The Effect of Controlling Shareholders and The Role of Board of Commissioners and Audit Committee to Audit Quality

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Abstract: This research aims to investigate the effect of controlling shareholders and the effectiveness of Board Of Commissioners and Audit Committee to audit quality measured with AQMS (Audit Quality Metric Score). The results of this research provide evidence that alignment and entrenchment effect of controlling shareholders have positive effect on audit quality. The effectiveness of Board of Commissioners and Audit Committee provides positive effect on audit quality. For sensitivity analysis, by changing the tenure in AQMS to tenure regardless partner rotation, the result shows that the model is robust and provides consistent result.

Keywords: alignment and entrenchment effect, audit quality, controlling shareholders, board of commissioners, audit committee

1. Introduction

1.1. Research Background and Motivation

Coffee (2010) explained that agency problem between management and shareholders commonly arise in companies with dispersed ownership structure. The dispersed ownership on the hands of many shareholders discouraged the shareholders to monitor performance and decision making of management so that the control of the company laid on the management’s hands (Coffee, 2010). Companies with dispersed ownership structure are generally found in common law countries with strong property rights protection, such as the United States, the United Kingdom and Canada (La Porta et al., 1999).

Unlike in the common law countries, in civil law countries with weak property rights protection, the majority of companies tend to have ownership concentrated in the hands of a few shareholders. This is proved by Claessens et al. (2000) through their research to 2,980 companies in Asia, including 132 Indonesian companies, whose results show that the ownership of public companies in Asia tend to concentrate in family ownership.

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Claessens & Fan (2002) stated that when ownership structure is concentrated in a few shareholders, controlling shareholders would have the ability to determine the company’s direction and operation, which is commonly referred as entrenchment effect (Claessens & Fan, 2002). The presence of the entrenchment effect, however, does not always result in an agency conflict in the company.

The agency conflict between controlling and non-controlling shareholders occur when the controlling shareholders, with the control they exert, direct the discretion of the company according to their personal interests, and therefore could potentially harm the interests of the non-controlling shareholders (Claessens & Fan, 2002). This phenomenon is also called negative entrenchment effect (Claessens & Fan, 2002).

The negative entrenchment effect potentially worsened when the company is controlled by ultimate controlling shareholders through a pyramidal ownership mechanism\(^1\) (Claessens & Fan, 2002). The pyramidal ownership mechanism enables the ultimate controlling shareholders to have control rights\(^2\) far exceeding their cash flow rights\(^3\). This may motivate the ultimate controlling shareholders to expropriate the wealth of the company without bearing any high cost if there is a financial loss or a decline of the company’s value (Claessens et al., 2000).

In the condition when control rights exceed cash flow rights, the ultimate controlling shareholders may be motivated to appoint a public accounting firm (PAF) with low audit quality in order to maintain the condition of asymmetric information with external parties, so that the chance that their expropriation is discovered becomes lower. Choi et al. (2007) proved in their research that the greater the difference between control rights and cash flow rights of the ultimate controlling shareholders, the higher the probability that the company would PAF with lower quality audit.

On the other hand, the ultimate controlling shareholders may also be motivated to appoint a PAF with higher audit quality in order to raise the investors’ trust towards the quality of financial statements. Fan & Wong (2005) in their research successfully proved that with the increasing

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\(^{1}\) Pyramidal ownership mechanism is a mechanism in which the share ownership of a company affects share ownership of other companies, the process repeats several times until it forms a chain of company ownership (Claessens et al., 2000).

\(^{2}\) Controlling right is voting right to participate in determining important discretions in the company.

\(^{3}\) Cash flow right is financial claim of the shareholders to the company.
difference between control rights and cash flow rights of the ultimate controlling shareholders in a company, the company tends to choose a PAF with higher audit quality.

One way to overcome the entrenchment effect is to increase ownership of the controlling shareholders (Fan and Wong, 2002). When ownership of the controlling shareholders increases, the ability of the controlling shareholders’ expropriation would decrease. The decrease of the expropriation ability was due to costs incurred by the controlling shareholders that would increase when the company suffered a loss or declining share valuation (Claessens, Djankov, Fan and Lang, 2002). The increase in ownership of the controlling shareholders in turn could trigger the controlling shareholders to increase the value of the company and align their interests with non-controlling shareholders. This effect is called alignment effect (Fan and Wong, 2002). The alignment effect of controlling shareholders would motivate controlling shareholders to improve the quality of audit of financial statements that are expected to increase the value of investor confidence to the quality of the company’s financial statements.

Motivation of ultimate controlling shareholders in choosing PAF may be affected by the role of Board of Commissioner (BOC) and audit committee. Maharani (2010) found that board size had positive and significant influence on the selection of qualified auditors. According to Maharani (2010), BOC should monitor management activities to minimize information asymmetry between management and owners to improve the transparency of financial reporting. Liu and Lin (2009) found that companies with appropriate size of BOC have positive effect on the selection of the auditor's Top 10. It can be concluded that the role of BOC has positive effect on audit quality.

One of the audit committee’s roles is to recommend BOC regarding the appointment of a PAF based on considerations of independence, assignment scope, and audit costs (Bapepam-LK Rule number: KEP-643 / BL / 2012). Thus it can be seen that the audit committee has the ability to improve the audit quality of the company’s financial statements. Such ability depends on the effectiveness level of the audit committee itself. Abbott and Parker (2000) documented that, the higher the level of audit committee’s effectiveness level, the higher the tendency of the company to select a PAF with higher audit quality.
This research is important to be conducted in Indonesia because more than 50% of companies in Indonesia’s ownership structure is concentrated on the hands of ultimate controlling shareholders (Claessens et al., 2000; Diyanty, 2012). The pyramidal ownership mechanism enables the controlling shareholders to have control rights exceeding their cash flow rights. The researches by Claessens et al. (2000) and Diyanty (2012) found that more than 50% of ownership structure in Indonesia has control rights exceeding cash flow rights.

1.2. Research Question and Objective

According to above background explanation, this research aims to investigate the effect of controlling shareholders through entrenchment and alignment effect and the role of board of commissioners (BOC) and audit committee towards audit quality. This research expands previous researches by measuring audit quality by the degree of competence; industry specialization and audit tenure; and also independence (Herusetya, 2012). To examine the alignment and entrenchment effect of ultimate controlling shareholders, this research will trace the chain of companies’ ownerships to the ultimate controlling shareholders. The ultimate controlling shareholders are shareholders, individual or family group, government or foreign companies, with the highest control rights at the chain of company’s ownership. The tracing method of the ownership chain refer to Diyanty’s (2012) research, if there are more than one controlling shareholders from the same family, the total ownership would be the total ownership of the family.

The measurement of audit quality is based on the degree of competence; industry specialization and audit tenure; also independence (Herusetya, 2012). The measurement of the role of BOC and audit committee is based on independence, competence, audit activity and the size of the audit committee (Hermawan, 2009).

2. Literature Review and Hypothesis Development

2.1. Ownership Structure and Agency Conflict
Difference in ownership structure causes difference in agency conflict. In a dispersed ownership structure, agency conflict commonly occurred as a consequence of management’s discretions that are not in accordance with shareholders’ interests (Jensen & Mecklin, 1976). In concentrated ownership structure, agency conflict commonly occurred between controlling shareholders and management with non-controlling shareholders. This is because the controlling shareholders may control the management, so that management’s discretions are frequently decided on the benefits of the controlling shareholders and neglect the rights of the non-controlling shareholders (Diyanty, 2012). With the great control rights owned, the controlling shareholders could control discretions, both direction and operational process of the company. This condition is also known as entrenchment effect (Coffee, 2010).

Entrenchment effect potentially worsens in companies controlled through pyramidal ownership mechanism. The pyramidal ownership mechanism allows the controlling shareholders to have control rights higher than cash flow rights. Accordingly, the controlling shareholders could freely undertake activities regardless the non-controlling shareholders’ interests without bearing any high costs in the event of loss or declining company’s value (Claessens, et al., 2000).

According to Fan and Wong (2002), the increase in shareholding could reduce the expropriation ability of the controlling shareholders and also encourage them to increase the company’s value, or also called as the alignment effect. This is because the risk of costs incurred by the controlling shareholders if they divert the company’s cash flows for their own interests would increase (Fan and Wong, 2002). The high risks would cause the controlling shareholders discouraged to conduct expropriation actions and maintain the company’s credibility by increasing management monitoring (Claessens, et.al., 2002).

2.2. **Audit Quality**

Audit quality is a concept not having a universal definition (IAASB, 2011). Audit quality is a complex and multidimensional concept (Herusetya, 2012). The perception of audit quality is even different among stakeholders of the company, depends on their involvement level in audit process and their point of view on how they measure audit quality.
For example, investors have their own perspective towards audit. Investors want that the financial statements they use are useful for decision making. To be useful for decision making, financial statements should have high credibility that investors measure audit quality from the credibility of the financial statements. Investors would review the preparer of the financial statements and auditor giving opinion to the financial statements. Investors may expect the companies audited by auditors with good reputation to produce credible financial statements.

The early concept of audit quality is traced back to the auditors’ independence. According to DeAngelo (1981), auditors’ independence is defined as the probability that auditor would find and report misstatements on financial statements and would not mind the pressure from management to not report the misstatement (if there is pressure from management).

Audit quality could also be viewed from the perspective of audit failure. Audit failure is difficult to describe, nevertheless according to Francis (2004) it could be measured from various sources, such as litigations to the auditor, business failure, examination by the stock market authority, and the restatement of financial statements. The higher the audit quality, the lower the audit failure would be.

Auditor size may also be employed as a measure of audit quality. DeAngelo (1981) argued that large public accounting firms (PAFs) have better audit quality due to lack of dependence on certain clients, so they have greater independence. Inspired from that study, researches focused on Big 4 PAFs contended that Big 4 PAFs have had reputation and incentive to provide high quality audit service to maintain their reputation (Simunic and Stein, 1987; Francis and Wilson, 1988). Becker et al. (1998) and Francis et al. (1998) demonstrated that companies audited by Big 4 PAFs had lower abnormal accruals denoting lower earnings management and higher earnings quality.

The Big 4 audit quality, under several studies, may arise from higher audit fees and special expertise in the industry. Simunic (1980) discovered that Big 4 PAFs have higher audit fees (fee premium) than other PAFs after controlling client characteristics i.e. size, complexity, and risk sharing between auditors and clients. On average, Big 4 audit fees are estimated to be 20% higher than non-Big 4. Higher audit fees might improve audit quality as greater audit effort, shown by lengthier audit working hours or more competent auditor (Francis, 2004).
If a PAF has a lot of clients in a particular industry, it should have opportunity to enhance its
ability and gain experience until the PAF becomes expert in that industry. Big 4 PAFs have plenty
clients across industries and resources to improve the abilities of their auditors, so that the Big 4 is
more likely to develop an industry expertise compared to non-Big 4 PAFs. Balsam et al. (2003)
detected that clients audited by Big 4 PAFs having industry specialization had lower discretionary
accruals and higher earnings response coefficient describing higher earnings quality.

Audit tenure, or how long a PAF auditing a client, may also be used to measure audit quality.
Theoretically, at the beginning of the tenure, audit quality would be low since the PAF is still in the
process of understanding the client’s business. Johnson, Khurana and Reynolds (2002) found out the
evidence that there was lower audit quality in the first three years after auditor switch. However, too
long tenure may have adverse effect on audit quality because relationship between the auditor and the
client would be closer, so that the independence and the professional skepticism of the auditor would
be reduced.

Financial statements users make economic decisions based on audited financial statements. In
consequence, the opinion of the company’s ability to continue its business is extremely important to
financial statements users. Going concern opinion, clearly stating the auditors’ doubt of the
company’s ability to continue its business, is a signal that the company is facing going concern
problems, such as financial problems. Therefore, going concern opinion could be a measure of audit
quality. It is considerably necessary for auditors to provide accurate going concern opinion because
according to Francis (2004), false positives in going concern opinion (company obtaining going
concern opinion but not going bankrupt) may reduce audit quality. The empirical research of
Bhimani, Gulamhussen, and Lopes (2009) verified that generally companies receiving going concern
opinion indeed went bankrupt, and the probability that such companies going bankrupt is greater than
companies not receiving going concern opinion.

In the studies mentioned above, it can be concluded that audit quality could be measured in
many dimensions so that it could entirely describe audit quality (Bamber and Bamber, 2009; Francis,
2004; and Watkins et al., 2004).

2.3 Hypothesis Development
2.3.1. Alignment and Entrenchment Effect on Audit Quality

2.3.1.1. Influence of Alignment Effect of Controlling Shareholders on Audit Quality

Darmadi (2012) found that concentrated shares ownership, measured by the percentage of shares owned by the largest shareholders, has positive effect on audit quality. While Fan and Wong (2002) inferred that the increasing ownership of the controlling shareholders may reduce the expropriation ability of the controlling shareholders. The increase in controlling shareholders’ ownership increases the alignment effect, where such increase would encourage the controlling shareholders to increase the value of the company.

Based on above argument, the alignment effect of the controlling shareholders is expected to enhance audit quality.

H1. The alignment effect of the controlling shareholders has a positive effect on audit quality

2.3.1.2. Influence of Entrenchment Effect of Controlling Shareholders on Audit Quality

The entrenchment effect of the controlling shareholders is the ability of the controlling shareholders to direct discretions of the company (Claessens et al., 2002). The pyramidal ownership mechanism enables the controlling shareholders to have control rights exceeding cash flow rights. This condition encourages expropriation of the company’s wealth without bearing any high cost when there is loss or decrease in the company’s value, because the controlling shareholders have low cash flow rights (Claessens et al., 2002).

When the expropriation activity is detected by external parties, for instance investors, investors would discount their valuation of the companies value, which may cause the decrease of shares value and the increase of cost of capital (Claessens et al., 2002; Fan and Wong, 2005). In such situation, the controlling shareholders may be encouraged to embezzle their expropriation activities so that the external parties could not detect them by decreasing the disclosure quality of the company’s financial statements (Fan and Wong, 2002). To help concealing the real financial conditions of the company, the company may appoint auditor with low audit quality (Choi et al., 2007; Choi et al., 2008).

Based on the above researches, one of the probabilities that may arise from the entrenchment effect of the controlling shareholders is a low audit quality. This low audit quality is caused by the
desire of the controlling shareholders to conceal their expropriation activities by reducing the transparency of the financial statements and this could potentially lower the audit quality.

However, agency conflict is not always negatively associated with audit quality (Fan and Wong, 2005; El Ghoul et al., 2007). The presence of agency conflict may reduce company’s value and increase the cost of capital, also complicate the controlling shareholders to obtain outside funding (El Ghoul et al., 2007). In that condition, the controlling shareholders would be motivated to appoint high-quality external auditor to reduce the potential agency conflict caused by the negative entrenchment effect (Fan and Wong, 2005). Additionally, the appointment of high-quality external auditor may also be viewed as a signal that the controlling shareholders would protect and concern about the interests of the non-controlling shareholders. Therefore, the next hypothesis can be stated as follows:

H2. The entrenchment effect of the controlling shareholders has an effect on audit quality

2.3.2. The Effect of the Board of Commissioners and Audit Committee to the Audit Quality

2.3.2.1. The Role of the Board of Commissioners (BOC) and Audit Committee

In two-tier corporate governance system, the role of the board of commissioners (BOC) is to conduct monitoring function to promote accountability and transparency of the presentation of financial statements (The Guidance of Good Corporate Governance of the National Committee of Indonesia Governance Policies, 2006; Kirk Panel, 1994 in Abbott & Parker, 2000). In carrying out their duties, BOC is assisted by audit committee.

According to the Regulation of the Bapepam-LK no.: KEP-643/BL/2012, audit committee is a committee established and is responsible to BOC in assisting them to do their duties and responsibilities. The audit committee is established by BOC to promote accountability and transparency of the presentation of the company’s financial statements so that the company may mitigate risks of reputational and financial loss (Menon & Williams, 1994 in Abbott & Parker, 2000). One of the main duties of the audit committee according to the Regulation of Bapepam-LK no.: KEP-643/BL/2012 is to give recommendation to BOC regarding the appointment of PAF which is based on
independence, engagement scope and fee of the PAF. Therefore, the audit quality of a company is greatly influenced by the role of BOC and the audit committee.

Maharani (2010) found that the size of the board of commissioners have a positive and significant effect to the appointment of auditors of great quality. According to Maharani (2010), the board of commissioners affects the monitoring capacity of management’s conduct, and to minimize information the information asymmetry between the management and the owners by increasing the transparency of financial reporting. Putra, et al. (2013) found that the independence of the board of commissioners affects the choice of quality auditors. Liu and Lin (2009) found that companies which has large supervisory board (the board contains more members) has a positive effect to the appointment of Top 10 auditors. Beasley and Petroni (2001) found that the independence of the board is related with choosing of auditors who has industry specialization. In general, from the researches mentioned, it can be concluded that the board of commissioners has a positive effect to audit quality.

The quality of audit committee is also considered as an important factor that influences audit quality (Fitriany, 2011). Rustam and Zaman (2013) found that the activeness and independence of the audit committee has a significant and positive effect to the audit fees as a measure of audit quality. The effectiveness of audit committee is also found by Maharani (2010) to have a positive and significant effect to the appointment of high quality auditor. The appointment of high-quality auditor is caused by the aspiration of the audit committee to conduct their monitoring function of the financial statements effectively (Maharani, 2010). It can be concluded from the previous researches that the audit committee also have a positive relationship with audit quality.

According to previous researches above, the effective role of the board of commissioners and audit committee is expected to increase audit quality. Therefore, the next hypothesis can be stated as follows:

**H3.** The higher the effectiveness of the board of commissioners and audit committee, the higher the audit quality is

3. **Research Method**

3.1. **Types and Sources of Data**
This research uses secondary data from manufacturing companies listed in the Indonesia Stock Exchange (IDX) from 2008 to 2012. The data is obtained from Annual Reports of companies from the IDX and Data stream Thomson Reuters and the tracing of ownership structure is obtained from the Ministry of Law and Human Rights of the Republic of Indonesia. The data about PAF is obtained from the Center of Education of Accountants and Appraisers of the Ministry of Finance of the Republic of Indonesia (CEAA).

3.2 Population and Samples

The population in this research is all companies listed in the IDX from 2008 to 2012. The samples are chosen using purposive sampling, a sample choosing method according to certain criteria, that is: manufacturing companies listed in the IDX from December 31, 2008 until December 31, 2012 (that never delisted, suspended, or went private), companies whose share ownership can be traced to the ultimate shareholders and the entrenchment effect can be measured, companies with positive equity⁴, companies that are not Foreign But Indonesian (FOBINDO)⁵, and companies that have all components that is required to measure the variables used in this research. According to those criteria, the samples used in this research are 432 companies for 5 years (2008 until 2012).

3.3. Research Model

3.3.1. Model Specification

The tests about the alignment and entrenchment effect of the controlling shareholders, and the effect of the effectiveness of the board of commissioners and the audit committee will be conducted using a proportional odds model that is processed using ordered logit method. The ordered logit method is used because the dependent variable is an ordinal variable.

The model specification to test hypotheses H1, H2, and H3 is as follows:

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⁴ Companies with negative equity generally experienced cumulative loss continually and tend to use debts to finance their operations. This condition can affect the basic assumption of the creation of the company’s financial statement, the going concern assumption (IFRS conceptual framework).

⁵ FOBINDO are companies that when established were owned by families, but then changed ownership to foreign companies in the next years, with control still maintained in the establishing family (Kim, 2003 in Diyanty, 2012).
Table 3.1. Variables Description

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>The level of audit quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUDQUAL1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>The cash flow rights of the controlling shareholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFR</td>
<td></td>
</tr>
<tr>
<td>CFL</td>
<td>The ratio between the control rights and cash flow rights of the controlling shareholders</td>
</tr>
<tr>
<td>GOV</td>
<td>The score of the effectiveness of the board of commissioners and the audit committee</td>
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</table>

<table>
<thead>
<tr>
<th>Control Variables</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LEV</td>
<td>Leverage of the Company</td>
</tr>
<tr>
<td>SIZE</td>
<td>Size of the Company</td>
</tr>
<tr>
<td>PROF</td>
<td>Profitability of the Company</td>
</tr>
</tbody>
</table>

3.4. Variables Operationalization and Data Collection

3.4.1. Dependent Variable

a. Audit Quality (AUDQUAL1)

The audit quality in this research is measured using AQMS (Audit Quality Metric Score) formulated by Herusetya (2012). AQMS is measured by computing the score of 5 measures of audit quality from the perspective of auditor competence; that is the size of the PAF (Big 4 or non-Big 4), the audit tenure and the auditor industry specialization; and the perspective of independence, which is measured by the importance of the client to the auditor (client importance) and the availability and the accuracy of the going concern audit opinion (a proxy for audit failure). The maximum value of every audit quality measures is 1, so that the maximum value of audit quality measured by AQMS is 5.
<table>
<thead>
<tr>
<th>No</th>
<th>Audit Quality Measure</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>PAF Size</td>
<td>Valued 1 if the PAF is one of the Big 4, and 0 otherwise.</td>
</tr>
<tr>
<td>2</td>
<td>Industry Specialization</td>
<td>Valued 1 if the PAF has the greatest share in the industry and 0 otherwise. The greatest industry share is measured with the threshold of highest 10% of industry share. The industry share is measured with the ratio: The total of a PAF clients’ assets in an industry The total assets of all PAF’s clients in an industry</td>
</tr>
<tr>
<td>3</td>
<td>Audit Tenure</td>
<td>valued 1 if the tenure is 3-4 years, and 0 otherwise</td>
</tr>
<tr>
<td>4</td>
<td>Client Importance (CI)</td>
<td>Measures the economic dependence level of the auditor to the client. It is measured with the ratio: $CI_{it} = \frac{SIZE_{it}}{\sum_{i=1}^{n} SIZE_{it}}$ Where the numerator is the natural logarithm of the total assets of client $i$ on year $t$ and the denominator is the natural logarithm of the total assets of clients audited by PAF $i$ in year $t$. If $CI$ is valued between $\mu \pm \sigma$, then this variable is valued 1, and 0 otherwise.</td>
</tr>
<tr>
<td>5</td>
<td>The Accuracy of Going Concern Opinion (GC)</td>
<td>Valued 1 if: a. The PAF issued going concern opinion to client $i$ on year $t$ and at year $t + 1$ that client $i$ experienced negative cash flows from operations or net loss; or b. The PAF did not issue a going concern opinion to client $i$ on year $t$ and on year $t + 1$ that client $i$ did not experience negative cash flows or net loss. And valued 0 otherwise</td>
</tr>
</tbody>
</table>

AQMS Maximum Value = 5

Source: Herusetya (2012)

According to Fitriany (2011), the rotation of PAFs can be divided into real and pseudo rotation, therefore in this research tenure is also divided into real and pseudo tenure. Pseudo tenure is defined as tenure measured to five years before the audit engagement in the research period (if the information is available), whether there is a partner change in the PAF in the five years period before the audit engagement. The real tenure is measured without regarding the change of partners. If the PAF still has the same affiliation, it will be counted as one PAF.

As an illustration, Company A is audited by PAF Purwantono, Sarwoko, and Sandjaja affiliated to Ernst and Young (EY) for the period 2004-2007. For the period of 2008 to 2010, the company is audited by PAF Purwantono, Suherman and Surja affiliated to EY. If measured using pseudo tenure, at the end of year 2008, the tenure of the PAF is 1 years (because it is currently audited by PAF Purwantono, Suherman, and Surja). However, if measured using real tenure, Company A has been audited by the PAF for 5 years, because the PAF is still affiliated with EY for 5 years before 2008,
so that it is counted as one PAF. The time limit of 5 years is used because the data for PAF tenure from the CEAA is obtained from 2004.

Fitriany (2011) found that in the period after the enactment of The Ministry of Finance Regulation (MOF Regulation) No. 17 Year 2008, the rotation of PAF partner increased the audit quality from the perspective of neutrality and predictability. Fitriany (2011) also found that in that period the audit quality from the perspective of neutrality has a convex-shaped relationship with the audit tenure and from the perspective of predictability has a linear negative relationship. According to MOF Regulation No. 17 Year 2008, the rotation of PAF partner must be conducted every 3 years. Based on the research and the regulation, this research uses 3-4 years as tenure that is considered “good” because every 3 years there must be a rotation in the PAF partner, but the audit quality will deteriorate when the tenure is too long. Therefore, a tenure is considered good if it lasts for 3 to 4 years.

The data for modified AQMS variable is obtained from the financial statements of the companies, Indonesia Capital Market Directory, and the CEAA.

3.4.2. Independent Variables

a. The Alignment and Entrenchment Effect of the Controlling Shareholders

In this research, the controlling ownership of the controlling shareholders is measured using two variables, the cash flow rights/CFR (for the alignment effect), and the ratio between the control rights and cash flow rights/CFL (for the entrenchment effect). The measuring of variables is based on Diyanty (2012) which ias a development from LaPorta, Lopez-DeSilanes, Shleifer (1999); La Porta, Lopez-De Silanes, Shleifer and Vishny (2002); Claessens, Djankov, Fan and Lang (1999, 2000, and 2002) which is conducted by tracing to the ultimate owners of the company. If the ultimate owners amounted to more than one individual in one family, the total ownership is the total ownership of the family. The data for family ownership is obtained from Diyanty (2012) from the Center of Data of Indonesian Business.
a. Cash Flow Right (CFR)

This variable describes the cash flow rights of the greatest controlling shareholders (Diyanty, 2012). The cash flow rights is the addition of the multiplication of the percentage of share ownerships for every chain of share ownership.

b. Control Rights (CR)

The value of control rights is computed using the weakest link of the control chain (La Porta, Lopez-DeSilanes, Shleifer, 1999; La Porta, Lopez-De Silanes, Shleifer and Vishny, 2002; Claessens, Djankov, Fan and Lang, 1999b, 2000, and 2002). However, if there is more than one individual in a family, their ownership proportion will be combined to one and then the weakest link is examined (based on Diyanty’s (2012) method). Cash Flow Leverage (Ratio Between Control Rights and Cash Flow Rights/CFL).

According to LaPorta et al. (1999), the ratio between the control rights and cash flow rights happened when the controlling shareholders reduced their ownership through superior voting rights through a pyramidal structure or cross-ownership. Cash flow leverage is a ratio that measures the incentive of expropriation of the controlling shareholders and the entrenchment effect of the controlling shareholders (Diyanty, 2012).

c. The Role of the Board of Commissioners and Audit Committee (GOV)

The role of the board of commissioners and audit committee (GOV) is measured with an index developed by Hermawan (2009) related to the size, independence, competence, and the activity of the board of commissioners and the audit committee. This index is divided to parts that measure the effectiveness of the board commissioners (17 questions) and the effectiveness of the audit committee (11 questions). Every question can have the value between 1 and 3, therefore the score of the effectiveness of the board of commissioners and audit committee has a minimum score of 28 (((17 x 1)+(11 x 1)) and a maximum score of 84 (((17 x 3)+(11 x 3)). The data for the index is obtained from the Annual Report of the companies.
3.4.3. **Control Variables**

a. **Company’s Size (SIZE)**

   Previous studies found that the appointment of PAFs tend to have a positive relationship with the size and business complexity of the company (Beatty, 1993; Fan and Wong, 2005; Ali and Lesage, 2013). The size of the company is measured using market capitalization of the company in the end of year $t$.

b. **Company’s Profitability (PROF)**

   Willenborg (1989) found that companies audited by big-scale auditors have higher profitability, ceteris paribus. Companies that have higher profitability also tend to appoint auditors with bigger scale (that exhibit higher audit quality) (Chaney and Shivakumar, 2004). Profitability of the company is measured using Return on Assets (ROA). The ROA is computed by dividing the net income with the average of total assets.

c. **Leverage (LEV)**

   Companies with greater leverage tend to have higher bankruptcy risk or financial failures (Grossman and Hart, 1982). According to Grossman and Hart (1982) also, in that situation, companies tend to appoint a better quality auditor to avoid the decrease in the company’s value. Leverage is measured by dividing the total of long-term debt to total assets.

3.5. **Data Analysis Method**

   The data analysis method used in this research is the quantitative data analysis method using the ordered logistic regression. This is because the dependent variable is an ordinal variable. The estimation method is maximum likelihood estimation (MLE).
4. Result

4.1. Descriptive Statistics

The descriptive statistics of the data can be shown as follows:

Table 4.1. Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Min</th>
<th>Max</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUDQUAL1</td>
<td>432</td>
<td>2.8866</td>
<td>0.0000</td>
<td>5.0000</td>
<td>1.2884</td>
</tr>
<tr>
<td>CFR</td>
<td>432</td>
<td>0.5192</td>
<td>0.0629</td>
<td>0.9974</td>
<td>0.2327</td>
</tr>
<tr>
<td>CFL</td>
<td>432</td>
<td>1.1259</td>
<td>0.9999</td>
<td>2.3233</td>
<td>0.2984</td>
</tr>
<tr>
<td>GOV</td>
<td>432</td>
<td>0.6751</td>
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<td>0.9167</td>
<td>0.1212</td>
</tr>
<tr>
<td>PROF</td>
<td>432</td>
<td>0.0770</td>
<td>-0.2524</td>
<td>0.4070</td>
<td>0.1060</td>
</tr>
<tr>
<td>SIZE</td>
<td>432</td>
<td>27.4410</td>
<td>20.7869</td>
<td>33.5836</td>
<td>2.2127</td>
</tr>
<tr>
<td>LEVERAGE</td>
<td>432</td>
<td>0.1042</td>
<td>0.0000</td>
<td>0.5456</td>
<td>0.1389</td>
</tr>
</tbody>
</table>

Variables Description

AUDQUAL1: Audit Quality Score based on AQMS; CFR: The cash flow rights of the controlling shareholders; CFL: The ratio between the control rights and cash flow rights of the controlling shareholders, GOV: the score of effectiveness of the board of commissioners and audit committee based on Hermawan (2009); PROF: Profitability of the company, measured by using the ratio of net income of the year divided by the average of total assets; SIZE: Size of the company, measured using the natural logarithm of the market value of equity of the company; LEVERAGE: leverage of the company, measured by the ratio of long-term debt and the total assets of the company

From the table, it can be seen that the audit quality has the average of 2.8866. This value shows that on average, the audit quality is moderate (from the max score 5). The descriptive statistics shows that CFL on average has a value above 1, which can means as in most companies, the controlling shareholders have control rights exceeding their cash flow rights. The effectiveness of the board of commissioners and audit committee has an average score of 0.69 (max value 1), that means on average the effectiveness of BOC and Audit committee do not show optimal condition.

4.2. Hypothesis Testing

4.2.1. The Influence of the Alignment Effect of the Controlling Shareholders to Audit Quality

The aim of this research is to test the influence of the alignment effect of the controlling shareholders and the effectiveness of the board of commissioners and audit committee to the audit quality.
Table 4.2. Result of Ordered Logistic of Model 1

\[ \text{AUDQUAL}_{1z} = \beta_0 + \beta_1 \text{CFR}_{1z} + \beta_2 \text{CFL}_{1z} + \beta_3 \text{GOV}_{1z} + \beta_4 \text{SIZE}_{1z} + \beta_5 \text{LEV}_{1z} + \beta_6 \text{PROF}_{1z} + \varepsilon_{1z} \]  \( (1) \)

**H1:** The alignment effect of the controlling shareholders has a positive effect to the audit quality.

**H2:** The entrenchment effect of the controlling shareholders has an effect to the audit quality.

**H3:** The higher the effectiveness of the board of commissioners and audit committee, the higher the audit quality is.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Prediction</th>
<th>Coefficient</th>
<th>Odds Ratio</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFR</td>
<td>+</td>
<td>0.7974</td>
<td>2.2197</td>
<td>0.0290 **</td>
</tr>
<tr>
<td>CFL</td>
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<td>0.8284</td>
<td>2.2898</td>
<td>0.0110 **</td>
</tr>
<tr>
<td>GOV</td>
<td>+</td>
<td>1.8444</td>
<td>6.3240</td>
<td>0.0060 ***</td>
</tr>
<tr>
<td>PROF</td>
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<td>2.1572</td>
<td>8.6467</td>
<td>0.0165 **</td>
</tr>
<tr>
<td>SIZE</td>
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<td>0.2615</td>
<td>1.2989</td>
<td>0.0000 ***</td>
</tr>
<tr>
<td>LEVERAGE</td>
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<td>-0.2913</td>
<td>0.7473</td>
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<td>_cut1</td>
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<td>5.6670</td>
<td></td>
</tr>
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<td>_cut2</td>
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<td>8.0043</td>
<td>8.0043</td>
<td></td>
</tr>
<tr>
<td>_cut3</td>
<td></td>
<td>9.5667</td>
<td>9.5667</td>
<td></td>
</tr>
<tr>
<td>_cut4</td>
<td></td>
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<td>10.4741</td>
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</tr>
<tr>
<td>_cut5</td>
<td></td>
<td>12.3032</td>
<td>12.3032</td>
<td></td>
</tr>
</tbody>
</table>

**Variables Description:**

**AUDQUAL1:** Audit Quality Score based on AQMS; **CFR:** The cash flow rights of the controlling shareholders; **CFL:** The ratio between the control rights and cash flow rights of the controlling shareholders; **GOV:** the score of effectiveness of the board of commissioners and audit committee based on Hermawan (2009); **PROF:** Profitability of the company, measured by using the ratio of net income of the year divided by the average of total assets; **SIZE:** Size of the company, measured using the natural logarithm of the market value of equity of the company; **LEVERAGE:** leverage of the company, measured by the ratio of long-term debt and the total assets of the company.

From the testing results, it is found that if CFR increases, the company tends to choose a higher quality auditor. This result supports the results of the researches of Darmadi (2012) and Hay, Knechel, and Ling (2008). A high alignment effect caused the controlling shareholders to have a low motivation to expropriate the non-controlling shareholders (Diyanty, 2012). Diyanty (2012) also stated the increase of the share ownership will increase the alignment of the interest of the controlling and the non-controlling shareholders. The alignment of interest between the controlling and the non-controlling shareholders is what encouraged the company to appoint a high quality auditor.

According to table 4.2., the result of CFL variable showed that the probability of higher quality audit level compared to lower audit quality level will increase by 2.2898 times if the CFL increases by 1 time. This result implies that as the entrenchment effect of the controlling shareholders is stronger, the company tends to choose a high quality auditor.

The finding of the entrenchment effect in this research supports the result of Fan dan Wong (2005) that stated that the controlling shareholders will choose a high quality auditor to give a signal
to the non-controlling shareholders that they care for the interests of the non-controlling shareholders. Additionally, the controlling shareholders wanted to maintain the reputation of their company by appointing a high quality auditor (El Ghoul, Guedhami, Lennox and Pittman, 2007).

The Effectiveness of BOC and Audit Committee or GOV gives result as predicted, with a positive and significant coefficient (alpha 1%). This result shows that BOC and Audit Committee has a positive and significant effect to the quality of auditor appointed by the company. The odds ratio value of 6.3240 shows that in every 1 point increase of GOV, the probability of audit quality that is higher compared to lower audit quality will increase by 6.3240 times. The existence of an effective BOC and audit committee is able to strengthen the motivation for controlling shareholder to appoint a public accounting firm with higher audit quality.

This result is consistent with Liu and Lin (2009) that found that the size of the supervisory board (the board of commissioners) has a positive effect in the appointment of Top 10 auditor, and Beasley and Petroni (2001) that found that the independence of the board is associated with the appointment of a higher quality auditor. The result of this research is also in line with the findings of Rustam et al. (2013) that the activity and the independence of the audit committee has a positive and significant relationship to audit quality.

The significant result of PROF variable shows that the probability of a higher quality audit compared to a lower quality audit will increase by 8.6467 times with 1 point increase in PROF. The interpretation of the odds ratio for the SIZE variable is that in every 1 point increase in SIZE, the probability of a higher quality audit compared to a lower quality audit will increase by $e^{1.2989}$ or 3.6653 times. These findings are consistent with Beatty (1993); Fan and Wong (2005); and Lennox (2005).

**Sensitivity Analysis**

To prove that the research model will give a consistent result if the proxy of the variable is changed, a sensitivity analysis is conducted. The sensitivity analysis conducted in this research is to change the tenure in the AQMS to a real tenure (so that the variable AUDQUAL1 becomes AUDQUAL2). This change in tenure is conducted because there is a probability that the rotation of the PAF done by the companies is not a real but rather only a pseudo rotation (Fitriany, 2011).
In this sensitivity analysis, like the main analysis, a test about the alignment and entrenchment effect of the controlling shareholders are also conducted. The aim is to find out if the change in tenure in AQMS gives a robust result.

From the result, it can be seen that the coefficient of CFR is positive and significant. This result is consistent with the main analysis. It can be concluded that if CFR increases, the company will tend to appoint a higher quality auditor. The high alignment effect of the controlling shareholders results in the low motivation of the controlling shareholders to conduct expropriation (Diyanty, 2012). The presence of alignment of interest between the controlling and non-controlling shareholders becomes a motivation for the company to appoint a high quality auditor.

The CFL variable is significant, and this result is consistent and supportive of the main analysis. This result implies that if the entrenchment effect of the controlling shareholders is stronger, the company will tend to choose a higher quality auditor.

Table 4.3 Sensitivity Analysis of Changing AUDQUAL1 to AUDQUAL2

(Model 1A)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Prediction</th>
<th>Coefficient</th>
<th>Odds Ratio</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFR</td>
<td>+</td>
<td>1.0688</td>
<td>2.8838</td>
<td>0.0060 ***</td>
</tr>
<tr>
<td>CFL</td>
<td>+/-</td>
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</tr>
<tr>
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<td>0.0025 ***</td>
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<td>2.1498</td>
<td>8.3596</td>
<td>0.0190 **</td>
</tr>
<tr>
<td>SIZE</td>
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<td>0.2491</td>
<td>1.2834</td>
<td>0.0000 ***</td>
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<td>7.8443</td>
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<td>_cut5</td>
<td></td>
<td>13.3941</td>
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</tr>
</tbody>
</table>

Variables Description:
AUDQUAL2: Audit Quality Score based on AQMS, with changing the pseudo tenure to real tenure; CFL: The ratio between the control rights and cash flow rights of the controlling shareholders; GOV: the score of effectiveness of the board of commissioners and audit committee based on Hermawan (2009); PROF: Profitability of the company, measured by using the ratio of net income of the year divided by the average of total assets; SIZE: Size of the company, measured using the natural logarithm of the market value of equity of the company; LEVERAGE: leverage of the company, measured by the ratio of long-term debt and the total assets of the company.
The finding about entrenchment effect in this research supports the research of Fan and Wong (2005) that stated that controlling shareholders will choose a high quality auditor to give signal to the non-controlling shareholders that they care about the interests of the non-controlling shareholders. According to El Ghoul, Guedhami, Lennox and Pittman (2007), the controlling shareholders also tend to appoint high quality auditors to maintain the reputation of their company and to avoid litigations.

The Effectiveness of BOC and Audit Committee or GOV also shows a positive and significant effect to the quality of auditor appointed by the company. Every results of this sensitivity analysis supports the main analysis. The conclusion is that the sensitivity analysis in this research gives a robust result.

5. **Conclusion, Implication, and Limitation**

5.1. **Conclusion**

a. The alignment effect of the controlling shareholders has a positive effect to audit quality. The alignment effect increases the alignment of interests between the controlling and non-controlling shareholders (Diyanty, 2012). The alignment of interests between the controlling and non-controlling shareholders caused the company to appoint a high quality auditor.

b. The entrenchment effect of the controlling shareholders turns out to have a positive effect to the audit quality. The high audit quality when the entrenchment effect of the controlling shareholder exists comes from the desire of the controlling shareholders to reduce the agency conflict by appointing a high quality auditor (Fan and Wong, 2005). The company may also appoint a high quality auditor to maintain the reputation of the company (El Ghoul, Guedhami, Lennox and Pittman, 2007)

b. The Effectiveness of BOC and Audit Committee also has a positive effect to the quality of auditors appointed. Increasing the effectiveness of BOC and the audit committee give evidence will increase the motivation of firm to select a public accounting firm with higher audit quality.
The sensitivity analysis by changing the pseudo tenure to real tenure based on Fitriany (2011) that after the enactment of the regulation of the PAF rotation, there are PAFs that rotated their partners and even merger with each other, so that the PAF looked as if it changed, when in reality the operational was still conducted by the previous PAF. This sensitivity testing shows that the use of real tenure is consistent with the main testing, both from the direction of the relationship and the significance of effect. The results of the sensitivity analysis shows that this results of this research is robust to the changing of tenure in AQMS from pseudo tenure to real tenure.

5.2. Implications of Research Results

5.2.1 For the Development of Science

a. This research adds to the empirical evidence of the relationship of the audit quality; which is a composite score of the auditor size, auditor industry specialization, audit tenure, the client importance to the auditor, and the accuracy of going concern opinion; the controlling ownership and the corporate governance in the context of a developing country.

b. This research also shows that it is important to observe the rotation of auditors, that is regulated in the MOF Regulation No. 17 Year 2008, is a pseudo or real rotation, based on the result of Fitriany’s (2011) research. This research tries to use the concept and apply it in the proxy of tenure to pseudo tenure (tenure with regards to the changes in the PAF partners) and real tenure (tenure without regards to the changes on the PAF partners). This research found that real tenure is better than pseudo tenure in measuring audit quality.

5.2.2 For the Regulators

a. The disclosure of ultimate beneficial owners or in this research known as the controlling shareholders is necessary because there is difficulty in tracing the controlling owners of companies in Indonesia. This implication is consistent as described by Diyanty (201) in her research and the findings of World Bank (2010).

b. According to Fitriany (2011) there were several instances of pseudo rotation of PAFs, that is the artificial change in name of the PAF so that their client did not have to change PAFs to fulfill the conditions in the MOF Regulation no. 17 Year 2008. The rotation of PAF influences the independence of the auditor so that the policies of the rotation of PAF should be perfected.
5.3. *The Limitations of Research*

This research has several limitations:

a. This research measures audit quality using AQMS developed by Herusetya (2012). This AQMS variable is only an addition of its composing variables, so there is a possibility that it is not yet representative of the real audit quality;

b. The data for auditor tenure is only obtained for five years before the start of the research;

c. The data of ownership in this research is limited to the companies whose data are available in the Ministry of Law and Human Rights. Foreign companies data are unavailable in the Ministry of Law and Human Rights so that their ownership are unknown.

5.4. *Suggestion for Future Research*

For future research, audit quality can be measured using better proxy from the previous proxies, for example, by creating a weighting for audit quality measures. The data for tenure auditor should also be obtained for years far before the start of the research period if possible, and there should be a tracing to the foreign ownership of company controllers.

Reference


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Choi, J., Kwak, S., dan Yoo, H. (2008) The effect of divergence between cash flow right and voting right on audit hour and audit fee per audit hour. Seoul Journal of Business 14, Number 1


Peraturan Bapepam Nomor I-tenang Pencatatan Saham dan Efek Bersifat Ekuitas Selain Saham yang Diterbitkan Oleh Perusahaan Tercatat


Undang-undang Republik Indonesia No. 40 Tahun 2007 tentang Perseroan Terbatas.


