THE INFLUENCE OF AUDIT TENURE AND AUDIT ROTATION TO THE AUDIT QUALITY: THE CASE OF INDONESIA

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ABSTRACT

This research objective is to examine the influence of audit tenure and audit rotation on audit quality. Audit quality is measured using a dummy variable with the option of either audited by big-4 audit firm or non-big-4 audit firm. Audit tenure is measured by the number of years an auditor has a partnership with the same client. Audit rotation is measured using a dummy variable with the option of either a company have an audit rotation or not. The population in this research consist of all manufacturing companies that are listed on IDX in the period of 2018-2020. This research is using a purposive sampling method which means that there are several requirements for a sample to be included. The final number of samples are 153. Logistic regression model is used to analyze the data. The result of this research shows that audit tenure has a negative effect towards audit quality, meanwhile audit rotation doesn't have any significant influence towards audit quality.

Keywords: audit quality, audit tenure, audit rotation.

PROBLEM DESCRIPTION

Audit is an impartial review of any organization's financial records, whether profit-oriented or not, regardless of its size or legal form, with the aim of expressing an opinion on it (Gupta, 2004). Auditing the financial statements is designed to reduce the risk of information and enhance decision-making (Arens et al., 2008). Auditing has done a great job in giving assurance to the stakeholders that the financial statements created by the company they invested in is true or not. However, it doesn't mean that auditing is always on the good side of a business. For the past few years, there are notably many auditing scandals happening. Started from the biggest auditing scandal of Enron, up to the latest one in the case of Wirecard Germany. There are many possible reasons which led to those scandals, lack of expertise from the auditors, audit fee, bad performance management, unhelpful regulations, or the one that is going to be the main topic of this research, audit tenure and audit rotation.

In Indonesia, the period of audit tenure has been regulated since 2003 by the Ministry of Finance and renewed in 2008. The regulation includes the provision of general audit services on the entity's financial statements by public accounting firm for a maximum of five consecutive financial years and by the public accountant for a maximum of three consecutive financial years. Public accountants and accounting firms may receive a remittance after one financial year does not provide general audit services for the same client's financial statements. The existence of these regulations means that companies are obliged to change auditors and their public accounting firm after a certain period of time.

Independence serves as the foundation of the accounting or audit profession both in the perspective of historically and philosophically, thus, the profession's strength and stature depend on it (Carey, 1970). Since the first establishment of an auditing fields itself, independence has become the foundation trait that every auditor should possess. The independency of an auditors is needed to provide an objective and true point of view while checking a company's financial statements or the

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company's condition itself as a whole, in which it will help to strengthen the reliability of a report published by the company and make stakeholders believe that those reports are really reflecting the real condition of a company. Stakeholders see audited financial statements and annual report as the most reliable sources to indicate the condition of a company. Therefore, auditors as an outside third party have to give their opinion in regards of company's financial statements in an objective manner, without any interference from the management. The independence of an auditor reflects the objectivity and builds the trust to those who depend on their services, mainly to the shareholders (Chia-Ah and Karlsson, 2010). It is clear that external auditor has an important role as the intermediary between a company and its shareholders.

The auditor's independence is currently put in a spotlight for the past few years, and during those times, the spotlights were threatened the integrity of an entire profession in auditing fields. This condition arises not without the cause, it is started with a big scandal involving Enron in 2001 and the recent one Wirecard. The company, which headquartered in United States went bankrupt due to the bad audit quality caused by lack independency provided by their auditors, Arthur Andersen's Public Accounting Firm. Enron has been using the services of auditor Arthur Andersen for 20 years, making the relationship between Enron and Arthur closer and closer to friends. As a result of this closeness, Arthur became reluctant and did not dare to reveal any misstatements in his financial statements. At that time, the role and quality of the auditor in auditing had become a subject of conversation and received a great deal of criticism, thus alerting the public to the use of financial statement audit services. Throughout the years, many changes of laws and regulations have been made by the regulators, nonetheless audit scandals are still happening to these days.

The particular problem that is going to be discussed in this research is regarding the influence of long audit tenure and audit rotation to the audit quality. Audit tenure, according to Johnson et al. (2002) and Myers et al. (2003), is the number of years an auditor is hired by a company. For the past few years, audit tenure has been a hot topic, particularly because there is a mandatory audit firm rotation that limits the number of years an audit firm can audit the same business. In the matter of audit tenure, it raises two main opinions regarding this, there are various researchers (Ghosh and Moon (2003); Jackson et al (2008)) who support that long audit tenure is positively influenced the audit quality, and there are some who against (Deis and Giroux (1992); Nasser et al., (2006)) the idea of it, they believe that long audit tenure is negatively influenced the audit quality. Mautz and Sharaf (1961) argues that longer auditor tenure may be associated with reduced vigilance through overfamiliarity with the client.

According to previous studies, auditors with a short tenure are correlated with lower earnings efficiency than auditors with a long audit tenure (Ghosh and Moon, 2003). There are few reasons that back this argument, the first one is that auditors who are engaged in a short audit tenure often didn't have the detail of client knowledge, lack of experiences and insights towards the firm they audited may restrict the auditor from conducting a high audit quality. This statement is supported by the research carried out by the Nyenrode Business Universiteit in the Netherlands, it is stated that short audit tenure reduces the probability of finding and correcting important errors (Buuren and Paape, 2012).

Based on the problems that have been discussed previously, audit tenure is an important issue in auditing fields that can influence auditor's independence in which can lead to the decreasing quality of an audit activities. Low audit quality not only can harm to the company being audited, but also impair the stakeholders' trust towards the audit firm who audit the company. The impact will be felt more by a small size audit firm, because if a big 4 accounting firms failed in doing their job, they have other resources that can retain them in the business. However, if a small size audit firm lose the trust of their client, it is less likely for them to survive in the business, since small size audit firm often rely on small number of clients also. Therefore, the research of this paper hopefully can solve the confusion regarding audit tenure, and provide an answer or suggestions to a small size audit firm in particular whether they should engage in a long audit tenure or not.

RESEARCH QUESTIONS

There are debatable opinions in regards to what influence the audit quality. The highlight of this research is about the influence of audit tenure which also brings other variable such as audit rotation into surfaces, with the audit quality. From the problems that have been stated, the research question is "What audit activities influence audit quality both positively and negatively?". It also came up with these three following sub questions:

1. How does the influence of long audit tenure to the audit quality?
2. How does the influence of audit rotation to the audit quality?

RESEARCH OBJECTIVES

The objective from this research is to provide empirical evidence regarding the influence of audit tenure and audit rotation to the audit quality in the case of Indonesian companies, so that audit firms can use the output of this research as a guideline for them in providing audit services, especially on regards of choosing a decision to engage in a long audit tenure or not.

THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

Healy and Lys (1986) stated that audit quality is the main indicator in auditor selection. This means that the quality of the auditor's services provided to clients is the main consideration in choosing an auditor. Client or a company in particular undoubtedly hoping for the best for their company, hence choosing an audit firm who has a track record of providing a good audit quality is the most basic thing that has to be fulfilled. Audit quality also has a variety of connotations depending on which point of view are using it, through the perspective of auditors or through the perspective of the users of the financial report. In terms of auditors, audit quality is the result of their work in accordance with established standards and professional code of ethics such as GAAP. Audit quality is expected to reduce the likelihood of dissatisfaction of information perceived by users and at the same time also maintain the auditor's reputation. Whereas, according to the users of financial report, the quality of an audit is determined by the auditor's ability to give an appropriate and responsible opinion as well as confirmation that there is no fraud or material misstatement. The level of the audit quality results heavily depends on the ability of the audit service provider to consistently meet client expectations. The audit quality is very critical since a high-quality audit would make the decision-making process easier.

The definition of audit quality is differed among various researcher. DeAngelo (1981) describes audit quality as the market-estimated joint likelihood of a given auditor detecting and reporting material misstatements in the company's financial statements. A closer examination of this description reveals two critical characteristics: the auditor's ability to identify any material misstatements in the financial report (auditor's competence) and auditor's willingness to report the errors to the client (auditor's independence). Watkins et al (2004) argues that audit activities should be conducted by a competent and independent auditor (Tandiontong, 2016). According to Arens et al. (2015), auditing must be performed by competent and independent individuals. Competent auditors are those that have an expertise in auditing fields, hence, have a thorough understanding of the auditing process. An independent auditor, on the other hand, is an auditor who, if a violation occurs, will objectively judge and willing to be independently report the violation to the principal or shareholders (Tandiontong, 2016).

The word "standard of assurance" is also used to describe audit quality (Palmrose, 1988). Since the aim of an audit is to provide assurance on financial statements, audit quality refers to the likelihood that financial statements will be free of material errors. In reality, the results of the audit, i.e., the reliability of audited financial statements, are used to reflect audit quality in this definition.

Audit quality consists of Actual Quality and Perceived Quality. Actual Quality is the level where the risk of reporting material misstatement in financial accounts is reduced, while Perceived Quality is how effectively users of financial statements believe that auditors have reduced material misstatement (Jackson et al., 2008). Concerning actual audit quality cannot be observed before or after an audit, a reliable proxy is required when examining the relationships between actual audit quality and other variables. There are two of the most common methods to measure audit quality, direct measure and indirect measure (Chadegani, 2011). Direct measures of audit quality examples are including the compliance of financial report to the accounting standard such as GAAP, perceived earnings quality and bankruptcy (Krisnan and Schauer, 2000). There was also previous researcher who use auditor's going concern opinion as a direct measure for audit quality (Geiger and Raghunandan, 2002). Due to the complexity of generalizing outcomes, low occurrence rates, and the confidential nature of data, direct measurements of audit quality have faced empirical challenges (Chadegani, 2011). Thus, the direct measure is less favorable to be used as the basis measurement for audit quality. Indirect measures of audit quality examples are including audit tenure, audit rotation, audit fee, audit size, and auditor's industry specialization. The first two examples are used as the basis measurement for audit quality in this research and act as an independent variable. Whereas audit size serves as the dependent variable. The choice of using audit size as the dependent variable of this research is due to the fact that audit size is the most common indirect measure used for audit quality. The theory first established by DeAngelo (1981), the size of an audit firm is a good measure of audit quality since larger firms have better resources, both in terms of human resources and equipment.

Following DeAngelo's research, many of other researcher have looked into the connection between auditor size and audit quality. Lawrence et al. (2011) conducted their research by dividing the auditor size into two criteria, namely between Big 4 (Deloitte, EY, KPMG, and PwC) and non-Big 4 audit firms, the result of this research suggest that the effect of audit size to the audit quality is significant (Lawrence et al., 2011). The main reason of classifying a good audit quality into the Big 4 audit firm is the same reason why they are called big 4, for a long time they have been the big player in audit service industry

The Influence of Audit Tenure to Audit Quality

The position of external auditors has been a source of contention since the revelation of auditors' participation in the controversy of corrupt accounting practices, especially in the manipulation of financial reporting such as Enron mega scandal in 2001. Client-public accountant relationships, also known as audit tenure, can influence their integrity and objectivity when analyzing financial statements.

Audit tenure is the length of the auditor's relationship with the client, as measured by the length of the financial report audited by the auditor (Johnson et al., 2002). Audit regulators and various researchers argue that audit tenure is one of the variables that influence the independency of an auditor which eventually also affect the audit's quality, and such effects can be described either positively or negatively (Liu, 2012). Regarding the impact of audit tenure on audit quality, there are two major opinions (Sengers, 2017). First, a longer partnership between the auditor and the client will lead to an informal relationship between them, and there is a chance that auditor will be more inclined to appease the client, ease his expectations, and work on behalf of the client. This will obstruct the audit's quality, which shows audit tenure is negatively impact the audit quality. Second, a longer auditor-client partnership would result in the client having a better understanding of the job and the auditor having a better understanding of the client's accounting processes. If an auditor's tenure increase, he or she will gain more client-specific experience, which will eventually improve audit quality. This is in accordance with SPAP (2001) which states that the acquisition of business knowledge required by the auditor is a continuous process and is cumulative in nature. Because of the learning process, the additional knowledge gained in the initial year can be more or less than in subsequent years. As a result, Tepalagul and Lin (2015) argues that audit tenure may have a negative or positive impact on audit results, depending on whether the auditor has a lower level of independence or a higher level of competence.

In Indonesia, regulations on the limitations of the period for the provision of audit services has been regulated since 2002 according to Minister of Finance Regulation Number 423 / KMK.06 / 2002. Then these regulations underwent changes in 2003 and 2008 in the Minister of Finance

Regulation No.17 / PMK.01 // 2008 concerning public accounting services. The ministerial regulation limits the auditor's tenure to a maximum of three consecutive years for the same client, while for the Public Accounting Firm or also known as KAP in Indonesia, a maximum of six consecutive years. This limitation is established to make the relationship between the auditor and the client is not too close so that it will not cause accounting scandals that will negatively affect the value of independency (Tuanakotta, 2011). This is in line with the research conducted by Knapp (1991), it shows that the length of the relationship between the client and the auditor can interfere with the independence and accuracy of auditors in carrying out auditing duties.

Since the regulations on audit tenure restrictions were enacted, audit tenure, or the auditor's length of relationship with their client, has reaped many pros and cons. The proponents claimed that the longer the audit tenure, the less independent and objective the auditors would be, particularly in light of the numerous financial scandals involving auditors and their clients such as Enron and Wirecard. This statement is supported by research conducted by Deis and Giroux (1992), whose research found that the longer the audit tenure, the lower the audit quality. The long relationship between the auditor and his client can potentially create closeness between them, sufficient to hinder the independence of the auditor so as to reduce the quality of the audit. According to Jackson et al. (2008), the likelihood of manipulating a financial statement rises as the auditor tenure increases. In addition, a long audit engagement period will give rise to the potential to build ties from an economic perspective, and the auditor will agree with the client's efforts to manipulate financial statements through accounting techniques (Nasser et al., 2006). The longer the relationship between the auditor and the client, the auditor will be less sensitive and fail to find new data and evidence needed to support the auditor's judgment (Fitriany et al., 2015). The ability to hold clients will be an incentive for auditors not to overly concern conflicts of interest with clients and tends to accommodate client desires with the aim of obtaining economic benefits in the form of not making clients move to other auditors. Therefore, with audit tenure limits in place, public trust in the auditor's audit opinion would be more confident as it is more likely to be independent in conveying audit findings.

On the contrary, those who are opposed to the audit tenure restriction argue that the audit standard will improve as the audit tenure lengthens. An auditor will better understand the business characteristics of his clients in line with the increase in the number of audit tenures performed. This statement is aligned with the research conducted by Ghosh and Moon (2004) which resulted in the finding that audit quality increases with the length of the audit tenure. Meanwhile, with a short audit tenure it is considered to be able to reduce audit quality because an auditor does not really understand the characteristics of his client's business so it is likely that the resulting audit quality is low.

A research by Carey and Simnett's (2006) states that the tenure between the auditor and the client can affect the quality of the resulting audit. A long audit tenure can create closeness between the auditor and the client. A longer working relationship between the auditor and the client may result in an informal relationship, and the auditor will be more likely to satisfy the client, lower his standards, and act on his behalf (Sengers, 2017). This assertion is backed by Deis and Giroux's (1992) study, which showed that the longer the audit tenure, the lower the audit quality. Thus, the proposed hypothesis:

H1: Audit tenure has a negative influence on the audit quality

The Influence of Audit Rotation to Audit Quality

Audit rotation or also known as auditor switching is a change of auditors who perform audit assignments in a company. Audit rotation can be done voluntary and mandatory. Voluntary auditor rotation are changes made not because of mandatory regulations, but voluntarily at the interest of management. Meanwhile, mandatory auditor rotation are changes made on the basis of the applicable mandatory regulations. This is done to maintain auditor independence and prevent any special relationships that occur between the company and the auditor. The government of Indonesia controls the requirement for audit rotation in the Regulation of the Minister of Finance of the Republic of Indonesia Number 17 / PMK.01 / 2008 on Public Accountant Services. Since a long auditor-client relationship can cause the auditor to develop unnecessarily near relationships, the duration of the engagement should be limited.

Research on the impact of audit firm rotation on audit quality reveals mixed findings, similar to the relationship between audit engagement tenure and audit quality. According to research supporting the auditor rotation, this regulation would prohibit the establishment of long-term partnerships between clients and auditors, which may compromise independence (Catanach and Walker, 1999). This is alluded to when calling for universal auditor rotation after a certain number of years in order to maximize the external auditor's independence. According to studies by Davis et al. (2000) and Carey and Simnett (20052), the consistency of audits decreases as auditor tenure increases. Fitriany et al. (2011), on the other hand, discovered that audit firm rotation had little impact on audit efficiency in the time following the implementation of audit firm rotation regulations. A report published by PwC (2013) stated that by impacting the competence metric, requiring companies to adjust their auditors may have a negative effect on audit results. Longer audit tenure is required, according to accountants, to develop client-specific expertise. Sengers (2017) argues that the risk of audit loss is greater in the first years of a new audit engagement because there is less client-specific expertise. As a result, including annual audit rotation could have the contrary and unintended consequence.

Mandatory rotation from the standpoint of agency philosophy, which explains the company's existence. This firm theory seeks to address concerns about the company's existence, the company's border with the market, the company's internal framework, and the heterogeneity of the company's behavior in terms of results (Kurniasih and Abdul, 2014). In order to increase the level of confidence of shareholders and users of financial reports, the company is trying to improve quality audited financial reports. Therefore, the company performs an audit partner rotation to gain the trust of users of financial statements. The findings of research conducted by Mgbame, et al (2012) show that there is a statistically significant relationship between mandatory rotation of public accounting firms and audit quality related to audited reports.

Research conducted by Siregar, et al. (2012) found evidence that prior to the existence of regulations regarding mandatory auditor rotation, audit partner rotation had a negative effect, but when there were regulations regarding audit firm rotation, it showed a positive effect. Research by Firth et al. (2012) show that mandatory audit partner rotation has a significant effect. This modern era has become a concern for the development of the public accounting business that pays attention to the independence and quality attitudes produced by an auditor from a public accounting firm. There is also another researcher who agrees with the application of rotation rules such as Gietzmann and Sen (2001) who found that although the mandatory accounting firm rotation rules have high costs, these rules increase auditor independence over the costs in the market relative to some large clients. So that legislators, regulators, and professional bodies have agreed with the mandatory rotation of auditors to maintain auditor independence. Thus, the proposed hypothesis:

H2: Audit rotation has a positive influence on the audit quality

RESEARCH METHODOLOGY

Research Design

This research uses explanatory study. Explanatory study is research that aims to analyze the relationship between one variable with other variables or how a variable affects other variables (Umar, 1999). This definition is in line with the purpose of this research which is to figure out the relationship between audit tenure and audit quality.

This research is conducted in quantitative approach as it will provide results that is more scientific, less biased, focused, repeatable, deals with larger sample, and most importantly it's useful for decision making (Kirk and Miller, 1986).

Data Collection Method

This research is conducted using a secondary data with a non-participant observation method which means that researcher did not directly into the field for collecting data. Instead, this research is using a data that can be accessed through a reliable website. The main source of data this research used is the data from IDX (Indonesia Stock Exchange) website that published information regarding public companies. Other source of data used in this research is from the company's website itself because some data on IDX are unavailable or uncomplete.

Population and Sample

This research is conducted using secondary data. The population used in this research is every Indonesian manufacturing company that are listed in Indonesian Stock Exchange (IDX) in the period 2018-2020 to make it easier in terms of data collection since IDX provide accessible information regarding the company's financial statement on their website.

The sampling method used in this research is purposive sampling. The number of samples that have to be collected is 30 at minimum to able to proceed using the logistic regression model. There are several requirements that has to be fulfilled by the listed manufacturing companies to be included in the sample:

- Published annual report from 2018-2020
- Disclosed audited financial statement from 2018-2020
- Provide sufficient data in regards with the research variables used for this research

The main reason this research uses financial report from period 2018-2020 is because this research wants to provide a result using the latest data, and the reason behind using financial report for the past three years is because this research wants to get a higher probability of a firm doing an audit rotation, because as previously mentioned, the mandatory audit rotation in Indonesia is every three years of audit tenure.

Data Analysis Method

This research is conducted using logistic regression model. Logistic regression model is a statistical model that used to explain the relationship between one dependent variable and one or more independent variables. In this case, audit quality is the dependent variable while audit tenure and audit rotation are the independent variables.

Audit quality as the dependent variable is measured using a dummy variable with the use of audit firm's size proxy, in this case the value is 1 if the company audited by big 4 audit firms and the value is 0 if it's not audited by the big 4 audit firms.

For the independent variables, audit tenure is measured by the number of years a company has a partnership with its auditor with the minimum value of 1 and maximum value of 4. Audit rotation, on the other hand, is measured using a variable dummy, the value is 1 if the company made an auditor change and the value is 0 if it doesn't do any changes. (Kurniasih and Rohman, 2014). The following logistic regression models are being used:

$$\text{Audit Quality} = \alpha + \beta_1 Tenure + \beta_2 Rotation + e$$

Where α = constant , e = residual error

The reason in choosing this regression model is because this model has been used several times in previous studies with similar topic (Liu, 2012; Hohenfels, 2016; Lim and Tan, 2010; Maharani, 2014; Hartadi, 2012). Considering this model has been used by previous researcher, author believe the accuracy of this model as the main calculation to conduct this research. As we know one of the hallmarks of scientific research is replicability which means that the more the same research conducted in the same method, the more reliable the research is.

RESULTS AND DISCUSSION

Sample Description

There are 153 samples used in this research selected by means of purposive sampling according to the requirements that must be met to become the research sample. The sample selection process based on the requirements can be seen in Table 4.1 on the appendices.

Regression Model Feasibility Test Analysis

The feasibility of the regression model was assessed using the Hosmer and Lomeshow's Goodness of Fit Test. If the value of Hosmer and Lomeshow's Goodness of Fit Test is the same as or less than 0.05, it means that there is a significant difference between the model and its observation value, thus, Goodness fit of the model is not good because the model cannot predict the value of the observation. Conversely, if the value is higher than 0.05, it means that the empirical data is the same as the model or the model is said to be fit (Ghozali, 2006). The results of the research using the SPSS obtained the following outputs:

Table 4.2

Hosmer and Lemeshow Test

Test	Chi-square	Df	Sig.
1	.057	2	.972

Source: secondary data processed using SPSS (2021)

Table 4.4 above shows the value of Hosmer and Lemeshow's Goodness of Fit Test is 0.057 and a significant of 0.972. The level of significance is greater than 0.05, therefore the model is able to predict the value of the observation or it can be said that the model is acceptable because it is in accordance with the observation data.

Overall Fit Model Test Analysis

The overall fit. model test is carried out by comparing the value between -2 Log Likelihood (-2LL) at the beginning (Block Number = 0), where the model only includes constants, with a value of -2 Log Likelihood (-2LL) at the end (Block Number = 1), where the model includes constants and independent variables. If the value -2LL Block Number = 0> the value -2LL Block Number = 1, this indicates a good regression model or in other words the hypothesized model is fit with the data (Ghozali, 2006). The results of the research using the SPSS obtained the following results:

Table 4.3

Overall Fit Model

Information	-2 Log Likelihood (-2LL)
Block Number = 0	199.854
Block Number = 1	192.783

Source: secondary data processed using SPSS (2021)

Table 4.4 shows that the initial -2LL value is 199.854 and the final -2LL value is 192.783. This shows that the initial -2LL value has decreased when compared to the final -2LL value of 7.071, which means that the addition of two independent variables into the regression model improves the fit model and shows a better regression model.

Negelkerke ($R^{2)}$ Test Analysis

The value of the coefficient of determination in the logistic regression model is indicated by the Negelkerke R^2 value. The test is conducted to assess how much the dependent variation (Audit Quality) can be explained by the variation of the independent variables (Audit Tenure and Audit Rotation). The results of the research using the SPSS obtained the following results:

Table 4.4

Nagelkerke (R^2) Test

Step	-2 Log Likelihood	Cox & Snell R^2	Nagelkerke R^2
1	192.783	0.045	0.062

Source: secondary data processed using SPSS (2021)

Table 4.5 shows the Cox and Snell's R value of 0.045 and the Negelkerke R2 value of 0.062. This result means that the variability of the dependent variable (Audit Quality) which can be explained by the variability of the independent variable (Audit Tenure and Audit Rotation) is 6.2%.

Classification Model

The classification table shows the predictive power of the regression model for predicting the likelihood of the dependent variable occurring. The results of the research using SPSS obtained the following results:

Table 4.5

Classification Table

Observed			Predicted		
			Audit Quality		Percentage Correct
			Audited by non Big-4	Audited by Big-4	
Step 1	Audit Quality	Audited by non Big-4	19	40	32.2
		Audited by Big-4	15	52	77.6
	Overall Percentage				56.3

Source: secondary data processed using SPSS (2021)

Table 4.6 shows the predictive power of the regression model to predict the probability of Audit Quality resulting from the company being audited by Big-4 audit firm is 77.6%. These results indicate that with the regression model used, there are 52 financial statements that are predicted to have a good audit quality produced by Big-4 audit firm from a total of 67 financial statements. The predictive power of the regression mode to predict the audit quality of companies produced by non-Big-4 audit firm is 32.3%, which means that with the regression model used there are 19 financial statements that do not produce good audit quality out of a total of 59 audited financial statements by non-Big-4 audit firm. Therefore, it can be concluded that the predictive power of the regression model is 56.3%.

Multicollinearity Test

A good regression model is regression with the absence of strong correlation among the independent variables. Multicollinearity test in logistic regression uses a correlation matrix between independent variables to see the magnitude of the correlation between independent variables. If the value of the correlation coefficient between the independent variables is less than 0.8, it means that there is no serious multicollinearity between the independent variables (Shrestha, 2020). The results of the research using SPSS obtained the following results:

Table 4.6

Correlation Matrix

		Constant	Audit Rotation	Audit Tenure
Step 1	Constant	1.000	-.909	-.328
	Audit Rotation	-.909	1.000	.212
	Audit Tenure	-.328	0.212	1.000

Source: secondary data processed using SPSS (2021)

Table 4.7 shows that there is no correlation coefficient between variables that is greater than 0.8. Thus, it can be concluded that there is no serious multicollinearity between these independent variables.

Logistic Regression Model

Hypothesis testing uses logistic regression model to test the influence of audit tenure and audit rotation to the audit quality. Logistic regression model is developed from variables in the equation table as shown below:

Table 4.8

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp (B)
Step 1	Audit Rotation	-.596	.257	5.361	1	.021	.551
	Audit Tenure	-.880	.563	2.443	1	.118	.415
	Constant	.446	.438	1.036	1	.309	1.562

Source: secondary data processed using SPSS (2021)

Based on the Table 4.8 above, it shows the logistic regression model equation in this research as follow:

$$\text{Audit Quality} = 0.446 - 0.596AT - 0.880AR + e$$

The significance level of each independent variable is determined by using a p-value or also known as probability value with a significance level of 5% (0.05). The hypothesis is accepted if the significance level is less than 0.05; if the significance level is greater than 0.05, the hypothesis is rejected (Greenland et al., 2016).

Research Discussion

Audit Tenure has a Negative Effect on Audit Quality

The audit tenure variable shows a negative regression coefficient of 0.596 with a significance level of 0.021, which is lower than the p-value value of 5% (0.05), then these results indicate that the hypothesis (H_1) can be accepted, meaning that a longer audit tenure is indeed negatively influence the audit quality. This result is supporting studies conducted by previous researcher, namely Sengers (2017) which stated that a lengthier working connection between the auditor and the client will result in an informal relationship, and the auditor may be more motivated to please the client, lower his expectations, and work on his behalf. This will compromise the audit's quality, demonstrating that audit tenure has a detrimental impact on audit quality. Deis and Giroux (1992) on their research, resulted that the longer the audit duration, the lower the audit quality. The auditor's long association with his client has the potential to generate closeness between them, obstructing the auditor's independence and lowering the audit's quality. Throughout this research, it is found that at most of the case, a big 4 audit firm which also indicate as a good audit quality, doesn't have a long audit tenure, and often to only have a 1-year partnership between their auditor and client. On the other hand, a non-big 4 audit firm often engage in a long audit tenure, one auditor can have a partnership with one particular client until 3 years. This is also indicating that a good audit quality could be attained by not having a long audit tenure. Auditors' independent judgment may be harmed by the established connection produced by auditor reappointment to audit the same client, which may increase client involvement in related party transactions (Rahmat and Ali, 2016).

Audit Rotation has no effect on audit quality

The second hypothesis (H2) proposed in this study is the audit rotation has a positive influence on the audit quality. The results showed that the beta coefficient of the audit rotation variable is negative 0.880 and a significant level of 0.118 which is more than 0.05. Therefore, the second hypothesis (H_2) cannot be accepted, meaning that audit rotation has no influence on audit quality. This result is consistent with the results of research conducted by Fitriany et al. (2011) who argue that audit firm rotation had little impact on audit quality in the time following the establishment of mandatory audit firm rotation regulations. Giri (2010) states that mandatory auditor rotation provisions should not be required in Indonesia, because they do not have an impact on audit procedures or audit quality. Based on this result, it is best to not implementing a mandatory audit rotation, because not only it has no effect on audit quality, the implementation of mandatory audit firm means that an audit firm have to learn about new company every once in a period, which is not effective both in terms of time and money.

CONCLUSION

This research aims to help a small size audit firm to decide whether they should engage in a long audit tenure or not by determining the effect of independent variables, namely audit tenure and audit rotation, on the dependent variable, namely audit quality. A small size audit firm needs to have a good reputation in order to have a lot of clients. The most important thing to be able to have a good reputation is to provide a good audit quality service to the existing client, therefore many future clients is lining up to receive the services provided by the audit firm. There are several measures that could influence the audit quality such as audit tenure, audit firm size, audit fees, audit opinion, and audit rotation. In this research, the focus is on the influence of audit tenure and audit rotation because of the contradictive opinions provided by the previous researcher (Sengers, 2017; Catanach and Walker, 1999; Fitriany et al., 2015).

Based on the data analysis and discussion of the formulated and tested hypotheses that have been explained in the previous chapter, it can be concluded that the effect of audit tenure and audit rotation on audit quality are as follows:

1. Based on the results of the analysis, it shows that audit tenure has a negative influence towards audit quality. The result also accepts the proposed hypotheses of this research. The main reason of this negative influence is because the longer the partnership between an auditor with a client could increase the likelihood of an unnecessary close relationship between them which may results in auditor's willingness to be more favorable to the management and provide an audit service in accordance to the client's desire instead of giving an independent audit service.
2. Based on the results of the analysis, it shows that audit rotation has no significant influence on audit quality. This result conclude that the proposed hypotheses cannot be accepted. In the years following the establishment of mandatory audit firm rotation rules, there was no effect on audit results. Mandatory audit rotation requirements should not be implemented in Indonesia because they have no bearing on audit procedures or results.

LIMITATION AND RECOMMENDATION

The specific issue addressed in this study is the impact of audit tenure and audit rotation on audit quality. According to Myers et al. (2003), audit period refers to the number of years an auditor is employed by a company. When it comes to audit tenure, there are two key points of view: those who believe that a long audit tenure has a positive impact on audit quality (Ghosh and Moon, 2004), and those who believe that a short audit tenure has a negative impact on audit quality (Nasser et al., 2006).

This research is hoping to answer the confusion going on in a small size audit firm whether they have to engage in a long audit tenure or short audit tenure to maximize their likelihood in giving a good audit quality. The small size audit firm that could be benefited from the result of this research is an Indonesian small size audit firm who is also rely on small number of clients, especially the one that have been just established. Based on the result of this research, it is better for a small size audit firm to engage their auditor in a short audit tenure since there is a negative effect of a long audit tenure to audit quality. A longer audit tenure could increase the chance of an auditor might provide a bad audit quality, which eventually also destroy the audit firm's reputation. Therefore, it is best to always change auditor each year while handling a client.

A short audit tenure is also having its own problem, mainly an auditor could lack of company's knowledge when conducting an audit activity to a new client. Therefore, the author of this research would like to suggest a small size audit firm to only focus giving their audit services on one particular industry, for example only to manufacturing company. With this strategy, they will gain a specialization. In order to achieve auditor specialization in one industry, the author of this research would suggest a small size audit firm to hire or to have a partnership with an auditor who has many years of experience working on a specialist audit firm. Auditor specialization has a substantial beneficial impact on audit quality; when a company hires an audit firm that specializes in a specific area, the audit quality will improve (Murtadho, 2017). If an audit firm only focus on a particular industry, even though there is a change of auditor to handle a new client, they could still manage to provide a good audit quality despite their lack of knowledge about the company, since the company still engage in the same industry where the audit firm is specialized.

Based on the result of this research regarding audit rotation, author of this research would also recommend the Indonesian audit authorities or The Ministry of Finance as the regulator body, to remove the rules regarding mandatory audit firm rotation because it has no significant effect to audit quality. One thing to be noted in relation to the small size audit firm is they have to seek for another client once their partnership period with the previous client is over, this will be detrimental to the financial condition of a small size audit firm.

Author of this research is aware that there are some limitations of this research, those limitations are including:

1. This research is only using two independent variables, namely audit tenure and audit rotation with one dependent variable, namely audit quality. There are certainly not only two variables that could influence the audit quality.
2. The sample used in this research is only from the manufacturing companies that are listed on IDX, and the observation period is only three years which relatively small. Hence, it doesn't represent all cases.
3. The audit quality variable is only proxied using a variable dummy with the option of either audited by big-4 audit firm or non-big-4 audit firm.

Based on the above limitations, the author of this research would like to advice for further research to do the following things:

1. Add more independent variables such as audit fees, audit firm size, auditor opinion going concern, and etc.
2. Adding the number of years used as the research sample to be more accurate.
3. Expanding the research sample by testing not only manufacturing companies but also other companies that are listed on IDX, hence the result will be more variative.
4. Adding the proxies used for the audit quality variable such as accrual discretionary models.

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