Study of Earning Management and Audit Quality in Indonesia

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ARTICLE INFORMATION

ABSTRACT

The objectives of the research is to find out empirical evidence of the determine audit quality in mediating the relationship between KAP size, KAP tenure and earnings management. The population of this study was listed companies in the manufacturing sector at the Indonesia Stock Exchange, and the sample was determined based on following criteria: (a) the annual report ended 31 December, (b) not include in financial sector, etc. There were 355 companies meeting the criteria. The technique used is the analysis of Partial Least Square (PLS). The result of this research show that (1) KAP size have significant effect on audit quality; (2) KAP tenure have significant effect on audit quality; (3) Audit quality have significant effect on earning management; (4) KAP size capable of being mediating variable in the relationship between KAP size with earning management; (5) KAP Tenure does not capable of being mediating variable in the relationship between KAP tenure with earning management.

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INTRODUCTION

Management has the responsibility to report the results of operations and the company's financial position to shareholders through financial statements. One measure of corporate performance that is often used as a basis for decision making is the profit generated by the company, the profit is measured on an accrual basis (Subramanyam, 1996).

Earnings management arises as a result of agency problems, namely the inconsistency of interests between managers and company owners due to information asymmetry. Information asymmetry is a condition where there is an imbalance in the acquisition of information between management and shareholders where management has more information than external parties. In the end the role of the third part competent and independent is needed to conduct an examination of financial statements in order to restore the confidence of the users of financial statements (Al-Thuneibat et al., 2011).

Public accountants are the most appropriate profession as a third party because they act as auditors to carry out the function of "giving confidence" through auditing financial statements. Audit of financial statements is intended to reduce information risk and improve the decision making process (Arens et al., 2008).

According to DeAngelo (1981) that the size of an accounting firm is considered to provide incentives for large public accounting firms to try to present audit quality better than a small accounting firm, whereas according to Arnett and Danos (1979) that the size of a Public Accountant Office (KAP) cannot used as a benchmark for the success of a job. As long as professional standards and qualifications are maintained, it is not ethical to distinguish between Big Eight and non-KAP.

Audit tenure is often associated with the auditor's independence. Johnson et al. (2002) noted that an understanding of clients who were not good enough at the beginning of the assignment would reduce the auditor's ability to detect material errors. Myers et al. (2003) and Johnson et al. (2002) found that long tenure did not reduce independence and in fact it improved audit quality.

Ardiati (2005) in Christiani and Nugrahanti (2014) stated that high-quality auditing acts as a deterrent to effective earnings management, because management's reputation will be destroyed and the value of the company will decrease if this false reporting is detected and revealed. Ratmono (2010) states that qualified auditors are able to detect earnings management actions by clients.

The case of earnings management that has occurred in Indonesia is a case in PT Kimia Farma Tbk. The management of PT Kimia Farma mark up profits in the 2001 annual financial report of Rp. 32.6 billion. Based on Bapepam's investigation, it was stated that the KAP that audited the financial statements of PT Kimia Farma had followed applicable audit standards, but failed to detect the fraud. In addition, the KAP was also not proven to help management commit fraud (Kompas, 21 November 2002) in Christiani and Nugrahanti (2014). Table 1 illustrates the study of global fraud:

<table>
<thead>
<tr>
<th>Remarks</th>
<th>2012</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number cases of surveyed</td>
<td>1,388</td>
<td>1,843</td>
</tr>
<tr>
<td>Global case</td>
<td>204</td>
<td>298</td>
</tr>
<tr>
<td>Asian case</td>
<td>20</td>
<td>27</td>
</tr>
<tr>
<td>The case of Asian</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average loss (median loss) globally</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Of the total revenue (% of revenue)</td>
<td>$3.5 million</td>
<td>$2.9 million</td>
</tr>
<tr>
<td>If project against Gross World Product (US$ triliun)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of fraud globally</td>
<td>86.7%</td>
<td>86.3%</td>
</tr>
<tr>
<td>Asset misappropriation</td>
<td>33.4%</td>
<td>32.8%</td>
</tr>
<tr>
<td>Corruption</td>
<td>7.6%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Fraudulent financial statements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average loss (median loss) globally – US thousand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial report manipulation</td>
<td>$ 1,000</td>
<td>$ 4,100</td>
</tr>
<tr>
<td>Corruption</td>
<td>$ 250</td>
<td>$ 250</td>
</tr>
<tr>
<td>Looting asset</td>
<td>$ 120</td>
<td>$ 135</td>
</tr>
<tr>
<td>Manipulation of financial statement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How long before it is detected.</td>
<td>24 months</td>
<td>27 months</td>
</tr>
<tr>
<td>Overall fraud, detected coincidentally</td>
<td></td>
<td></td>
</tr>
<tr>
<td>By accident</td>
<td>7%</td>
<td>8.3%</td>
</tr>
<tr>
<td>By external audit</td>
<td>3.3%</td>
<td>4.6%</td>
</tr>
</tbody>
</table>

Source: Tuanakota, 2013

Several studies that are relevant to this research have been widely carried out, but the results are inconsistent. Among them research Christiani and Nugrahanti (2014) concluded that the size of KAP does not have a significant effect on earnings management, Farmansyah (2014) concluded that audit tenure has no significant effect on the level of earnings management, KAP size has a negative
effect on earnings management, Arfan (2013) produces the conclusion that the size of KAP and KAP tenure has a negative effect on accrual management and IFRS does not moderate KAP size with accrual earnings management, Esa (2013) concludes that audit quality significantly negatively affects earnings management and earnings management significantly negatively affects earnings quality, Inaam et al. (2012) concluded that KAP size has a significant negative effect on accrual earnings management, KAP size has a positive effect on real earnings management while audit tenure has no effect on earnings management, Gerayli et al. (2011) concluded that the size of KAP has a significant negative effect on earnings management.

Meanwhile the contradictory research results found by Rusmin (2010) which resulted in the conclusion that auditor quality results in low discretionery accruals and Luhgiatno (2008) which results in the conclusion that the big four KAP is not able to limit the company's earnings management practices.

The inconsistencies in the results of previous studies led to more interesting and important research on audit quality and earnings management, so that researchers were motivated to re-examine, especially the factors that were thought to have contributed to audit quality and earnings management. The renewal of the previous research is that in this study there are audit quality variables as intervening variables.

**LITERATURE REVIEW**

**Stewardship Theory**

Stewardship theory stems from a different model of human behavior applied in an organization. Stewardship theory is very consistent with organizational theory that views organizations as a collection of smart people who are always oriented towards achieving organizational goals (Davis, 1997 in (Luhgiatno, 2008).

**Agency Theory**

Agency theory is one form of game theory, a contractual model between two people (parties) or more, which explains the relationship between the agent (management of a business) and the principal (business owner).

However, the interests of these two parties are not always in line so that conflicts of interest arise between the two if both parties (principals and agents) try to maximize their respective utilities.

**Positive Accounting Theory (TAP)**

Positive accounting theory explains why companies choose accounting policies as part of a deep problem of minimizing contract costs and for achieving corporate governance efficiency.

The three PAT hypotheses that are used as the basis for understanding earnings management actions formulated by Watts and Zimmerman (1986) are:

a. The Bonus Plan Hypothesis
b. The Debt To Equity Hypothesis (Debt Covenant Hypothesis)
c. The Political Cost Hypothesis (Size Hypothesis)

**Research Hypothesis**

**a. KAP Size and Audit Quality**

According to DeAngelo (1981) that the size of an accounting firm is considered to provide incentives for a large public accounting firm to try to present better audit quality than a small accounting firm, whereas according to Arnett and Danos (1979) the size of a firm cannot be used as a benchmark for success work.

The size of KAP according to Francis and Yu (2009), found that the larger the size of KAP, the higher the audit quality produced. In addition Choi et al. (2010) also found consistent results. This study uses discretionary accrual measures for audit quality and for KAP size using the number of clients and audit income.

H1: KAP size affects audit quality

b. KAP Tenure and Audit Quality

The long relationship between KAP and clients has the potential to cause closeness between them, this can hinder auditor independence and reduce audit quality (Al-Thuneibat et al., 2011).

The long relationship between KAP and the client can also lead to the closeness of KAP with company management so as to make independent attitudes difficult to implement by KAP (Dao et al., 2008). Deis Jr and Giroux (1992) found that the longer the audit period (audit tenure), the auditor will become less challenged and the less innovative the audit procedure, even the skepticism of the client will decrease, which will ultimately reduce
the quality of the audit carried out by the auditor. In line with Deis Jr and Giroux (1992), Lavin (1976) in his research also states that the longer the audit period, the independence will decrease because the auditor will have financial dependence on the client.

H2: KAP tenure affects audit quality

c. Effect of Audit Quality on Accrual Earnings Management

Earnings management arises as a result of agency problems, namely the inconsistency of interests between managers and company owners due to information asymmetry.

Several studies on the effect of audit quality and earnings management found that high audit quality was able to limit earnings management practices (DeAngelo, 1981). This is in line with the research of Myers et al. (2003) and Chen et al. (2008) in Esa (2013) found that audit quality proxied by long-term audit tenure is associated with a decrease in "extreme income-increasing accruals" and limits earnings management in creating future earnings management. Research by Fitriany and Rosieta (2010) in Esa (2013) found that quality audits significantly have a negative effect on earnings management practices.

H3: Audit quality affects accrual earnings management.

d. Effect of KAP Size on Accrual Profit Management through Audit Quality

A number of studies found the size of KAP on audit quality and earnings management. Aronmwan (2013), Choi et al. (2010), Wibowo and Rossieta (2010) prove that the size of KAP significantly affects audit quality.

In line with the research of Inaam et al. (2012), Gerayli et al. (2011), Ardiati (2005) in Christiani and Nugrahanti (2014) stated that high-quality auditing acts as a deterrent to effective earnings management, because the reputation of management will be destroyed and the value of the company will decrease if this false reporting is detected and revealed. Ratmono (2010) states that qualified auditors are able to detect earnings management actions by clients.

H4: KAP size affects accrual earnings management through audit quality.

e. Effect of KAP Tenure on Accrual Profit Management through Audit Quality

A number of studies have found a relationship between KAP tenure, audit quality and earnings management. Myers et al. (2003) and Johnson et al. (2002) found that long tenure did not reduce independence and in fact it improved audit quality.

In line with the research of Inaam et al. (2012), Gerayli et al. (2011), Ardiati (2005) in Christiani and Nugrahanti (2014) stated that high-quality auditing acts as a deterrent to effective earnings management, because the reputation of management will be destroyed and the value of the company will decrease if this false reporting is detected and revealed. Ratmono (2010) states that qualified auditors are able to detect earnings management actions by clients.

H5: KAP tenure affects accrual earnings management through audit quality.

METHOD

Population and Research Sample

The population in this study are manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2010-2014. The analysis was carried out quantitatively on the research sample selected by purposive sampling with criteria including: the company issued a complete financial report; the company is fully operational and does not include a newly listed company (Initial Public Offering/IPO) within the observation period; the company does not delist from the IDX, does not stop operating activities, does not carry out business mergers and does not change the status of the sector within the observation period; the company presents financial statements stated in rupiah (Rp); and companies are not included in the financial industry sector. Based on these criteria a sample of 355 manufacturing companies was obtained.

Definition of Research Variables

Operational definitions of variables in this study are:

1. KAP Size (X1)

The size of the KAP is the size of the company audited, proxied to be (Li et al, 2008):

a. Total value of company assets
b. Total sales
c. Number of Audit Fees Receive
2. KAP tenure (X\textsubscript{2})
   KAP tenure is the audit engagement period between KAP and client related to audit services that have been agreed upon beforehand. KAP variable tenure is a dummy variable, which uses a scale of 0 for KAP with an assignment period of 0-3 years and 1 for KAP with an assignment period of 3-6 years.
3. Audit Quality (Y)
   Audit quality is earnings quality, which is calculated by the following equation (Francis and Wang, 2008):

\[ PA = \left\{ \left[ \text{Sales}_t \times (\text{CA}_{t-1} - 1/\text{Sales}_{t-1}) \right] - \left\{ \text{grossPPE}_t \times (\text{depr}_{t-1}/\text{grossPPE}_{t-1}) \right\} \right\} / \text{TAt}_1 \]

\[ \text{PA} : \text{Predicted accruals} \]
\[ \text{Sales}_t : \text{Sales in year } t \]
\[ \text{CA}_{t-1} : \text{Current accrual in year } t-1 \]
\[ \text{grossPPE}_t : \text{Gross property, plant, & equipment} \]
\[ \text{depr}_{t-1} : \text{Depreciation in year } t-1 \]
\[ \text{TAt}_1 : \text{Total asset in year } t-1 \]

4. Profit Management (Z)
   Earnings management is a choice from the manager regarding what accounting policies can affect income so that the company's profits. In this study using discretionary accruals estimated using The Modified Jones Model. The Modified Jones Model is calculated using the following formula (Dechow et al, 1995):

\[ \text{TA}_t = \text{NI}_t - \text{CFO}_t \]
\[ \text{TA}_{t/A_{t-1}} = a_1 \left( \text{TA}_{t/A_{t-1}} \right) + a_2 \left( \Delta \text{REV}_{t/A_{t-1}} \right) + a_3 \left( \text{PPE}_{t/A_{t-1}} \right) + \varepsilon_1 \]
\[ \text{NDA}_t = a_1 \left( \text{TA}_{t/A_{t-1}} \right) + a_2 \left( \Delta \text{REV}_{t/A_{t-1}} \right) + a_3 \left( \text{PPE}_{t/A_{t-1}} \right) + \varepsilon_2 \]
\[ \text{DA}_t = \text{TA}_{t/A_{t-1}} - \text{NDA}_t \]

\[ \text{TA}_t : \text{Total accrual} \]
\[ \text{NI}_t : \text{Net income} \]
\[ \text{CFO}_t : \text{Cash flow from operation} \]
\[ \text{NDA}_t : \text{nondiscretionary accrual} \]
\[ A_{t-1} : \text{Assets total in } t-1 \]
\[ \Delta \text{REV}_t : \text{Income year } t \text{ subtracted by income year } t-1 \]
\[ \Delta \text{REC}_t : \text{Accounts receivable net of the year } t \text{ subtracted by net debt year } t-1 \]

\[ \text{PPE}_t : \text{Gross property, plant, & equipment} \]
\[ \text{DA}_t : \text{Discretionary accrual} \]

Data Analysis
The analysis technique used in this study is Partial Least Square (PLS), assisted by WarpPLS 3.0 software. The Partial Least Square (PLS) method is a powerful analytical method because it can be applied to all data scales, does not require many assumptions and the sample size does not have to be large. Besides that PLS can be used as a confirmation of the theory can also be used for predictive purposes (Ghozali, 2014).

Descriptive statistics test.
Descriptive statistics to describe or provide information about a data or situation or phenomenon. Descriptive statistical tests include average values, mode values, maximum values, minimum values, and standard deviation values.

Hypothesis test.
a. Describes the Measurement Model / Outer Model as measured by Convergent validity, Discriminant validity and Composite reliability
b. Describing a Structural Model or Inner Model that is tested by model fit test (model fit), Path Coefficient and Determination Coefficient (R\textsuperscript{2}).

Analysis for testing indirect effects, KAP size (X\textsubscript{1}), KAP tenure (X\textsubscript{2}), on audit quality (Y) through accrual earnings management (Z). This test is carried out to prove H\textsubscript{4} and H\textsubscript{5}.

a. The first requirement for H\textsubscript{4} testing can be done after seeing the significance of the influence of X\textsubscript{1} to Y and also seeing the significant influence of the influence of Y to Z, if the significance is <0.05, there is an influence of the independent variable on the dependent variable. The second condition is to see the positive or negative direction of the standardized beta, if the direction is the second condition is met. After that, it is done by multiplying the standardized coefficients between b\textsubscript{1} (X\textsubscript{1} to Y) with b\textsubscript{2} (Y to Z).
b. The first requirement for H\textsubscript{5} testing can be done after seeing the significance of the influence of X\textsubscript{2} to Y and also seeing the
significance of the effect of Y to Z, if the significance is <0.10 there is an influence of the independent variable on the dependent variable. The second condition is to see the positive or negative direction of the standardized beta, if the direction is the second condition is met. After that, it is done by multiplying the standardized coefficients between $b_2 (X_2 to Y)$ with $b_5 (Y to Z)$.

RESULT
Effect of KAP Size on Audit Quality

Based on the results of WarpPLS 3.0, it shows that the size of KAP has a positive effect on audit quality, so that $H_1$ is the size of KAP that affects audit quality. This result is indicated by the value of beta ($\beta$) of 0.69 and the significance level of <0.01, less than the significance level of <5% (0.05).

The results of this study are in line with the research conducted by DeAngelo (1981) arguing that audit quality is directly related to the size of the audit firm with a proxy for the size of the audit firm is the number of clients. Krishnan and Schauer (2000) use the number of professionals who work in the relevant KAP as an indicator of KAP size. Krishnan and Schauer (2000) link the number of professionals working in the public accounting firm concerned with audit quality in terms of compliance with generally accepted accounting principles. Simunic and Stein (1987) in Krishnan and Schauer (2000) say that client characteristics are indicators of KAP size. Simunic and Stein (1987) in Krishnan and Schauer (2000) further stated that client size is positively related to audit quality.

Effect of KAP Tenure on Audit Quality

Based on the results of WarpPLS 3.0, it shows that KAP Tenure has a negative effect on Audit Quality, so that $H_1$ is the size of KAP that affects audit quality. This is indicated by the value of beta ($\beta$) of -0.02 and the significance level of 0.06 is greater than the level of significance <5% (0.05).

The results of this study in line with Deis Jr and Giroux (1992) found that the longer the audit period (audit tenure), the auditor will become less challenged and the less innovative the audit procedure, even the skepticism of the client will decrease which ultimately will reduce audit quality carried out by auditors. Lavin (1976) in his research also states that the longer the audit period, the independence will decrease because the auditor will have financial dependence on the client. The results of this study are not in line with Myers et al. (2003), and Johnson et al. (2002) found that long tenure did not reduce independence and in fact it improved audit quality. Whittington (2002) provides an example that when an auditor has a relationship that is too close to his client such as often attending social events held by the client because the auditor already has a long-standing relationship with his client, it can reduce his independence by appearance (independece in appearance).

Effect of Audit Quality on Accrual Earnings Management

Based on the results of WarpPLS 3.0 shows that audit quality has a positive and significant effect on accrual earnings management, seen from the value of $\beta$ 0.14 with a p-value <0.01 (smaller than the significance level of 5% or 0.05) so that $H_3$ is audit quality affects accrual earnings management be accepted.

The results of this study are in line with Myers et al. (2003) and Chen et al. (2008) in Esa (2013) found that audit quality proxied by long-term audit tenure is associated with a decrease in "extreme income-increasing accruals" and limits earnings management in creating future earnings management. Research by Fitriany and Rosieta (2010) in Esa (2013) found that quality audits significantly have a negative effect on earnings management practices.

Effect of KAP Size on Accrual Profit Management through Audit Quality

The main requirements of audit quality variables are able to mediate in the relationship between KAP size and accrual earnings management is seen from the significance value. The effect of KAP size on audit quality has a significance level of <0.01, so the size of KAP has a significant effect on audit quality. Audit quality on accrual earnings management has a significance level of <0.01, so audit quality has a significant influence on accrual earnings management. Based on the significance of these two pathways, the effect of KAP size on accrual earnings management
by mediating audit quality is significant. This shows if the first requirement has been met.

The second requirement, audit quality variables can be mediated in the relationship between KAP size and accrual earnings management is seen from the same standardized beta values. The influence of KAP size on audit quality has a standardized beta of 0.69, so that the size of KAP has a positive effect on audit quality. The influence of audit quality on accrual earnings management has a standardized beta of 0.14, so that audit quality has a positive effect on accrual earnings management. Then the influence of KAP size on corporate accrual earnings management mediated by audit quality is 0.0966, which is obtained from multiplication of 0.69 with 0.14. Because these two paths have the same direction, namely the positive direction, the relationship between KAP size and accrual earnings management mediated by audit quality has a unidirectional effect. Hi, this shows if the second requirement has been met.

Because both of these requirements have been met, the audit quality is able to mediate in the relationship between the size of KAP and accrual earnings management. So that H4 is the size of KAP affecting accrual earnings management through audit quality received.

**Effect of KAP Tenure on Accrual Profit Management through Audit Quality**

The main requirements of audit quality variables can be mediated in the relationship between KAP tenure and accrual earnings management is seen from the significance value. The influence of KAP tenure on audit quality has a significance level of 0.06, so KAP tenure has a significant influence on audit quality. Audit quality on accrual earnings management has a significance level of <0.01, so audit quality has a significant influence on accrual earnings management. Based on the significance of the two pathways, the influence of KAP tenure on accrual earnings management by mediating by audit quality is significant. Hi, this shows if the first requirement has been met.

The second requirement of audit quality variables can be mediated in the relationship between KAP tenure and accrual earnings management is seen from the standardized beta value in the same direction. The influence of KAP tenure on audit quality has a standardized beta of -0.02, so that the size of KAP has a negative effect on audit quality. The influence of audit quality on accrual earnings management has a standardized beta of 0.14, so that audit quality has a positive effect on accrual earnings management. The effect of KAP tenure on the company's accrual earnings management mediated by audit quality is -0.0028, which is obtained from multiplication of -0.02 with 0.14. Because these two paths do not have the same direction, the relationship between KAP tenure and accrual earnings management mediated by audit quality does not have a direct effect. Hi this shows if the second requirement is not met.

Because there is one requirement that is not fulfilled, the audit quality cannot be mediated in the relationship between KAP tenure on accrual earnings management. So that H5 namely KAP tenure influences accrual earnings management through audit quality is rejected.

**CONCLUSION**

Based on the analysis of the results of the research and the discussion described earlier, some conclusions that can be taken are as follows:

1. This study analyzes the effect of KAP and KAP size on accrual earnings management through quality. Of the 621 companies included in the Indonesia Stock Exchange (BEI) for the period 2010 to 2014, researchers used 355 companies as samples in this study. This study uses Partial Least Square (PLS) to process data, with the help of the WarpPLS program ver. 3.0.

2. The results of the analysis obtained in this study indicate that the size of KAP is proven to have a positive and significant influence on audit quality, with a standardized beta obtained at 0.609 with a significance level of <0.01. KAP tenure proved to have a negative and significant influence on audit quality with standardized beta obtained at -0.02 with a significance level of 0.06. Audit quality has a positive and significant effect on accrual earnings management with standardized beta obtained at 0.14 with a significance level of <0.01.

3. The results of audit quality analysis as mediating variables indicate that audit quality is only able to mediate in the relationship
between KAP size and accrual earnings management and cannot be a mediating variable in the second relationship between KAP tenure and accrual earnings management.

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