



Does Mandatory Auditor Rotation Increase Audit Quality? A Test of Indonesian Ministry of Finance's Decree Effectiveness

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Abstract: We investigate whether auditor's mandatory rotation affects audit quality. In specific, we test the effectiveness of Ministry of Finance's (MOF) decree no. 423/2002. Following some other researches that investigate audit quality, we use discretionary accruals as the proxy of audit quality. Our test result suggests that audit quality is lower after the rotation than before the switching. This result is surprisingly unexpected since we expect post-rotation auditor will be more skeptical and conservative to its new client and therefore will push the discretionary accrual down. We conjecture that auditors have anticipated that MOF decree for two reasons. Firstly, more than half of our sampled rotations (58%) take place on 2002 or 85% of sampled firms by 2003. It proves that companies and their auditors have anticipated this decree. Secondly, some local accounting firms dissolve their partnerships and re-establish a new one while both of them retaining their foreign associates. If the pre- and post-mandatory auditors are in fact the same accounting firm since they have the same foreign affiliation, there is no surprise that we will not observe some change in the audit the quality. In this research, we, however, consider this switch as a mandatory rotation since lawfully the company is audited by different auditor. Our samples are suffers from this limitation.

Keywords: *audit quality, discretionary accruals, earnings management mandatory rotation.*



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I. INTRODUCTION

One allegedly source of problem that caused Enron to collapse was long tenure of Arthur Andersen accounting firm¹ with Enron. The Economist (December, 2001) reported that Arthur Andersen has audited Enron for 16 years since Enron was first established. This long relationship is associated to lower auditor's² independence. Long tenure has created financial dependency to its client. Regulator believed that auditors' dependency can be achieved by limiting their tenure with its client. Although Enron represented less than 2% of Arthur Andersen's national revenue from publicly listed clients, however, it was more than 35% of such revenues in the Houston office (Francis, 2004). In 2000 alone, Enron has paid Andersen USD 52 millions for its service (Sims, 2003: 197), USD 25 millions paid for financial audit service.

Sarbanes-Oxley Act (SOX) is an attempt from United States (US) government to reform auditing industry, among many other things. In its best effort, the US government can only regulate audit partner tenure, but not accounting firm tenure. Until now, they still leave auditor rotation unregulated. The US government postponed this regulation is because proponents and opponents of such regulation have to have stronger, convincing evidence that mandatory auditor rotation may actually increase audit quality. However, their debates will not be solved unless they

¹ We use "firm" to denote an accounting firm and "company" to denote an auditee or auditor's client.

² Auditor and accounting firm are used interchangeably, unless when we refer to an auditor as an individual.



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search for evidence in other country, i.e. that a country that has been mandating auditor rotation.

In September 2002, Indonesian Minister of Finance (hereafter MOF) enacted a decree numbered 423.³ This decree actually regulates audit services in general. One of them is auditor tenure. According to this MOF decree, any company that has been audited by an accounting firm for five consecutive years must rotate its auditor no later than 2004.⁴ It seems the idea behind this regulation is that Indonesian government suspect that long tenure may decrease auditor's independence. Even though there was no explicit statement that government questioned the auditor independence, the message was clear. The government expects the auditor has to be independent and mandatory rotation must be a solution.

While the researchers and regulators are still debating in the US even until today, the government of Indonesia has concluded that auditor rotation will increase, or at least maintain, audit quality. We find no such evidence that Indonesian government based their decision on some research or academic analysis. The regulation itself seems to be an immediate response to Enron debacle or to SOX since it was enacted on September 2002, the same year as SOX enacted. However, since the academic world is waiting for answers to debate about the impact of mandatory auditor rotation to audit quality, the decision of Indonesian government to regulate

³ In 2003, the decree no. 423 then was amended by decree no. 359 but with no changing in auditor rotation rule. Even though we do not explicitly mention the later decree through out this paper, readers should aware that implicitly both are considered.

⁴ Later in 2008, the Minister of Finance changed it into six years.



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auditor rotation earlier than, for example, US government make it possible for us to test the regulation effectiveness. This research is aimed to answer that question.

Research Objectives

The objective of this research is to test empirically whether the Indonesian Minister of Finance's decree of mandatory auditor rotation will enhance, or at least maintain, the quality of financial report. The quality of financial report is measured by discretionary accruals (DeFond & Subramanyam, 1998). We use discretionary accruals, among others, to measure audit quality on the ground that a quality auditor will question not-normal discretionary accrual. If this decree is effective, the company's discretionary accruals will be lower following the mandatory rotation than before the rotation. The premise is that the new auditor is expected to be more conservative to its new client so that any abnormal, aggressive estimates in financial report will not be allowed.

Secondly, we test whether the size of auditors of pre- and post-mandatory rotation relates to the higher or lower audit quality. This question is based on the conjecture that bigger firms associated with higher audit quality (DeAngelo, 1981) and based on the fact that, even though rotation is mandatory, however, the decision to choose an auditor is voluntary. Therefore there are possibilities that a company move to an accounting firm of different or of same size as it former auditor. We investigate the change in the audit quality of those rotating companies.



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Finally, this research is aimed to specifically test the Indonesian Minister of Finance's decree. Therefore, findings to this research will indicate the effectiveness of that decree to preserve accounting information quality. No research in Indonesia has study the effectiveness of this decree and since this decree was not based on any research like most of auditing-related government regulation (Francis, 2004), we expect our findings can be a sort of basis for any future auditor rotation regulations, not only to our country.

II.THEORY AND HYPOTHESES

Mandatory and Voluntary Auditor Rotation

Regulator and researchers have shown great interest on the issue of (voluntary) auditor rotation. Regulator especially concern about managerial opportunism. In 1988, SEC indicated their attention to auditor switches. They suspect that some companies switch their auditors to one that will agree with their chosen accounting methods. Motives behind those practices can be traced back to Watts & Zimmerman (1986). This practice allegedly will decrease the quality of financial report.

DeFond & Subramanyam (1998) investigate alternative explanations on the motives behind auditor rotation. Specifically, they study implication of proposition that suggests auditor rotation is caused by auditor's preferences to conservative accounting methods. Dye (1991) and Antle & Nalebuff (1991) conclude that auditor switches could be caused by disagreement between auditor and its client about proper



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application of certain GAAP. This disagreement will be most likely if auditor believes that certain GAAP will result in lower earnings than earnings that its client claims (Antle & Nalebuff, 1991).

Auditor's preference on methods that produce lower earnings does not have to be a response to managerial effort to opportunistically boost earnings. Conflict between auditor and its client can arise because auditor has incentives to report conservatively. This view suggests that auditor's behaviors are based on some incentives (Magee & Tseng, 1990; DeAngelo, et al., 1994) and that accounting method chosen is a mixture of auditor's and client preferences.

One of the incentives that motivates auditor to choose a more conservative accounting method is litigation risk. By choosing a more conservative method, auditor will be protected against future litigation. However, we may expect that conservatism level may vary among auditors, based on, for example, auditor's assessment on client's risk. If a manager thinks that the incumbent auditor will prefer a more conservative accounting method which will result in a lower current year's earnings, then this manager will fire that auditor and look for another auditor that will be more flexible to manager's accounting method.

Other than voluntarily, auditor rotation can also mandatorily. In this case, the motive to change the auditor is clear i.e. government regulation. Manager of a rotation company has no option than to find a new accounting firm to replace the incumbent accounting firm. Whether the accounting firm agrees or not to audit a new client, the



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accounting firm does not have as much information as much as the old accounting firm about their new client. The firm does not know, for example, whether the manager of its new client will prefer an aggressive accounting method or whether he has a reputation in the past to manipulate earnings. Therefore, every time an accounting firm agrees to audit a new client, the litigation risk will follow. It is not unusual, therefore, if the newly assigned auditor to be more skeptical to its new client and to prefer more conservative accounting methods, especially if the client's manager tends to choose more aggressive accounting methods.

We can conclude here that, due to the lack of knowledge about its new client, the accounting firm will be more conservative. It will disagree more to accounting methods that can boost current earnings and it may choose methods that will result in earnings number similar to previous year's number or even lower number if it suspects the previous number as to be unrealistic. Newly appointed auditor is expected to scrutinize methods used and their resulted numbers. Therefore, we may expect the newly appointed auditor to choose income decreasing accounting method. In this case, we will observe income decreasing discretionary accruals.

Auditor Rotation and Audit Quality

In accounting and auditing literatures, audit quality is believed to be responsible for credible accounting information. They posit that higher audit quality will result in more accurate information. However, this proposition is difficult to prove because we have some problems in measuring audit quality. Davidson & Neu



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(1993) assert that there is no accurate, agreeable measure of audit quality itself even though formal definition of quality audit has been proposed by DeAngelo (1981). In fact, we can only observe an audit report as the output of an auditor's activity. Unfortunately, this audit report is only a generic template and the majority of audit reports are standard clean opinion (Francis, 2004). In other words, it is implicitly assumed that all audits meet minimum legal and professional standards and we can focus on differential audit quality above and beyond the legal minimum (Francis, 2004). If we want to scrutinize audit quality, we have to investigate what the auditors have performed during the audit. However, we, the outsiders, cannot observe the auditing process. What we know is that two accounting firms may not have the same quality.

This difficulty may have led some researchers to use accounting firm's size as a proxy for audit quality. The main difference between bigger and smaller accounting firms is the possession of resources. A bigger accounting firm may have more auditors and/or more sophisticated audit-related technology than a smaller accounting firm. If we assume that both accounting firm use all their available resources, we may believe that one that has more resources will deliver higher quality service. In this case, we may expect that bigger accounting firms will deliver more quality service and, as a result, will associate with more accurate information (Titman & Trueman, 1986; Beaty, 1989).



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Some researchers have found the relationship between accounting firm's size and audit quality. DeAngelo (1981), for example, concludes that bigger accounting firms have more incentives to maintain their quality than smaller accounting firms. Dopuch & Simunic (1982) in Davidson & Neu (1993) suggest that audit quality is a function of amount and extent of audit procedures performed by auditors. Therefore, we can say that bigger accounting firms have more resources to perform more tests than smaller accounting firms. Moore & Scott (1989) find a positive correlation between accounting firm's size and the extent of audit tasks. We, therefore, may conclude that audit quality is the ability of auditor to detect and eliminate, or at least to reduce, audit failures and manipulations. If this premise is true, bigger accounting firm will be more successful to minimize frauds and errors, since they have more resources to spend. Moreover, in case they have to receive a new client, bigger accounting firm will be more careful than smaller accounting firms.

Accounting Information Quality, Discretionary Accruals, and Auditor Rotation

Prior to Enron's collapse, some people believed that longer tenure was related to higher audit quality and, therefore, higher accounting information quality. If an auditor audits a client for quite long periods, auditor is expected to gain some experiences on clients business. The more experience an auditor, the better he performs the audit task, the higher the quality of financial information. Johnson et al. (2002) provide empirical evidence on this issue. They compare the quality of financial information of three groups of auditor tenures: short term (two to three years), medium term (four to eight years), and long term (at least nine years). They find the quality of medium term tenure is higher than the quality of short term



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tenure; but they fail to prove that the quality of long term tenure is lower than the quality of short term tenure.

Later evidences show some supports to Johnson et al.'s (2002) findings. Myers et al. (2003) use absolute value of discretionary accruals and current accruals as proxies for audit quality. They find that longer auditor-client relationship cause auditor to cautiously limit extreme management's decisions when client want to report their financial performance. It means that longer tenure will benefit financial information users since auditor is more aware of its client's business. Carcello & Nagy (2004) assert that more financial reporting frauds found on the first three years of auditor-client relationship than on the later years. In their investigation, they fail to find more frauds on longer relationship. In other words, they insist that regulator should not regulate auditor rotation since the benefit of longer auditor's tenure is higher than shorter auditor's tenure.

Nagy (2005) provides evidence on mandatory auditor rotation—at least as he claimed.⁵ He investigates ex-Arthur Andersen's clients' earnings quality as they are audited by other auditor after the demise of Arthur Andersen. He find significant decrease of discretionary accruals of ex-Arthur Andersen's clients and concludes that this decrease as an indication of increased audit quality. However this evidence is only valid for smaller companies since auditors of bigger accounting firm has more bargaining position. Nagy also find that, following auditor rotation, positive association between discretionary accruals and the length of auditors-clients relationship likely to decrease. Overall, he obtains a significant decrease of the level of discretionary accruals after the demise of Arthur Andersen. He claims

⁵ We have to differentiate auditor rotation due to a regulation that mandates it and auditor rotation due to the demise of previous accounting firm. In the latter case, a public company has to find a new auditor because its financial report has to be audited since the earlier accounting firm is no longer operating, not because of a regulation that limit the accounting firm's tenure.



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this as an indication of the increase of client's conservatism and of skepticism of successive auditors.

Hypotheses Development

Indonesian Minister of Finance decree in 2002, and its 2003 amendment, obliges companies that have been audited by the same accounting firms for five consecutive years to switch their accounting firms no later than 2004. This decree, implicitly, seems to be based on the idea that long term auditor-client relationship will decrease earnings and audit quality. Mandatory auditor rotation will cease this long tenure

H1. The audit quality is higher in the post-mandatory rotation than in the pre-mandatory rotation.

Even though the premise behind the mandatory auditor rotation is that rotation itself will improve information quality, the quality of successive accounting firms may play a role. Specifically, if the size of former and successive accounting firms is significantly different, we may expect that the effect of mandatory rotation will be different from if the two accounting firms are of equal size. The effect of smaller-to-bigger rotation will be different from bigger-to-smaller rotation, from bigger-to-bigger rotation, and from smaller-to-smaller rotation.

H2: Audit quality of a company that mandatorily rotates its auditor will be different if the auditors of post- and pre-rotation are of different size.



III. RESEARCH METHODS

Sampling and Data Collection

We collect samples from non-financial related public companies that switch their auditors in response to the Minister of Finance decree no. 423/2002 and no. 359/2003. Non-financial related companies groups have different discretionary accruals characteristics from that of financial related companies. We investigate auditor switching between 2002 and 2007 window. The reason to limit analysis to 2007 is that because in 2008 the MOF decrees no. 423 and 359 are superseded by a new MOF decree no. 17. This latter decree changes maximum auditor tenure to six years, not five years tenure anymore. To test the effect of newly enacted decree of 2008, we have to wait for some more years before samples switch their auditors mandatorily again. Therefore, our samples are limited to the previously mentioned window.

We extract auditor information from Indonesian Capital Market Directory. However, we cross-check those data with the company's annual report and in case there is any difference between them, we rely on the company's annual report. The sampling procedure is as follow. First, we identify companies that change their auditors within our observation window of 2002-2007. Second, we trace back how long the rotated auditor's tenure is before it is replaced by a new auditor. Only companies that have five or more consecutive years of tenures that we use as samples.



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Our main problem in sampling is due to the characteristic of Indonesian accounting firms. Accounting firms in Indonesia are in the form of partnership and at anytime this partnership can be dissolved. Since 2002, some of the accounting firms deliberately have dissolved the partnership and then form a new one with a new name. However, the dissolution motive is obvious. If the previously dissolved local accounting firm is in an affiliation with a foreign accounting firm, let's say ABC, LLP, the successor accounting firm surprisingly still affiliates with the same foreign accounting firm, i.e. the ABC, LLP, and even has the same address with the previous dissolved accounting firm.⁶ Those MOF decrees of mandatory accounting firm rotation, including no. 17/2008, unfortunately, are silent about this. Therefore, in this research we have to assume that the two accounting firms, before and after dissolution, are two different accounting firms since legally they are two different entities.

⁶ Take British American Tobacco (BAT) Indonesia as an example. BAT Indonesia first auditor in 1979 was Tang Eng Oen & Co. which affiliated with Price Waterhouse. In 1980, the firm changed its name into Hadi Sutanto while still maintained its affiliation with Price Waterhouse. BAT Indonesia was still its client. Then, in 1998, Price Waterhouse merged with Coopers and Lybrand into PriceWaterhouseCoopers. Again, BAT Indonesia was still its client. Later, the accounting firm changed their partnership into Haryanto Sahari & partners in 2004 and BAT Indonesia was still the client. Therefore, since 1998 to 2003, BAT Indonesia has been audited by Hadi Sutanto & partners for six year. Because the MOF decree mandated auditor rotation after five years tenure, BAT Indonesia then "switch" Haryanto Sahari & partner in 2004. Both Hadi Sutanto & partners and Haryanto Sahari & partners are affiliated with PriceWaterhouseCoopers and share the same office address. So we can say the rotation was indeed only legal rotation, not factual rotation.



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Variables and Variable Operational Definitions

The variable of interest in this study is the quality of accounting information of the firms that switch their auditors mandatorily. We follow Becker et al. (1998), DeFond & Subramanyam (1998), Bartov et al. (2000) and Nagy (2005) and use discretionary accruals as a proxy of the quality of accounting information. We borrow the same logics used by Nagy (2005) when we equate the quality of accounting information with the audit quality.

We estimate discretionary accruals using Jones (1991) model. Specifically, we use the cross-sectional variation of accruals following DeFond & Jiambalvo (1994) and DeFond & Subramanyam (1998), instead of their time-series variations. This method estimates normal accruals as a function of change in revenues and change in level of plants, properties, and equipments. These variables are believed to control changes in accruals due to company's economic changes. Changes in revenues are included because changes in working capitals depend on changes in revenues. Plants, properties, and equipments are used to control a portion of total accruals that relates to non-discretionary depreciation expenses. Parts of total accruals that cannot be explained by normal operating activities are discretionary accruals. Formally, we use this following model to estimate discretionary accruals.

$$\frac{TA_{it}}{A_{it-1}} = \alpha \frac{1}{A_{it-1}} + b_1 \left(\frac{\Delta REV_{it}}{A_{it-1}} \right) + b_2 \left(\frac{PPE_{it}}{A_{it-1}} \right) + \varepsilon_{it} \quad (1)$$

Where:



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TA_{it-1} = total accruals of company i in year t ;

A_{it-1} = total assets of company i in year $t-1$;

ΔREV_{it} = net change in company's i revenues in year t

PPE_{it} = gross value of plants, properties, and equipments of company i in year t ;

and

ϵ_{it} = error term

Discretionary accrual is the aforementioned error term (DeFond & Subramanyam, 1998; Francis & Yu, 2009).

We use the absolute unstandardized residuals as proxy for discretionary accruals and put them in the following equation:

$$\text{AbsUR}_i = \alpha + \text{ROT}_i + \beta_1(\text{BB}_i) + \beta_2(\text{BS}_i) + \beta_3(\text{SB}_i) + \epsilon_i \quad (2)$$

Where:

AbsUR_i : cross-sectional absolute value of unstandardized residuals of firm i

DROT : dummy variable, 1 if companies from pre-mandatory rotation, 0 if other;

DBB_i : dummy variable, 1 if the company switches from Big 5 (or Big 4)⁷ to other Big 4 accounting firms; 0 if others;

DBS_i : dummy variable, 1 if the company switches from Big 5 (or Big 4) to non-Big 4 accounting firms; 0 if others;

DSB_i : dummy variable, 1 if the company switches from non-Big 5 to Big 4 accounting firms, 0 if others.

⁷ Prior to MOF decree, Andersen LLP still operated, so there were five big accounting firms. After 2002, Andersen was demised and only four big accounting firms that are still operating.



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Analysis

After running equation (1) we have unstandardized residuals. DeFond & Subramanyam (1998) and Francis & Yu (2009) consider these residuals as discretionary accruals. To test first hypothesis, we cross-sectionally estimate discretionary accruals of each company (auditee) on their last year with its pre-mandatory rotation and on their first year with its post-mandatory rotation. We also test whether audit quality of companies switching to an accounting firm of different size are statistically different. Specifically, we test whether discretionary accruals of a company switch from a Big 5/Big 4 or from a non-Big 5/non-Big 4 accounting firms is different from one that switch to another Big 4 or to a non-Big 4 accounting firms.

IV. RESULTS AND DISCUSSION

Descriptive Statistics

[Insert Table 1 about here]

Panel A of Table 1 shows that total accruals (TA) on the first year after rotation in average decline from 0.213 to 0.072. This decrease indicates changes in estimate of discretionary and non-discretionary accruals. Since it is total accruals, we could not conclude yet whether we have earnings management or not. If we compare median value of total accruals, we could conclude that before auditor rotation total accruals are scattered on the left-hand side of normal curve.



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Panel B of Table 1 provides statistics of years when the mandatory rotation took place and number of companies that rotates their auditors mandatorily.⁸ Most of sample companies (90 companies or 58%) switched their auditors in 2002. The more interesting fact is that 86% of samples have changed their auditors by 2003. It indicates that most companies have long relationship before 2002/2003 so that they have to change their auditors in both years. MOF decree, actually, allows companies to stay with their auditors until 2003 audit year if they already signed an audit contract for 2003. However, we can see that many of them have moved to a new auditor by 2003. We can also see that number of mandatory rotation decline after 2002. We can conclude two things here. First, number of companies that switch their auditors mandatorily may actually decrease since 2002. This may indicate that some companies have anticipated the decree because they changed their auditors in the same year as the decree signed. Secondly, statistics may also indicate that other companies in Indonesian Stock Exchange (ISX) switch their auditors voluntarily, which in this case before reaching five consecutive years of tenure.

Hypothesis Testing

The first hypothesis tests whether audit quality is higher or lower following mandatory rotation. Audit quality is measured by discretionary accruals of switching companies, pre- and post-mandatory auditor rotation.

[Insert Table 2 about here]

⁸ There is no formal information in annual report that the new appointed accounting firm is due to mandatory rotation. We only assumed it based on the tenure and the year of rotation.



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Table 2 shows that prior to mandatory auditor rotation companies' discretionary accruals mean is statistically lower than their discretionary accruals after the rotation or, using the opposite perspective, we find statistically higher discretionary accruals after the mandatory rotation. This result suggests that audit quality is statistically lower after companies change their auditors mandatorily. This finding is surprising since we predict accounting firms will bring higher conservatism and skepticism with them to their new clients. The MOF decree itself expects, implicitly, that mandatory rotation will result in higher audit quality.

The rests of the table shows comparisons of discretionary accruals of companies that rotate their auditors, based on their former and later auditor's size. We find evidence that there are statistically significant discretionary accruals differences among companies that move from Small-to-Small (SS companies) to Big-to-Big (BB companies) accounting firms. The BB companies' discretionary accruals are statistically lower than that of SS companies. This result implies that SS companies have statistically lower audit quality than BB companies, due to, partly at least, their auditor size. The same is true for companies that move from Big-to-Small (BS) accounting firms. Audit qualities of BS companies are statistically higher than that of SS companies. However, we do not find any statistically significant differences among companies that move from Small-to-Small (SS) to Small-to-Big (SB) accounting firms. We can conclude that the size of pre-mandatory rotation auditors determine the audit quality of a companies.

Additional Analysis

We run an additional test. This test investigates whether discretionary accruals of companies audited by auditor of different size also differ. We split our samples into two: prior to mandatory rotation and after mandatory rotation.

$$\text{AbsUR}_i = \gamma_0 + \gamma_1 \text{PAUD}_i + \varepsilon \quad (3)$$

$$\text{AbsUR}_i = \theta_0 + \theta_1 \text{FAUD}_i + \varepsilon \quad (4)$$

Where:

AbsUR = absolute value of unstandardized residuals of company i

PAUD = dummy variable, 1 if the company audited by one of the Big 5/4 accounting firm prior to rotation; 0 if audited by other auditor.

FAUD = dummy variable, 1 if the company audited by one of the Big 4 accounting firm after the rotation, 0 if audited by other auditor.

Panel A and B of Table 3 present the results of both tests.

[Insert Table 3 about here]

Panel A shows that companies' discretionary accruals audited by Big 5/Big 4 accounting firms are partially and statistically lower ($p\text{-value} < 10\%$) than discretionary accruals of companies audited by other accounting firms. In other words, audit quality of Big 5/Big 4 is statistically higher than the audit quality of non-Big 5/non-Big 4 accounting firm.

Panel B, however, shows different results. Here, we fail to conclude any differences between Big 4 and non-Big 4 accounting firm. The audit quality, after the rotation, seems not to be different. Even though we cannot conclude that the audit



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quality becomes lower after the rotation, however, we believe that our samples show the same audit quality, no matter who is the auditor.

Discussion

Theory predicts that long, unlimited tenure is responsible for auditor's low independence. It is not uncommon for an accounting firm to have a long relationship with a single client. A long relationship will secure the cash inflow to the accounting firm and the longer the relationship, the more secure the cash inflow. However, that long and secure relationship will cause some damage on the audit quality, especially in terms of auditor's independence.

Dopuch et al. (2001) provide evidence that mandatory rotation relates to high auditor independence. They find that auditors are more independent in the regime that mandates auditor rotation than in the regime that does not regulate it. Moreover, they also find that auditors are the most independent in the regime that both mandates auditor rotation and retention. Their findings actually conform to prediction that auditors will be more conservative and skeptical to a new client. In fact, auditors must at all time be conservative and skeptical. However, the difference is that in a regime where the tenure is limited, auditors cannot expect that their tenure will last forever. Whatever their efforts to retain their clients, there is a limit to their tenure. On the other side, in a regime where there is no regulation on auditor tenure, auditors will expect that they themselves can retain (or can be retained by) their clients at all cost, if necessary. Therefore, if an auditor perceives that his tenure is limited and there is no way that he can retain his client beyond that limited tenure, he has nothing to loose



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if he delivers a quality job. He will not agree with, for example, client's doubtful accounting estimates that he perceives will mislead outside investors. In short, we expect that replacing auditor has more quality than its predecessor. In this case, after the rotation, the client's discretionary accruals should be lower than the before the rotation.

Our research produces results contrary to our expectation. Companies audited by successor auditors show higher discretionary accruals. It means we fail to prove that mandatory rotation will enhance audit quality. This finding is surprising regarding the cost the companies have to pay to switch to a new auditor. Theory predicts that, auditor will be exposed to audit failure risk and litigation risk, to name a few.

However, before we conclude that the regulation itself brings no effect on preserving audit quality, we have to consider two facts. First, if we look carefully to the year of rotation as shown in Table 1, we think that year of rotation the firm chose may have some influence on the results. Even though mandated companies are allowed to postpone the switching until they finish 2003 audit year, more than half of samples change their auditors earlier. The interesting fact is that the MOF decree itself was signed on September 2002, so we may speculate that they, in this case are the accounting firms, have anticipated the regulation. If an accounting firm anticipates that this audit year will be the last year for them to audit a certain client, the accounting firm is expected to be more independent since it has no more to lose, especially if it is the last year of assignment. However, it is not the real case.



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Secondly, some of accounting firms, especially after the year of 2002, dissolved their partnership and formed a new one. Indonesian regulation recognizes the newly formed accounting firm as a different accounting firm, not a successor of the earlier accounting firm. If the dissolved local accounting firm had an affiliation with a foreign accounting firm, then, the affiliation was also ended as the local partnership dissolved. Therefore, if the newly formed accounting firm then affiliates with the same foreign accounting firm as the old ones, it is considered a new affiliation.

Let's take Ernst and Young (EY) and PriceWaterhouseCoopers (PWC) as examples. Before 2002, EY affiliated with Sarwoko Sandjaja and Partners. In 2002, it affiliated with Prasetio, Sarwoko, Sandjaja, and Partners. Since 2005 it affiliated with Purwantono, Sarwoko, Sandjaja, and Partners. Between 2002 and 2007, EY in Indonesia had retained big companies like P.T. Indofood Sukses Makmur—the biggest food company, P.T. Indomobil Sukses International—a leading automotive company, and P.T. Mustika Ratu—the leader in cosmetics industry.

PWC, through its local affiliation, also has the same strategy to retain its local client. We observe that from 1997 to 2007, PWC is the only auditor of PT. British American Tobacco (BAT) Indonesia, through Hadi Sutanto and Partners (1997-2002) and Haryanto Sahari and Partners (2003-2007) which both were the local affiliations of PWC. Today, PWC affiliates with Tanudiredja, Wibisana, and Partners. Moreover, both EY and PWC in Indonesia have the same addresses even though they have



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changed their local partners several times. Therefore, we may speculate that the motive relates to retain some (possibly) big clients as we present earlier.

In our study, we assume the two accounting firms are different accounting firms since legally they are different accounting firm. Therefore, we consider a company has already switched its auditor although the new accounting firm still affiliates with the same foreign accounting firm as the older accounting firm and has the same address. We admit that this assumption brings some consequences to our results since in fact those companies' we mentioned earlier had never changed their auditors. They had been audited by the auditors that had the same audit procedures, technology, and, of course, quality. We believe this is a loop hole in the government regulation. Future research may investigate the effect of this loop hole on the audit quality.

[Insert Table 4 about here]

Our samples are characterized by companies that switch from a Big 5(4) accounting firms to another Big 4 accounting firms. Previously, our results in Table 3 show a negative and statistically significant coefficient of dummy variable of rotation between Big-to-Big (DBB) accounting firms. This result indicates that, as compared to Small-to-Small accounting firms rotation, Big-to-Big rotations has lower audit quality. We suspect that this result may be caused by the phenomenon that we have discussed earlier, i.e. there is actually no auditor rotation, especially, among Big 4 accounting firms in Indonesia. Future question is whether the Big 4 accounting firms really contribute to quality audit.



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V. CONCLUSION

This research investigates whether mandated auditor rotation has impact on audit quality. As many other countries in the world, before Enron collapsed and Andersen demised, auditor rotation was voluntary in Indonesia. Some, if not all, companies in Indonesia have long relationships with their clients. Auditor tenures can reach as long as 20 years. Some experts believe that long, or, more specifically, unlimited, tenure will deteriorate auditor's independence. Longer tenure will ensure cash inflow to auditor and the longer the tenure, the more auditor to be financially dependent to its client. However, others opposed that claim on the ground that long tenure will increase audit quality since auditor will gain more expertise the longer the tenure. Therefore, debates continue until today and all of the debate centered in the USA where auditor rotation, in this case the accounting firm, is not mandatory.

The only way to test the effectiveness of a regulation is to test it in an area where the regulation is in effect. In this case, Indonesia may be one of some countries that mandate auditor rotation. Therefore, testing audit quality due to mandatory rotation using Indonesian data is relevant and will give us clearer picture of the impact of the proposed auditor rotation regulation.

Audit quality is a variable that has been measured using many proxies. We use discretionary accruals as proxy for audit quality following Krishnan (2003). Even though auditors do not directly concern about discretionary accruals, they, however, will not allow doubtful accounting methods and estimates. For example, they will not allow managers to change accounting method that will increase earnings rapidly. Or,



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auditors may disagree with managers on some doubtful estimates as a result, for example, of some accounting methods chosen by manager. Therefore, indirectly, we can say that auditors interested in discretionary accruals.

We hypothesize that audit quality is higher after than before mandatory rotation. We test this hypothesis by comparing discretionary accruals of companies audited before and after rotation. Our test failed to support our hypothesis that audit quality will be higher if the company changes its auditor. Audit quality is higher one year before the rotation than on year of rotation. This result indicates that we failed to prove that auditor will be more skeptical to its new client. More than half of our samples change their auditors on 2002 or on the first year of enactment of that decree. Moreover, some accounting firms take advantage of the loop holes on the decree using dissolve-and-recreate strategy. Therefore, it is not a surprising if someone finds that the old and the incumbent accounting firm associate with the same foreign accounting firm while their both clients in fact has mandatorily switch its auditor. Our test also implies that size of pre-mandatory rotation auditor associates with the audit quality.

Our study can be considered as an earlier part of research on the relationship between audit quality and mandatory rotation. We limit our window of observation to 2002 to 2007, while in 2008 a new MOF decree was released to supersede the earlier ones. The latter is effective on 2008 and will have effect on audit quality on after some time. Further research can investigate the effectiveness this new decree. Even though the difference between those decrees only on the length of tenure, we believe



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the effect of will be different. On the outset of enactment, only some companies that switch auditors and it will their first time changing auditors mandatorily. Over the time, those companies may have to switch auditors mandatorily again. The effect of mandatory rotation on the audit quality if it is the second switching or more will be different than the effect on the quality if it is the first switching. The search will be more interesting since some accounting firms again have follow what we call the dissolve-and-recreate strategy. Future research may investigate the effect of this loop hole on the audit quality.

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APPENDICES

Table 1
Descriptive Statistics

Panel A

| Variabel | Mean | | Median | | Standard deviation | |
|----------------------------|-----------------|----------------|-----------------|----------------|--------------------|----------------|
| | Before rotation | After rotation | Before rotation | After rotation | Before rotation | After rotation |
| TA_{it-1}/A_{it-1} | 0.213 | 0.072 | -0.042 | -0.013 | 3.003 | 1.875 |
| $1/A_{it-1}$ | 3.412E-06 | 6.518E-06 | 1.368E-06 | 1.436E-06 | 5.728E-06 | 3.502E-05 |
| $\Delta REV_{it}/A_{it-1}$ | 0.139 | 0.188 | 0.063 | 0.033 | 0.399 | 1.150 |
| PPE_{it}/A_{it-1} | 2.854 | 2.391 | 0.414 | 0.565 | 21.836 | 22.015 |

Panel B.

| Year of rotation | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|-------------------------------|------|------|------|------|------|------|
| Number of rotation n = 155 | 90 | 44 | 0 | 20 | 0 | 1 |

Table 2
Regression results

$$ABUR_i = \alpha + ROT_i + \beta_1(BB_i) + \beta_2(BS_i) + \beta_3(SB_i) + \varepsilon_i$$

| Variables | Coefficients | t | p-value |
|--------------------|---------------|--------|---------|
| Constant | 0.304 | 6.545 | 0.000 |
| DROT | -0.081 | -2.464 | 0.014 |
| DBB | -0.101 | -2.103 | 0.036 |
| DBS | -0.130 | -2.228 | 0.020 |
| DSB | -0.059 | -0.284 | 0.777 |
| F-value | | 2.994 | 0.019 |
| N | 155 companies | | |
| Adj-R ² | 0.025 | | |

Table 3
Additional Analysis
Panel A

| Variable | Coefficient | t-value | p-value |
|--------------------|-------------|---------|---------|
| Constant | 0.198 | 5.141 | 0.000 |
| PAUD | -0.079 | -1.904 | 0.059 |
| F-value | | 3.625 | 0.059 |
| Adj-R ² | 0.017 | | |

Panel B

| Variable | Coefficient | t-value | p-value |
|--------------------|-------------|---------|---------|
| Constant | 0.324 | 4.283 | 0.000 |
| FAUD | -0.133 | -1.619 | 0.107 |
| F-value | | 2.622 | 0.107 |
| Adj-R ² | 0.010 | | |

Table 4
Movements of clients based on auditors sizes

| Auditor size | Numbers of companies |
|---------------------------|----------------------|
| Big 5(4) to Big 4 | 98 |
| Big 5(4) to Non-Big 4 | 34 |
| Non-Big 5 to Big 4 | 1 |
| Non-Big 5 to Non-Big 5(4) | 22 |