016) that finds managerial ownership increases informative earnings management, but this result follows Gabrielsen et al. (2002) that finds managerial ownership has no effect on earnings management. It happens because there is only little of management that has company’s share, so it does not reflects yet about owner-manager role to monitors earnings management behavior. Another reason why managerial ownership fails to make effective monitoring is position of owner-manager as minority shareholders. Descriptive statistics shows that average managerial ownership is only 3.39% that places owner-manager as minority shareholders. Managerial ownership makes agency conflict between management and shareholders has been solved, but agency conflict between minority and majority shareholders is not solved yet. It indicates that owner-manager tends not to do informative earnings management.

Institutional ownership has effect on informative earnings management. It is consistent with Man and Wong (2013) that explains institution shareholders have effective monitoring on management, include in reducing opportunist earnings management and increasing informative earning management. Institution shareholders spend more time to do research on company and its industry than individual shareholders (Man and Wong, 2013). Institution shareholders can give more pressure to company if it experiences bad performance (Man and Wong, 2013). Institution shareholders have better monitoring because they have more industry business knowledge than individual shareholders. Institutional shareholder can reduce opportunist earnings management that can give bad effect to financial information quality. In the other hand, institution shareholders will increases informative earnings to helps earnings information to have more predictability power.

Foreign ownership has effect on informative earnings management. It is consistent with Jiang and Kim (2004) that explains foreign ownership has effective monitoring on management, include in reducing opportunist earnings management and increasing informative earning management. Foreign shareholders are more sophisticated than local one, because they can processes public information into private one, so it have value-relevant in decision (Jiang and Kim, 2004). It happens because foreign shareholders have wider international capital network. Foreign shareholders also have obligation to implement good corporate governance in other countries because they have pressure of reputation and legal risk (Klapper et al., 2006). By having sophisticated ability and obligation of good corporate governance implementation, foreign shareholders provide effective monitoring to management, especially monitoring of financial reporting. Foreign shareholders will increase informative earnings management that can increase information quality, while they will decrease opportunist earnings management.

5. Conclusions

This research is aimed to examine (1) effect of managerial ownership on informative earnings management, (2) effect of institutional ownership on informative earnings management, (3) effect of foreign ownership on informative earnings management. Results show that managerial ownership has no effect on informative earnings management, indicates that there is still agency conflict between owner-manager as minority shareholders with majority shareholders. Institutional and foreign ownership has effect on informative earnings management, indicates that institution and foreign shareholders have effective monitoring to reduce opportunist earnings management and increase informative earnings management.
Limitation of this research is that this research measures share ownership by direct share ownership and does not consider indirect one. Another limitation is that this research does not use earnings prediction by analyst to compares to discretionary accrual in order to determine informative earnings management. Future research is expected to indirect ownership and use earnings prediction by analyst as a signal of informative earnings management.

References


