EFFECTS OF CORPORATE GOVERNANCE VARIABLES
ON EARNINGS MANAGEMENT IN INDONESIA

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Abstract
To determine the effects of corporate governance on earnings management, this paper analyzed 171 annual
reports from issued 2006 to 2009 by 57 non-financial, joint stock companies implementing GCG (Good
Corporate Governance) practices, which were listed on the Indonesia Stock Exchange (IDX). Six corporate
governance variables (board composition, independent commissioners, separate chairman/CEO roles, audit
committee, managerial share ownership, and audit quality) as well as three control variables (leverage, size,
and ROA) were used. The results showed that two corporate governance variables significantly influenced
earnings management practices (separate chairman/CEO roles and managerial share ownership); the other
variables had no effect because these companies used GCG practices only to follow regulations rather than to
monitor and control.

Key words: earnings management, working capital accruals, good corporate governance (GCG)

A company’s principal is either the shareholders
or owners while the agent is either the manage-
ment or a chief executive officer (CEO). In this
structure, the agent engages in work activities in
order to satisfy the principal.

The Agency Theory of earnings management
practice states that individuals tend to maximize
personal satisfaction. According to this theory, the
separation of ownership and control between agent
and principal motivates managers (agents) to engage
in opportunism: earnings management practices that
increase personal benefits to the detriment of the
principal’s benefits (Jensen & Meckling, 1976).

This theory highlights the information asym-
metry between management and shareholders: manage-
ment has early access to key information, and has opportunities to manipulate records. In-
vestors focus more on profits than management
process. Furthermore, principals cannot continu-
ously monitor agent actions.

Because of the conflict of interest between
agent and principal, corporate managers may en-
gage in earnings management to adjust financial data
to increase company value in the eyes of inves-
tors. Earnings management is defined as the pro-
cess of adjusting financial information in accor-
dance with applicable legal frameworks while fulfilling specific, self-serving objectives.

There are four reasons for managers to manipulate financial reports: job security, contractual agreements involving external shareholders and managers, personal compensation schemes, or to accomplish target earnings and market expectations (Healy & Wahlen, 1999).

Data manipulation of financial information can misrepresent a company’s value to external parties. Therefore, management must limit such practices through effective monitoring concepts. These concepts are developed into corporate governance mechanisms known as Good Corporate Governance (GCG).

Rising in popularity in the last decade, the GCG concept is regarded as a foundation for company growth and success amidst global business competition. The popularity of GCG increased after the large-scale financial manipulations at Enron and WorldCom. The 1998 Asian financial crisis was reportedly triggered by these events, as well as by failure to implement good corporate governance (Daniri, 2005). A survey ranked Indonesia lowest in a corporate governance index (Booz-Allen, 1998).

According to Moeljono (2005), a country’s ability to recover from a financial crisis depends on each corporation in the country. Consequently, Indonesian companies should start and increase GCG awareness to excel in global business.

This study was motivated by the notion that opportunistic earnings management practices are widespread among companies in Indonesia. This research examines how corporate governance variables reduce earnings management practices, particularly in Indonesia’s listed, non-finance companies.

A relationship occurs when a contract engages two parties: an agent to perform some service for a principal’s interests, and a principal who authorizes the agent to act and to make decisions. Since both agent and principal try and maximize personal goals and value differences, it is almost impossible for the agent to always act in the principal’s behalf. This results in earnings management practices (Jensen & Meckling, 1986).

Earnings management practices in financial reports and in structuring transactions happen when managers alter these reports to mislead stakeholders about the economic performance of a company (Healy & Wahlen, 1999).

There are two types of earnings management: (1) efficient earnings management where private information is communicated to transfer full knowledge, and (2) opportunistic earnings management, where managers transfer modified information to their benefit (Scott, 2000). Efficient earnings management occurs when managers accurately communicate private information about firm profitability, while opportunistic earnings management occurs when managers distort the quality of information (Subramanyam, 1996).

To minimize conflicts of interests between company and shareholders, management should engage in Good Corporate Governance (GCG), which motivates the board and management with incentives to pursue stated objectives, thus encouraging more efficient use of resources. In Indonesia, GCG is described as: “... a set of rules that define the relationship between shareholders, managers, creditors, the government, employees and other internal and external shareholders with respect to their rights and responsibilities that have the main objective of creating added value for the stakeholders.” (FCGI, 2006).

Corporate Governance Practices

Independent Board

The 2007 Indonesian Company Law requires firms classified as under the Perseroan Terbatas (PT) structure to have a two-board system consisting of a Board of Commissioners (BOC) and a Board of Directors (BOD). The BOC is important in a
company’s GCG implementation as it primarily monitors, supervises and advises management in the way the company is run. Three important criteria affect BOC effectiveness: independence, competence and commitment. The Board of Commissioners must include independent commissioners to ensure that decisions are fair to all parties.

Section III.1.4 of the Jakarta Stock Exchange Regulations says that independent commissioners should be independent of the company and its shareholders, and should comprise at least a third of the total number of commissioners (Firmansyah & Wiguna, 2004).

It has been found that firms with CEOs who are also the firm’s board chairman are more likely to be subject to SEC (Securities and Exchange Commission) investigation for alleged GAAP (generally accepted accounting principles) violations (Dechow, et al., 1996). Also, independent boards constrain earnings management (Chtourou, et al., 2001).

**Audit Committee**

Bapepam Regulation IX.1.5 requires all Audit Committee members to be independent and external parties (Herwidayatmo, 2004) and to only be responsible to the Board of Commissioners. Their responsibilities include submitting opinions on accounting problems, financial statements, legal compliance, risk management, internal monitoring systems and independent audits. An audit committee must include at least one Independent Commissioner who will act as Chairman, and at least two independent members.

Research found that negative discretionary accruals are significantly lower among firms with an audit committee compared to firms with no audit committee; positive discretionary accruals of firms with an audit committee are not significantly lower than those of firms with no audit committees (Parulian, 2004).

**Managerial Share Ownership**

It has been found that there is no transparency when a company’s management is privileged with private information that supports its personal interests (Iskander & Chamlou, 2000), which can occur when company management holds ownership shares, known as managerial share ownership.

However, to its credit, managerial ownership has been used as a mechanism to reduce agency problems by aligning the interest of managers and shareholders. Research shows that agency problems are reduced when managerial share ownership is enlarged to the point that managers need not manipulate earnings for personal benefit (Jensen & Meckling, 1976).

**Audit Quality**

Researchers have correlated audit quality with earnings management. For instance, qualified auditors proxied by the Big Four reduce incidences of earnings management (Al-Abbas, 2009; Bauwhede, et al., 2003). However, others found no significant evidence of the moderating effect of audit quality on earnings management (Sandra & Kusuma, 2004), which may indicate that auditor size is not be an effective proxy for audit quality.

**METHOD**

Six variables went into the development of the hypothesis used in this study: board of commissioners, dual roles, audit committees, managerial ownership, auditor reputation and competence.

**Board of Commissioners**

The Board of Commissioners (BOC) is responsible for ensuring the reliability of financial statements. Theoretically, the BOC affects the quality of financial reports used as a measure of earnings management (Chtourou, et al., 2001).
Smaller boards of four to six members may be more able to make quick strategic decisions (Goodstein, et al., 1994), while larger boards are more capable of monitoring the actions of top management (Zahra & Pearce, 1989).

An inverse proportion to the size of the board and incidence of manipulating financial reports has been found: it appears that, the larger the board, the less likely for earnings management practice to occur (Xie, et al., 2003).

Studies have found similar relationships between earnings management and board independence and support the notion that boards which are more independent of management are more effective in monitoring corporate financial accounting procedures.

For instance, it has been found that the presence of outside boards reduced the probability of fraud in financial statements (Beasley, 1996). As well, companies with independent boards are less likely to report abnormal accruals (Klein, 2002; Xie, et al., 2003).

**Audit Committees**

The absence of audit committees make earnings management easier while a qualified audit committee can limit the practice (Dechow, et al, 1996; McMullen, 1996) or at least reduce it (Wedari, 2004).

**Managerial Ownership**

Managerial ownership can reduce agency problems by aligning the agent's and principal's interests. The larger proportion of managerial ownership, the less likelihood for the manager to manipulate earnings while, the lower the proportion of managerial ownership, the higher incentives for managers to manipulate earnings (Jensen & Meckling, 1976).

**Auditor Reputation and Competence**

Companies audited by Big Six auditors use less discretionary accruals to adjust reported earnings (Francis, et al., 1999; Kim, et al., 2003; Krishnan, 2003). Furthermore, big auditors exercise more effective control over corporate manipulation of earnings statements. Size, leverage and ROA are control variables used in the model (Kang & Kim, 2011; Al-Abbas, 2009).

The research population comprises companies listed on the Indonesian Stock Exchange (IDX) and on Kompas 100 as of 30 January 2011. The population selection criteria follows: (1) non-financial, IDX-listed companies from 2006-2009; (2) companies with published 2006-2009 financial reports; (3) companies with published information on independent commissioners, audit committees, managerial ownerships, and auditors. The final sample comprises 57 companies.

Financial companies such as banks, insurance companies, and financing companies were excluded from this study due to the wide variation of capital structures and intensity of government regulations.
Secondary data were obtained from annual reports downloaded from the IDX database and from company websites, comprising board composition, lists of independent commissioners, insiders' shareholdings, audit committee memberships, independent auditor reports, and financial statements.

To test the research hypothesis, the following multiple linear regression formula uses working capital accruals as dependent variable and corporate governance variables as independent variable:

\[ WCDAC = \alpha + \beta_1 BOC + \beta_2 IC + \beta_3 CEO + \beta_4 AC + \beta_5 MSO + \beta_6 AQ + \beta_7 Size + \beta_8 Leverage + \beta_9 ROA + \varepsilon \]

Where:
- WCDAC: working capital discretionary accruals
- BOC: number of commissioners on the board
- IC: ratio of independent commissioners on the board compared to total board of commissioners
- CEO: dummy variable (1) if CEO is the chairman and (0) if not
- AC: number of audit committee members in the firm
- MSO: percentage of managerial share ownership
- AQ: dummy variable (1) if auditor is one of the big four firms and (0) if not
- Size: natural log of total assets of firm
- Leverage: debt ratio of firm
- ROA: return on assets of firm
- \( \varepsilon \): error term

The dependent variable used in this research is earnings management, where working capital accruals are used to proxy the earnings management. Consistent with Xie, et al. (2003), working capital accruals are used in this research because managers have a great deal of discretion in shaping their firms' reports of actual earnings (Teoh, et al., 1998). In addition, a lay user of financial statements find managing earnings through accruals manipulation more subtle and difficult to detect.

The use of working capital accruals as proxy for earnings management is calculated using the modified Jones Model. This model has been found to be most effective in detecting manipulation in earnings reports (Dechow, et al., 1996; Guay, et al., 1996).

In the modified Jones (1995) model, working capital accruals are decomposed into non-discretionary accruals (NDAC) and discretionary accruals (DAC). NDAC or normal accruals are estimated by managers that represent changes in the underlying economic performance of the company. On the other hand, DAC are affected by manager discretion and thus used as proxy to measure earnings management. NDAC are estimated during the observation year (the year in which earnings management is estimated) as:

\[ NDAC_{it} = \alpha\left(1/TA_{i,t-1}\right) + \beta\left(\Delta REV_{it} - \Delta REC_{it} / TA_{i,t-1}\right) \] (1)

Where:
- NDAC: non-discretionary accruals for company i in year t
- \( TA_{i,t-1} \): total assets for company i at the end of year t-1
- \( \Delta REV_{it} \): revenues for company i in year t less revenues in year t-1
- \( \Delta REC_{it} \): net receivables for company i in year t less net receivables in year t-1
- \( \alpha, \beta \): industry-specific parameters

The change in receivables is subtracted from the change in revenues to reflect the fact that the change in receivables is treated as discretionary. All variables in the regression model are deflated.
by lagged total assets to reduce heteroscedasticity problems (Teoh, et al., 1998).

$$\frac{WCA_{j,t}}{TA_{j,t-1}} = \alpha_1\left(\frac{1}{TA_{j,t-1}}\right) + \beta_1\left(\frac{\Delta REV_{j,t}}{TA_{j,t-1}}\right) + \epsilon_t$$

(2)

Where:

- $WCA_{j,t}$: working capital accruals in year $t$ for industry $j$; defined as change in non-cash current assets minus the change in current liabilities.
- $WCA_i,t = (\Delta CA_t - \Delta CASHT_t) - (\Delta CL_t - \Delta STD_t)$, in which STD defined as current maturity of long-term debt.
- $\beta_1$: ordinary least square (OLS) estimates of $\beta_1$ in equation (1) above.
- $\epsilon_t$: regression residuals.

Essentially, working capital discretionary accruals are regressed on revenue change since the underlying assumption under this model is that revenue is a component of NDAC. The DAC then defined as the remaining portion of the WCDAC:

$$WCDAC_{i,t} = WC(1/TA_t) - NDAC_{i,t}$$

(3)

Where:

- $WCDAC_{i,t}$: working capital discretionary accruals for company $i$ in year $t$.
- $WC$: working capital.
- $NDAC$: non-discretionary accruals for company $i$ in year $t$.

The variables and their measurements utilized in this study are summarized in the following table:

### FINDINGS

#### Descriptive Statistics

Table 2 illustrates the range (minimum and maximum values), the average value and the standard deviation value of all variables utilized in this empirical analysis.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Type</th>
<th>Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings Management</td>
<td>Dependent Variable</td>
<td>Proxy by working capital discretionary accruals (WCDAC) using the Modified Jones Model (1995).</td>
</tr>
<tr>
<td>(Discretionary Accruals)</td>
<td></td>
<td>Board size: Number of commissioners listed by the company.</td>
</tr>
<tr>
<td>Board of Commissioners size</td>
<td>Independent Variable</td>
<td>Independent board: Number of independent commissioners listed by the company, divided by total size of the Board of Commissioners.</td>
</tr>
<tr>
<td>Independent Commissioners (Ratio)</td>
<td>Independent Variable</td>
<td>Separation: Dummy variable (1) if CEO is the same person as the Chairman and (0) if not.</td>
</tr>
<tr>
<td>Separation roles of Chairman/CEO</td>
<td>Independent Variable</td>
<td>Number of Audit Committee members in the firm.</td>
</tr>
<tr>
<td>Audit Committee</td>
<td>Independent Variable</td>
<td>The proportion of shares in a company owned by the management of that company.</td>
</tr>
<tr>
<td>Managerial Ownership</td>
<td>Independent Variable</td>
<td>Dummy variable (1) if the auditor is one of the Big Four firms (high audit quality) and (0) for firms audited by non-Big Four auditors (low audit quality).</td>
</tr>
<tr>
<td>Audit Quality</td>
<td>Independent Variable</td>
<td></td>
</tr>
</tbody>
</table>
Table 2. Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOC</td>
<td>228</td>
<td>2</td>
<td>12</td>
<td>5.25</td>
<td>2.263</td>
</tr>
<tr>
<td>IC</td>
<td>228</td>
<td>0.000</td>
<td>0.750</td>
<td>0.36577</td>
<td>0.1405417</td>
</tr>
<tr>
<td>AC</td>
<td>228</td>
<td>0</td>
<td>6</td>
<td>2.20</td>
<td>1.647</td>
</tr>
<tr>
<td>MSO</td>
<td>228</td>
<td>0.000</td>
<td>0.2723</td>
<td>0.00614</td>
<td>0.02878</td>
</tr>
<tr>
<td>Size (Ln)</td>
<td>228</td>
<td>25.2</td>
<td>32.21</td>
<td>29.166</td>
<td>1.27934</td>
</tr>
<tr>
<td>Leverage</td>
<td>228</td>
<td>0.5458</td>
<td>3.604</td>
<td>0.5411</td>
<td>0.2906</td>
</tr>
<tr>
<td>ROA</td>
<td>228</td>
<td>-0.067</td>
<td>0.6215</td>
<td>0.0396</td>
<td>0.08116</td>
</tr>
<tr>
<td>WCDAC</td>
<td>228</td>
<td>-0.7461</td>
<td>1.3763</td>
<td>0.087723</td>
<td>0.2176918</td>
</tr>
</tbody>
</table>

Valid N (listwise) 228

WCDAC are the working capital discretionary accruals as the proxy for earnings management; BOC is the number of commissioners on the board; IC is the proportion of independent commissioners on the board compared to total number on the Board of Commissioners; and MSO is the percentage of managerial share ownership held by the management.

Table 3. Descriptive Statistics for Dummy Variable

<table>
<thead>
<tr>
<th>Separation role of CEO/Chairman</th>
<th>1.31%</th>
<th>98.69%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit Quality</td>
<td>60.96%</td>
<td>39.04%</td>
</tr>
</tbody>
</table>

CEO is a dummy variable, (1) if CEO is the same person as the Chairman and (0) if not; AQ is a dummy variable, (1) if auditor is one of the Big Four firms and (0) if not.

Table 2 illustrates the sample's descriptive statistics in the years 2006-2009. The mean for proportion of independent commissioners compared to total commissioners on the board fulfills the independence requirement (Indonesia Stock Exchange Regulation III.1.4.) where the number independent commissioners on the board is at least 30% of the total BOC. The mean for independent commissioners is 36.577% with a standard deviation of 0.14054. This means that the Indonesian companies in this study had independent parties in the Board of Commissioners.

The WCDAC mean value is positive at 8.77%. Based on the sample T-test, the WCDAC p-value is significant at 0.000. This implies that, on average, large Indonesian firms managed their reported earnings.

Table 3 shows that almost all companies (98.69%) separate the roles of CEO and Chairman; more than half of the population sample did not have a competent in-house audit committee (mean = 2.2) and was audited by Big Four auditors (60.96%) who are employed in most large Indonesian companies due to the complexity and sophistication of their financial activities (Abdul Rahman & Haneem, 2006). Big Four auditors also provide credibility to financial statements and result in high investor confidence; their presence is expected to minimize earnings management practices in companies.

Table 4 shows an adjusted R square value of 0.18, which indicates that 18% of the independent variables affect the dependent variable, where the proxy element is working capital accruals. This indicates that many other factors (82%) should be accounted to explain variations in measuring earnings management in the model used in this study. The F-statistics is lower than the significance level (5%), which indicates a great deal of evidence inferring the validity of this model.
DISCUSSION

In this research, not all corporate governance variables are significantly related to earnings management. Some variables, such as CEO-owner role separation and managerial share ownership, significantly influence earnings management. Other variables (board size, independent commissioner, audit committee, and audit quality) are not significantly related to earnings management. Moreover, the control variables size and leverage significantly influence earnings management, while ROA is not significant. These findings are consistent with those of Kang & Kim (2011).

The authors assume that the insignificant relationship between BOC and earnings management occur because size is not a crucial element in determining the effectiveness of monitoring management, which is consistent with the previous findings (Klein, 2002; Chtourou, et al., 2001; Xie, et al., 2003; Al-Abbas, 2009). The effectiveness of control mechanisms depend on the values, norms, and beliefs held in an organization (Jennings, 2004 b; Oliver, 2004).

Table 4 shows that independent commissioners on the board and the competence of audit committees do not significantly affect earnings management. This is consistent with other studies which found no significant relationship between independent boards in JSE-listed firms (Indonesia Stock Exchange) and earnings management (Chtourou, et al. 2001; Park & Shin, 2003).

This may be caused by several factors. First, public companies only appoint independent boards and establish audit committees to comply with regulations rather than to monitor processes. Second, it is possible that independent boards and audit committees are ineffective in carrying out monitoring functions. Here, ineffectiveness is defined as lack of expertise, of required skills, of experience, and of knowledge in the business environment. Due to limited knowledge about a company, outside boards rely on management for information (Abdul Rahman & Haneem, 2006). The third reason is that the minimum number required of independent board membership may insufficient to affect earnings management practices (Siregar & Utama, 2008). As minority groups, outside boards are powerless to bring change or might to act as an effective monitoring systems.

With the separation of the roles of owner and CEO, there is no all-powerful person with concentrated authority to make earnings management possible. Such an individual can dominate the Board, emasculate independent directors and, ultimately, not represent the interests of the shareholders. The separation leads to greater responsibility, and avoids temptations such as biased decisions in favor of a CEO’s interests at the expense of the company and the shareholders. Previous studies show that companies with combined roles do not perform as well as their counterparts (Abdul Rahman & Haniffa, 2005) and are more likely to be subjected to accounting enforcement actions by the SEC for GAAP infringements (Dechow, et al., 1996).

Another corporate governance variable which is significantly related to earnings management is managerial share ownership. The larger the managerial share ownership, the less likely for
earnings management to occur, and vice versa. This is echoed by other reports (Shleifer & Vishny, 1997; Warfield, et al., 1995). The lower the share ownership, the lower the incentives received by managers. As for personal maximization, managers with low share ownership have more possibilities to engage in opportunistic earnings management (Shleifer & Vishny, 1997).

The variable audit quality is not significantly related to earnings management; Big Four auditors do not necessarily restrict earnings management practices. This is consistent with other studies that found no significant evidence of audit quality’s moderating effect on earnings management (Sandra & Kusuma, 2004; Siregar & Utama, 2008).

CONCLUSION AND SUGGESTION

The prediction about the ability of good corporate governance practices to reduce earnings management practices is not entirely accurate. Separating the roles of Chairman and Chief Executive Officer (CEO) as well as managerial share ownership are significantly related with earnings management. The other corporate governance variables (board of commissioner size, independent commissioners on the board, audit committee competence, and audit quality) are not significantly related to working capital discretionary accruals.

Earnings management performed by managers can beneficial for shareholders, particularly where accounting discretion is used for improving informativeness of reported earnings (Peasnell, et al., 2000). Thus, further research should investigate if discretionary accruals are harmful or beneficial to shareholders or investors.

REFERENCES


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