ANALYSIS OF CORPORATE GOVERNANCE MECHANISM AND EARNINGS MANAGEMENT: SHORT TERM AND LONG TERM ACCRUAL MODELS

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ABSTRACT
Earnings management existed because it was impacted from accrual. Agency theory provides a view that earnings management issues can be minimized through monitoring mechanisms to align interests and differences between management control itself from others by the Corporate Governance (CG) mechanism. This study measured earnings management with short term and long term accrual models. The purpose of this study examines the relationship between corporate governance mechanism ie institutional ownership, managerial ownership, the independence of the board committee, existence of the audit committee, and the size of the board committees and earnings management with STDA and LTDA accrual models. The samples are 158 companies listed in LQ 45 during 2004-2010 periods. Descriptive and regression analysis used for the data analysis. In STDA model, the institutional ownership has significant effect on earnings management (coeff. -0.215; prob. 0.011), but in LTDA model, the existence of audit committee has significant effect on earnings management (coeff-0.276; prob. 0.001). The result that monitoring by outside company can reduce the earnings management practices with STDA and LTDA models. The future studies should be added another variables as elements of corporate governance and analysis the disclosure of corporate governance index to analysis corporate governance mechanism for reducing to earning management comprehensively.

Key words: Corporate governance mechanism, short term discretionary accruals model (STDA), long term discretionary accruals model (LTDA.)

BACKGROUND
Basically, earnings management practice is a result of the lack of effective good corporate governance implementation. Good corporate governance is a set of rules for the relationship between shareholders, management companies, lenders, government, employees, and stakeholders as internal and external parties relating to the rights and obligations, or is a system that regulates and controls the company. The concept of corporate governance in order to achieve a more transparent company management for all users from their financial statements (Nasution and Setiawan, 2007).
Good corporate governance mechanism will reduce earnings management practices (Watfield et al. 1995), Gabrielsen et al. (1997), Wedari (2004), Midiantuty and Machfoedz (2003). One of the methods used to monitor and contract issues restricted the opportunistic behavior of management is the good corporate governance application (Watts, 2003). Through implementation of good corporate governance, is expected to reduce the urge to commit acts of manipulation by the manager, so performance reported can reflect the real economy firms (Jensen, 1993).

The relationship between corporate governance mechanisms with earnings management, has been conducted by several researches. Nasution and Setiawan (2007) found board composition, board size, and the existence of an audit committee significant effect on earnings management practices. The size board of directors is the only variable that had a significant relationship with earnings management practise (Abed, Attar and Suwaidan, 20120. However it contradicts with Nofiani (2008), in which the audit committee and board size significant positive effect on the action while earnings management board composition does not affect the earnings management measures. Scout (2007) found the institutional ownership and board size has no effect on earnings management practice, while managerial ownership and the existence of independent commissioners effect on the earnings management.

Research on earnings management with various earnings management models in the Indonesian capital market both in the Islamic and conventional indexes has been done by (Wiyadi et al.2011, 2012). Generally, previous studies Boediono (2005); Kusumawati (2005); Veronica and Main (2005); Rahmawati, Suparno and Qomariyah (2006); Nasution and Setiawan (2007); Ujiyantho and Scout (2007); Herawaty (2008), Sasongko and Fauziah (2011), Wiyadi and Prasnowo (2011), Trisnawati and Nugroho (2011), are measuring earnings management used accruals aggregate approach. This approach separated total accruals into non-discretionary component and discretionary accruals (accruals components are in management or policy managers to intervene in the financial reporting process). This models frequently used is the modified Jones

Further models were developed to perform separation of components of discretionary accruals into short-term discretionary accruals component and long-term discretionary accruals. The separation is expected to clarify the role of each of the components of discretionary accruals to measure earnings management (Sasongko and
Purbasari, 2012; Wiyadi and Safitri, 2012; Romi, 2011; Zayene and Jilani, 2010; Subekti, Wijayanti and Ahmad, 2010;). The research of Whelan and McNamara (2004) stated that in the long-term and short-term discretionary accruals have different effects on the relevance of financial reporting information. These effects cannot be revealed with the older models, so the weakness of the old models is only short-term-oriented focus.

Short-term and long-term discretionary accrual has different characteristics. The difference lies in the issue of return period and the accounting method used. Short-term discretionary accrual has a relatively short period of time (generally only one year). While the long term discretionary accrual has a relatively long period of time (over a year). Other causes are: the existence of differences in the selection of the accounting method is performed, the recording of inventory, accounts receivable, business assets, accounts payable and taxes payable, intangible assets, revenue and net income (Wiyadi and Safitri, 2012).

This study is part of post graduate research grants in the third phase, which it followed by Wiyadi and Fauziah (2011); Wiyadi and Safitri (2012) researches. This research aims to analyzing the effect corporate governance mechanism i.e institutional ownership, managerial ownership, the independence of board committee, audit committee, and the size of board committee to earning management with short term and long term discretionary accrual model in the company's go public the LQ 45 index,

LITERATURE REVIEW
Earnings Management: Long Term and Short Term Accrual Models

Schipper (1989) defines earnings management as an intervention with the specific purpose of external financial reporting process deliberately to gain some personal advantage. Fischer and Rosenzweig (1995) defines earnings management as an act of a manager by presenting a report that raise (lower) profit for the period of the business unit that became his responsibility, without causing an increase (decrease) the economic profitability in the long run.

The practices of earnings management occurred because the companies use accrual method in preparing its financial statements. Transactions are not recognized in the event of cash or cash equivalents received or released. As a consequence, the profits in financial statements contain elements of cash and accrual (non-cash) in current period.
The elements of accrual can be occurred because of nondiscretionary accruals and discretionary accruals. For example: in case nondiscretionary accruals, increasing in credit sales as the company's growth. While on discretionary accruals, changes in the cost of accounts receivable losses due to change in accounting policies made by management. Their implication is the accounting profits are determined by the magnitude of both discretionary and nondiscretionary accruals (Wiyadi and Safitri, 2012).

Some researchers have difficulty in distinguishing between discretionary accrual with non-discretionary accrual. Discretionary approach is substance accrual management interference in the financial reporting process. Then the allowance accounts receivable not collectible which do not suitable with the conditions noted, it lead to discretionary accrual changed. For example: in an economic growth period, the company expects no change accrued (e.g. receivables and debts) due to increased sales without the expected earning management.

Previous studies (Healy 1985; DeAngelo 1986; Dechow and Sloan 1991; Gumanti 2000; Gomez, et al. 2000) generally use aggregate accruals approach for measuring the existence of earning management. This approach separates the total accrual in non discretionary accruals component and discretionary accruals component. One of the advantages of aggregate accruals approach is potentially to illustrate the increasing and decreasing the profits, because it means less attention to be known by external parties, Gumanti (2000). But in the aggregate accruals model, also have criticism from other researchers. According to Gomez, et al. (2000), this model did not heed a connection between accrual and cash flow, so some non-discretionary accruals incorrectly classified as discretionary. As a result an error occurred on the specification in this model.

Whelan and McNamara (2004) offer a new model in the discretionary accrual approach which is a development of model of Jones (1991) and Dechow (1994). The difference lies in the discretionary accruals are separated into short term and long term discretionary accruals. The separation is expected to describe the role of discretionary accruals in earnings management clearly.

Short-term and long-term discretionary accrual has different characteristics. The difference lies in the issue of return period and the accounting method used. Short-term discretionary accrual has a relatively short period of time (generally only one year). While the long term discretionary accrual has a relatively long period of time or long (over a year). Other causes are: the existence of differences in the selection of the accounting method is performed, the recording of inventory, accounts receivable, business assets,
accounts payable and taxes payable, intangible assets, revenue and net income (Wiyadi and Safitri, 2012)

Short-term accruals and long term has the potential to reduce the time difference and the matching problem, the distinction between these components is an important consideration in the research role of discretionary accruals as earnings management tool. However, in the literature of earnings management, discretionary accruals existing measurements fail to address this consideration.

Markets have perception if long-term discretionary accruals as earnings management tools differ from the short-term discretionary accruals. Long-term discretionary accruals reduce the perception of earnings reliability more than short-term discretionary accruals because they provide a greater opportunity for manipulation. Therefore, the impact of the value-relevance of earnings and book value will be greater when the long-term discretionary accruals used to manage earnings rather than short-term discretionary accruals

**Corporate Governance**

According to the Organization for Economic Cooperation and Development (OECD, 2004) and FCGI (2003) in (Effendi, 2009), corporate governance is a set of rules that define the relationship between shareholders, management, creditors, government, employees and the role of internal stakeholders and other external related to the rights and obligations, or a system that directs and controls the company.

Based on the definition above, good corporate governance is defined as a procedure that is packaged rules and mechanisms that control a company to maximize long-term benefits to shareholders. So, main objective of corporate governance is to optimize the company's value for shareholders and stakeholders more in the long run.

Based on agency theory, that explains the relationship between management and the owners, where they have different interests. Divergence of interests between the owner and a management lies in maximizing utility owners with incentives that will be received by a management (Sunarto, 2009). Good corporate governance mechanism can resolve the conflict between the principal and agents and controlling shareholders to minority share holders. There are two types of CG mechanism. The first CG mechanism is internal mechanisms, such as: ownership structure, executive compensation, board of commissioners, and the disclosure of financial statements. And the second mechanism with external mechanisms, such as: independent commissioners, public ownership, and auditor quality (Septiyanto, 2012).
1. Institutional Ownership

Institutional ownership has the ability to control the management through monitoring process effectively so the management reduces earnings management. This reasoning supported by Rajgopal et al. (1999), Bushee (1998), Rajgopal and Venkatachalam (1998), Conclusions of these results are institutional ownership has the ability to affect earnings management practice that can be pressing discretionary management in the financial statements for providing the quality of reported earnings. Indicator used to measure institutional ownership is the percentage of shares owned by institutions from the total shares of the company.

Midiastuty and Masud (2003) found that the presence of high institutional ownership restricts managers do earnings management. This study will test the effect institutional ownership to earning management, so the hypothesis can be formulated as follows:
H1a: Institutional Ownership affects negatively on the long-term earnings management (LTDA).
H1b: Institutional Ownership affects negatively on short-term earnings management (STDA).

2. Managerial Ownership

A manager will also determine the policy and decision making on the selection of the accounting method applied to the company. In general, the certain percentage of stock ownership by management is likely to affect earnings management. This is supported by Morck et al. (1988), Warfield et al. (1995); Gabrielsen, et al. (2002), and Midiastuty and Mas'ud Mahfoedz (2003), According to Jensen and Meckling (1976) the interests of managers and shareholders can be aligned when managers have a larger company shares. Based on the reasoning and findings of previous research, this study will examine the effect of managerial ownership with measures of earnings management. In other words, the greater the ownership of the manager, the earnings management can be reduced. Then the hypothesis can be formulated as follows:
H2a: Managerial ownership negatively affects on long-term earnings management (LTDA).
H2b: Managerial ownership negatively affects on short-term earnings management (STDA).
3. The size of the Board Commissioners

Number of board members that are owned by the company is consisting of the main commissioner, an independent commissioner, and the commissioner. Commissioners have a duty and responsibility to supervise and advise the board of directors. Therefore, the number of members of the Board of Commissioners in Indonesia vary depend on the complexity of the company with regard to its effectiveness in decision-making. In Indonesia, number of Commissioners at most three and five people (Ratnasari, 2011). Number of commissioners is an important factor in the effectiveness of the commissioners. Through the role of the board in exercising oversight of the company's operations by management, the board can make an effective contribution to the outcome of the process of preparation of the financial statements of quality or avoid the possibility of fraudulent financial statements. However, the literature has not provided a consensus regarding the relationship between the number of commissioners and effectiveness (Chtourou et al. 2001). A large number of commissioners will reduce the effectiveness of the functions but it is easier to control the board of directors (Jansen 1993). On the other hand, a large number of commissioners created a better environment relationships and more expert. The research hypothesis can be formulated:

H3a: board size has a positive effect on long-term earnings management (LTDA).
H3b: board size has a positive effect on short-term earnings management (STDA).

4. Proportion of Independent Commissioners

Independent commissioners are expected to be fairness as a core principle in the interests of other parties, such as minority shareholders and other stakeholders, because the independent commissioners should be free of interest and any business that may be considered as interference to act in the interests profitable companies (Linoputri, 2010). The commissioner composition consisting of members from outside the company have a tendency affect earnings management. This reasoning supported research Dechow et al. (1996), Chtourou et al. (2001), Midiastuty and Masud (2003), The results provide conclusion that companies with compositions by commissioners who come from outside the company may affect the earnings management practices. Dechow et al. (1996) showed that earnings manipulation is more likely to have a board that is dominated by management and are more likely to have a major directors who concurrently as chief commissioner. Chtourou et al. (2001) and Wedari (2004) found that independent commissioners will restrict earnings management activities. Based on the above arguments and empirical findings, the research hypothesis can be formulated:
H4a: proportion of independent commissioner effect on long-term earnings management (LTDA).

H4b: proportion of independent commissioner effect on short term earnings management (STDA).

5. Existence of the Audit Committee

The existence of an audit committee is expected to improve the quality of earnings through oversight of the financial reporting process and the implementation of external audit. Veronica and Bakhtiar (2004) stated the audit committee has a significant relationship with the managed accruals in manufacturing companies in Indonesia, especially for the period 2001-2002. Thus the presence of an audit committee is effectively restricts the increase in earnings management. Wilopo (2004), the presence of audit committees and independent board is able to negatively affect earnings management practices. Based on the above arguments and empirical findings, the research hypothesis can be formulated:

H4a: the existence of audit committee effects on long-term earnings management (LTDA).
H4b: the existence of audit committee effects on short-term earnings management (STDA).

RESEARCH METHODS

Population and Research Sample

The population is all companies listed in the Conventional Index (LQ 45) during the period 2004-2010. The sample selected by purposive sampling. With criteria: (1) listed company on LQ 45 index and published annual financial reports continuously from 2004 to 2010, (2) companies published annual financial statements during the periods and stated in rupiah (IDR), and (3) have the data completely for analysis.

Data is the annual financial statements which published in LQ 45 index during the 2004 – 2010 periods. Data collected from Capital Market Reference Center (CMRC), and Indonesian Capital Market Directory (ICMD), www.IDX.co.id. The following table describes the sample used in this study:
Table 1  
The Sample

<table>
<thead>
<tr>
<th>Company sample LQ-45</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies listed on the LQ-45 during the period 2004-2010</td>
<td>315</td>
</tr>
<tr>
<td>Number of industrial enterprises banking, insurance and other financial</td>
<td>(49)</td>
</tr>
<tr>
<td>The number of companies that do not publish financial statements in order</td>
<td>(79)</td>
</tr>
<tr>
<td>Number of firms for which data is incomplete</td>
<td>(24)</td>
</tr>
<tr>
<td>Outlier</td>
<td>(7)</td>
</tr>
<tr>
<td>The sample</td>
<td>158</td>
</tr>
</tbody>
</table>

Sources: Secondary data were processed

Variables

Dependent variable in this study is earning management as measured by short term discretionary accrual model and long term discretionary accrual models. This model refers to Whelan and McNamara (2004) was developed to perform separation of components of discretionary accruals into short-term discretionary accruals component and long-term discretionary accruals. The separation is expected to clarify the role of each of the components of discretionary accruals to measure earnings management (Sasono and Purbasari, 2012; Wiyadi and Safitri, 2012; Romi, 2011; Zayene and Jilani, 2010; Subekti, Wijayanti and Ahmad, 2010). The test steps of these models are as follows:

a. Calculate the amount of total accruals

\[ ACC_{i,t} = EARN_{i,t} - CFO_{i,t} \]

Where:

- \( ACC_{i,t} \) = Total accruals of firm i in year t
- \( EARN_{i,t} \) = Income before extraordinary items of firm i in year t
- \( CFO_{i,t} \) = Cash from operations of firm i in year t

b. Calculate the amount of short term accrual

\[ STACC_{i,t} = AR_{i,t} + INV_{i,t} + OCA_{i,t} - AP_{i,t} - TXP_{i,t} - OCL_{i,t} \]

Where:

- \( STACC_{i,t} \) = Short Term Accruals firm i in year t
- \( AR_{i,t} \) = Accounts Receivable Trade accounts receivable in year t minus year t-1 firm i
- \( INV_{i,t} \) = year t minus inventory Inventories year t-1 firm i
- \( OCA_{i,t} \) = t in other current assets minus current assets other last Saturday
- \( AP_{i,t} \) = year t minus accounts payable accounts payable in year t-1 firm i
- \( TXP_{i,t} \) = payable in year t minus tax payable in year t-1 firm i
- \( OCL_{i,t} \) = Current liabilities other year t minus other current liabilities t-1 firm i
c. Calculate the amount of long term accrual

\[ \text{LTACC}_{i,t} = \text{ACC}_{i,t} - \text{STACC}_{i,t} \]

Where:

\( \text{LTACC}_{i,t} \) = Long-term accruals of firm i in year t
\( \text{ACC}_{i,t} \) = Total Accruals firm i in year t
\( \text{STACC}_{i,t} \) = Short-term accruals of firm i in year t

After calculating the amount of short term and long term accrual, the next step to calculate short-term discretionary accruals (STDAM) and long term discretionary accrual (LTDAM) which refers to the model of Kothari et al (2005).

d. Calculate the amount of short term discretionary accrual

\[ \text{STDAM}_{i,t} = \frac{\text{STACC}_{i,t}}{\text{TA}_{i,t-1}} - \left[ \beta_1 \left( \frac{1}{\text{LogTA}_{i,t-1}} \right) + \beta_2 \left( \frac{\Delta \text{REV}_{i,t} - \Delta \text{REC}_{i,t}}{\text{TA}_{i,t-1}} \right) + \beta_3 \left( \frac{\text{INC}_{i,t}}{\text{TA}_{i,t-1}} \right) \right] \]

Where:

\( \text{STDAM}_{i,t} \) = Short term discretionary accrual
\( \text{STACC}_{i,t} \) = Short term accruals of firm i in year t
\( \text{TA}_{i,t-1} \) = Total assets of firm i in year t-1
\( \text{LogTA}_{i,t-1} \) = Logarithm of total assets of firm i in year t-1
\( \Delta \text{REV}_{i,t} \) = Revenues firm i in year t minus year t-1
\( \Delta \text{REC}_{i,t} \) = Accounts receivable firm i in year t minus year t-1
\( \text{INC}_{i,t} \) = Net profit of firm i in year t


e. Calculate the amount of long term discretionary accrual

\[ \text{LTDAM}_{i,t} = \frac{\text{LTACC}_{i,t}}{\text{TA}_{i,t-1}} - \left[ \beta_1 \left( \frac{1}{\text{LogTA}_{i,t-1}} \right) + \beta_2 \left( \frac{\Delta \text{PPE}_{i,t} - \Delta \text{INT}_{i,t}}{\text{TA}_{i,t-1}} \right) + \beta_3 \left( \frac{\text{INC}_{i,t}}{\text{TA}_{i,t-1}} \right) + \beta_4 \left( \frac{\text{INC}_{i,t}}{\text{TA}_{i,t-1}} \right) \right] \]

Where:

\( \text{LTDAM}_{i,t} \) = Long term discretionary accrual
\( \text{LTACC}_{i,t} \) = Long term accruals of firm i in year t
\( \text{TA}_{i,t-1} \) = Total assets of firm i in year t-1
\( \Delta \text{PPE}_{i,t} \) = Gross asset value of land, buildings and equipment of firm i in year t-1
\( \Delta \text{INT}_{i,t} \) = Intangible assets of firm i in year t
\( \text{INC}_{i,t} \) = Net profit of firm i in year t

This study applies the adjustment function of the logarithm of the total value of assets in the model estimates of earnings management in order to get better analysis results in order to indicate the use of models of earnings management in developing countries such as Indonesia.
**Independent variables** in this study include:

1. **Managerial Ownership**
   
   Managerial ownership is the percentage of shares owned by management who actively participate in corporate decision-making (commissioners and directors). Its measurement is (the number of shares owned by management divided by total number of shares outstanding) \( \times 100\% \)

2. **Institutional Ownership**

   Institutional ownership is the percentage of shares owned by institutional investors. Institutional ownership = (the number of shares owned by institutional investors divided by the total number of shares outstanding) \( \times 100\% \)

3. **Board Size**

   Board of commissioners is the supervisor in charge of the company and responsible for overseeing and providing advice to directors and to ensure that companies implement GCG. Board size was measured by using the number of commissioners from both internal and external.

4. **Proportion of Independent Board of Commissioners**

   It’s measured by the percentage of independent board members from companies commissioner outsiders (not management and owner). So, the formula is (Number of independent commissioners coming from outsiders divided by the total number of commissioners).

5. **Existence of the Audit Committee**

   The audit committee is a dummy variable, if the company's Audit Committee established committee audit consisting of three people, led by an independent commissioner was given the score 1. If there is no audit committee was given the zero score.

**Data analysis**

Descriptive analysis performed to calculate the amount of short term and long term discretionary accrual models and attempt to explain or describe each of the variables involved in this study. Multiples regression analysis was used to test the hypothesis by using the following equation:

\[
EM_{STD}=\alpha+\beta_1MGROWN+\beta_2INSTOWN+\beta_3BOARSIZE+\beta_4BOARDINP+\beta_5AUDCOM+ e
\]

\[
EM_{LTDA}=\alpha+\beta_1MGROWN+\beta_2INSTOWN+\beta_3BOARSIZE+\beta_4BOARDINP+\beta_5AUDCOM+ e
\]
Description:

\[ \text{INC}_{i,t} = \text{Net profit of firm } i \text{ in year } t \]
\[ \text{EM}_{\text{STDA}} = \text{Earnings management with short term accrual models} \]
\[ \text{EM}_{\text{LTDA}} = \text{Earnings management with long term accrual models} \]
\[ \alpha = \text{intercept}, \]
\[ \beta_{1,2,3,4,5} = \text{coefficient} \]
\[ \text{MGROWN} = \text{managerial ownership} \]
\[ \text{INSTOWN} = \text{institutional ownership} \]
\[ \text{BOARDSIZE} = \text{board size} \]
\[ \text{BOARDINDP} = \text{the proportion of independent board} \]
\[ \text{AUDCOM} = \text{the existence of an audit committee} \]
\[ \varepsilon_i = \text{error term}. \]

DATA ANALYSIS AND DISCUSSION

1. Descriptive Statistics

Descriptive statistics attempt to explain or describe each of the variables involved in this study. The results showed in table 2.

Table 2

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTDA LQ-45</td>
<td>158</td>
<td>-4.53223</td>
<td>2.34166</td>
<td>.60490</td>
<td>.96938</td>
</tr>
<tr>
<td>STDA LQ-45</td>
<td>158</td>
<td>-.90146</td>
<td>-.08920</td>
<td>-.40423</td>
<td>.09,974</td>
</tr>
<tr>
<td>MGROWN LQ-45</td>
<td>158</td>
<td>.00000</td>
<td>.88270</td>
<td>.10444</td>
<td>.13,994</td>
</tr>
<tr>
<td>INSTOWN LQ-45</td>
<td>158</td>
<td>.00360</td>
<td>.86150</td>
<td>.51,193</td>
<td>.18,514</td>
</tr>
<tr>
<td>BOARDSIZE LQ-45</td>
<td>158</td>
<td>2</td>
<td>11</td>
<td>6.23</td>
<td>2.308</td>
</tr>
<tr>
<td>BOARDINDP LQ-45</td>
<td>158</td>
<td>.00000</td>
<td>.75000</td>
<td>.35,685</td>
<td>.15289</td>
</tr>
<tr>
<td>AUDCOM LQ-45</td>
<td>158</td>
<td>0</td>
<td>1</td>
<td>.39</td>
<td>.488</td>
</tr>
</tbody>
</table>

Sources: Secondary data were processed

Description:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTDA</td>
<td>Model long term discretionary accrual</td>
</tr>
<tr>
<td>STDA</td>
<td>Short term discretionary accrual models</td>
</tr>
<tr>
<td>INSTOWN</td>
<td>Institutional ownership</td>
</tr>
<tr>
<td>MGROWN</td>
<td>Managerial ownership</td>
</tr>
<tr>
<td>BOARDINDP</td>
<td>The proportion of independent board</td>
</tr>
<tr>
<td>BOARDSIZE</td>
<td>Board size</td>
</tr>
<tr>
<td>AUDCOM</td>
<td>The existence of an audit committee</td>
</tr>
</tbody>
</table>

Descriptive statistical results showed that the average value of long term discretionary accrual (LTDA) of companies listed in the LQ-45 index is 0. 60490. It means that during the period 2004-2010 companies tend to perform actions with the pattern increasing profit. These results supported by Jiambalvo DeFond (1994), Sweeney (1994); Peltier-Rivest (1999); Jaggi and Lee (2001), Rosner (2003); Djakman (2003), Sham
The average value of short-term discretionary accrual (STDA) is -0.40423. It means during the period 2004-2010, companies tend to have the pattern of decreasing earnings. These results support previous studies that provide empirical evidence on earnings management pattern with reducing the number of reported earnings.

2. Hypothesis Testing in LTDA and STDA models

To answer hypothesis 1 to hypothesis 5, the level of significance will be examined individually variables (t test), simultaneously (F test), and the coefficient of determination. The table below is a regression to the model results of the study.

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>LTDA Model</th>
<th>STDA Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>t</td>
</tr>
<tr>
<td>Constants</td>
<td>1.662</td>
<td>3.951</td>
</tr>
<tr>
<td>MGROWN</td>
<td>-0.051</td>
<td>-0.592</td>
</tr>
<tr>
<td>INSTOWN</td>
<td>-0.102</td>
<td>-1.243</td>
</tr>
<tr>
<td>BOARSIZE</td>
<td>-0.071</td>
<td>-0.899</td>
</tr>
<tr>
<td>BOARDINC</td>
<td>-0.154</td>
<td>-1.921</td>
</tr>
<tr>
<td>AUDCOM</td>
<td><strong>-0.276</strong></td>
<td><strong>-3.495</strong></td>
</tr>
<tr>
<td>F</td>
<td>3.849</td>
<td>0.003</td>
</tr>
<tr>
<td>R²</td>
<td>0.112</td>
<td>0.077</td>
</tr>
<tr>
<td>Adj R²</td>
<td>0.083</td>
<td>0.047</td>
</tr>
</tbody>
</table>

Sources: Secondary data were processed

Testing hypothesis 1a and 1b

Managerial ownership illustrates the large number of shares owned by management divided the total shares outstanding. The larger managerial ownerships have incentives to align the interests between managers with outside the company. Results of hypothesis testing for managerial ownership variable indicates the value of Beta (β) is (-0.051) with a significance value (0. 555) is much greater than 0.05. This suggests that managerial ownership variable has not significant effect on the variable LTDA. Thus, Hypothesis 1a is not supported. Furthermore, hypothesis testing for managerial ownership variable indicates
the value of Beta ($\beta$) is 0.047 with a significant value 0. 594. It means that the managerial ownership variables do not significantly affect the variables STDA. So the hypothesis 1b is not supported. The result is in contrast with some studies that high managerial ownership will reduce earnings management practices Gabrielsen, et al. (2002); Midiastuty and Mas'ud Mahfoedz (2003). The reason for this is in the study, the percentage of managerial ownership is very low (10%). Thus, these results have not addressed that managerial ownership reduce the misalignment of interests between management by the owners or shareholders.

**Testing Hypotheses 2a and 2b**

Hypothesis testing is intended to test whether institutional ownership negatively affects earnings management with STDA and LTDA models. The results shows that the Beta ($\beta$) value of institutional ownership variable is equal to (-0.102) with a probability level (0, 216). It means hypothesis 2a not supported, The results of this study do not support the study Jensen and Meckling (1976), Warfield et al., (1995), Dhaliwal et al., (1982), Morck et al., (1988), The results are consistent with the reason that institutional owners are more focused on current earnings (Porter, 1992; Mas'ud 2003). As a result, managers are forced to take action to boost short-term profits, for example, with earnings manipulation. The same research was also expressed by Cornett et al., (2006), which stated institutional ownership would make the manager feel bound to meet profit targets of the investors, so they will still tend to engage in earnings manipulation. The results also contrast with some studies showing that most of the significant results and declare, that the presence of institutional investors may reduce earnings management measures, as institutional investors are considered more experienced (Midiastuti and Machfoedz, 2003). However, the assumption of condition sophisticated institutions. In reality not all institutional investors are investors who sophisticated. This is especially true in terms of the number of institutional investors are very low. However, the increasing number of institutional investors, it will further limit management to manipulate earnings.

**Testing hypotheses 3a and 3b.**

Testing hypothesis 3a and 3b aim to test the board size has a positive effect on earnings management with STDA and LTDA models. Based on the analysis, the variable board size has Beta value (-0.071) and the sig. t (0. 370). It means that hypothesis 3a not supported, thus board size is not a positive influence on earnings management. While the STDA models, it has Beta value (-0.002) with sig. t (0.984). It also unsupported hypothesis 3b
Board size variable has not positive effect on earnings management practices both in STDA and LTDA models. This study gives the opposite result with Xie, Davidson, and Dadalt (2003), Yu (2006), Zhou and Chen (2004), and Chtourou, Bedard and Courteau (2001) which showed that the larger board size can reduce earnings management in the company which indicated by the negative coefficient. This can be explained, that the placement or additional commissioners made possible simply to comply with the formal, while the majority shareholder (controlling or founders) still plays an important role, so that the performance of the board is not increasing (Gideon, 2005). The size of the board size is not a major determinant for effectiveness of the oversight of the company's management. However, the effectiveness of control mechanisms depends on the values, norms and beliefs which are accepted within an organization (Jennings 2004a; 2004b; 2005a; Oliver, 2004)

**Testing Hypotheses 4a and 4b**

Its testing aims to test the proportion of independent board negatively affect earnings management in STDA and LTDA models. The results showed that the proportion of independent board variable has coefficient (-0.154) with probability value (0, 057), So Hypothesis 4a is not supported. In the LTDA models, the Beta value of this variable is (-0.116) with a probability value (0, 160). Hypothesis 4b is not supported too. It means that the proportion of independent board does not negatively affect the earnings management practices with STDA and LTDA models. The results are consistent with research conducted by Klein (2002), Veronica and Main (2005) and Boediono (2005) which states that the proportion of independent board is not proven an effect on earnings management practices.

**Testing Hypotheses 5a and 5b**

Testing hypotheses 5a and 5b intended to test the presence of an audit committee negatively affect earnings management practices with STDA and LTDA models. Based on the analysis, the Beta value of this variable on LTDA model is (-0.276) with a probability value (0, 001). So hypothesis 5a accepted. It means the existence of an audit committee negatively affect earnings management actions. The result is consistent with Xie, Davidson, Dadalt (2003), Veronica and Bakhtiar (2004), Wedari (2004), and Wilopo (2004), where the existence of an audit committee negatively affect earnings management practices. The important think if corporate governance mechanism ensure the implementation of the company's actions were fair and transparent.
On STDA model, the result showed that the Beta value of the variable existence of audit committee is (−0.045) with a probability value (−0.577). It means the hypothesis 5b is not supported, So the existence of an audit committee is not negatively affect earnings management model. It is consistent with research Veronica and Main (2005) that the existence of an audit committee does not affect the earnings management. It is possible, because this study measure the presence of an audit committee with dummy variables and not measures the characteristics of the audit committee members. These characteristics are audit committee activity (number of meetings with the function of the Internal Control System (SPI) and the external auditors, audit committee members competency, educational background and experience as a member of the audit committee.

CONCLUSIONS

1. Based on short term discretionary accrual models (STDAM), during 2004 to 2010 period, most companies included in the LQ 45 index tend to use a pattern by reducing profit numbers. While on the long term discretionary accruals model approach (STDAM) tend to use a pattern by raising profit numbers.

2. Results of testing hypotheses 1a and 1b (managerial ownership) are not supported in LTDA and STDA models. (prob. value 0.555 and 0.047 is much greater than 0.05). The result is in contrast with previous studies, that higher managerial ownership will reduce earnings management.

3. The hypothesis 2a (institutional ownership) is not supported (prob. value 0.216). But the hypothesis 2b is supported (prob. value 0.011). So the greater institutional ownership can reduce earnings management in LTDA models but in STDA model is not significantly.

4. Results of testing hypotheses 3a and 3b (Board size) are not supported in LTDA and STDA models (prob. value 0.370 and 0.984). So the greater board size companies have not been successful in reducing earnings management

5. Results of testing hypothesis 4a and 4b (the proportion of independent board) are not supported in LTDA and STDA models. The probability value is 0, 057 and 0,160. So the greater proportion of independent board in the company has not succeeded in reducing earnings management.

6. Results of testing hypothesis 5a (existence of audit committee) is supported in LTDA model (prob. value 0.001; coeff-0.276) in LTDA model. It means the
existence of an audit committee variables negatively affect earnings management. While testing the hypothesis 5b is supported (coeff-0.045; prob. value 0.577). So in STDA model, the existence of audit committee is not reducing earning management.

LIMITATIONS AND SUGGESTIONS

1. The sample is manufacturing company, so the results are still too general. For future research needs to be done for each type of industry, in order to identify differences in the pattern of earnings management in each industry type.

2. Earnings management perspective used in this study is an opportunistic perspective. For further research needs to use efficiency perspective to provide better information about impending cash flow and minimize the agency cost occurs.

3. Mechanisms of corporate governance variables were represented by the variable institutional ownership, managerial ownership, board composition, board size, and the existence of an audit committee. For future research will need to use the disclosure of CG index, so the results are more comprehensively.

4. Variable existence audit committee used by dummy variable which measured with audit committee characteristics. For future research will need to add other characteristics, such as: the competence of audit committee members, educational background, and experience.

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