

Effects Of Moderating Variables On Audit Tenure And Audit Quality

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Abstract: A problem of public accountant profession is that public accountant profession is perceived to fail in conducting its role as independent auditor, after the disclosure of several scandals such as the case of Enron Corporation, WorldCom, Kanebo Limited, Waste Management.Inc, Saytam Computer Service, and PT. Telkom, involving a number of public accountants, even The big-five accounting firm. This study aims to (1) predict that the shorter period of audit tenure, the more it positively affects quality of audit result; (2) predict that the larger Public Accountant Firm, the more audit tenure positively affects audit quality with the shorter period of audit tenure, the better audit quality; (3) to predict that the greater fee audit received by auditor, the more audit tenure negatively affects audit quality with shorter period of audit tenure, the less qualified audit result will be. Data used are audited financial report of manufacturing company that is listed in Indonesian Stock Exchange (IDX) during period of 2009-2014. Testing is conducted with multiple linear regression. From the result of statistic testing, it is proven that: (1) Short Audit Tenure (3 years) has positive and is significant towards audit quality. It means that short period of audit tenure can give qualified audit result; (2) contingency effect of APF scale (big four APF) with short audit tenure affects positively and is significant towards audit quality. Meanwhile, the size of APF (Non big four APF) on Audit Tenure affects negatively and is significant towards audit quality; (3) Contingency effect of fee audit on Audit Tenure affects negatively and is significant towards audit quality.

Index Terms: Audit quality, Audit Tenure, APF scale, Fee audit.

1 INTRODUCTION

Profession of public accountant is a community trusted profession. To be able to run its function and duty well, an auditor must be able to produce qualified audit. Therefore, Public Accountant profession has a great role in supporting the realization of economy that is healthy, efficient, and transparent. The disclosure of financial scandal has created skepticism of community relating to the inability public accountant profession in keeping its independency. Community attention is led to auditor behavior in facing a client that is perceived to fail in conducting its role as independent auditor. Independent auditor in conducting function and duty of profession, auditor will always face audit conflict (Tsui, 1996) when auditor finding result is not in line with expectation of client. Audit conflict will grow to be a dilemma when auditor is required to make decision that contradicts with his/her independency and integrity with economic reward that might occur (Tsui and Gul, 1996). Auditor independency is the main key of audit profession, including evaluating equity of financial report. If auditor fulfills client's demand, it means that he/she breaks the standard of inspection, and it can affect audit quality. Audit result can be said qualified when it fulfill auditing provision or standard (Watkins *et al.* 2004). An interesting issue in fraud of financial report is the involvement of public accountant, even involves the role of auditor Arthur Andersen who is an owner of the big-five public accounting firm (Choi *et al.*, 2010). In investigatin scale of APF, many previous studies found difference of audit quality between large APF and small APF, but there were some studies that did not support difference of audit quality, for example, DeAngelo (1981), Davidson and Neu (1993), Dye (1993), Becker *et al.* (1998), and Lennox (1999) in Kusharyanti (2003) that found positive relationship between scale of APF and audit quality. Large APFs produce higher audit quality because they have more sources. Moreover, large APFs have had wide client network so that they do not depend on clients (DeAngelo (1981). The world financial scandal cases are shown on Table 1.

Table 1.

World Financial Scandal Cases

No	Name of Firm	Fraud Case Charge
1	Enron Corporation	Boosting profit and hiding debt more than US\$1 billion by using a company outside of accounting.
2	WorldCom	Cash flow is boosted up to US\$3.8 billions by noting operating expenses and capital expenses.
3	Kanebo Limited	Inflating profit as much as US\$2 billions for 5-year period.
4	Waste Management, Inc	Profit is creasing as much as US\$17 billions by adding period of depreciation for fixed assets in 2002.
5	Satyam Computer Services	Inflating cash and bank balance more than US\$1 billions, overstated debtor position as much as US\$100 billions and understated liability as much as US\$250 millions.

Source: <http://bizcovering.com/history/10-major-accounting-scandals/>

Meanwhile, in Indonesia, similar cases also occur. One of them is an audit case of PT Telkom by APF "Eddy Pianto & Rekan" (Media Akuntansi, 2003). In this case, the audited financial report owned by PT Telkom is not recognized by SEC (authority of stock exchange in USA), and because of that event, re-audit is done by other APFs. Other interesting case is the involvement of 10 APFs conducting audit towards operation of congealed bank and business activity of congealed bank (Baidaie, 2000). Even in this case, larger APFs such as "Hans Tuannakotta & Mustofa", "Prasetio Utomo & Rekan", "Johan Malonda & Rekan" as well as "Hendra Winata & Rekan" are mentioned involved (Media Akuntansi, 2002). One factor of audit failure is audit tenure that is short and too long (Wooten, 2003). When tenure is short, auditor have not obtained understanding and known client's business environment so that there is a possibility that auditor has difficulty in detecting misstatement. Contrarily, longer tenure makes auditor comfortable with the client. The relationship of long masa kerja and client has potential to make auditor satisfy towards his/her job, conduct less firm audit procedure, and too much depend on management

statement (Deis and Giroux, 1992). Study done by Ghosh and Moon (2003) resulted a finding that audit quality is increasing along with longer audit tenure. Meanwhile, studi of Mai et al. (2008) found that the longer audit tenure, the lower its audit quality. Other factor that is also important in affecting auditor independency is fee audit. Fee audit is scale received by the auditor in conducting his/her duty. This besaran fee sometimes make an auditor in dilemmatic position, on one side auditor must be independent in giving opinion on financial report equity relating to the interest of many parties, however, on the other side, auditor also has to fulfill the requirement wanted by by a client paying fee for his/her service, in order to satisfy the client with his/her work and to keep using the service in the future (Ng dan Tan 2003). Competition among PAFs enables them to offer lower price. With this lower fee, PAF has tendency to cutdown several job vacancies, for example by not conducting certain auditing procedure. Empirically fee audit has proven that that variable very affects audit quality. Several study results found the existence of relationship between audit quality and audit service fee, for example a study conducted by Abdul et al. (2006) and Dhaliwal et al. (2008) that found a proof that fee audit significantly affects audit quality. Problems of audit quality become global issues, for instance International Forum of Independent Audit Regulators (IFIAR). IFIAR is an international organization from regulators of Public Accountant and Public Accountant Firm assistance and supervisor that are independent towards profession. Regulators attending are led by executive chairmen from institutions that have the authority in assisting and supervising Public Accountant and Public Accountant Firm, while audit firms who attend are chairmen of Price Waterhouse Coopers, Ernst & Young, Deloitte from each country of ASEAN. Moreover, there is observer from Global Public Policy Committee-Regulatory Working Group (GPPC-RWG) that is a group of six leaders of global audit firms. In this meeting, the main issue is about Audit Quality Indicators that is an instrument to evaluate a qualified audit. This study analyzes the Effect of Contingency on Audit Tenure and Audit Quality. The problem investigated can be formulated as the: (a) does audit tenure affect audit quality? (b) does audit tenure have effect on audit quality through the size of public account firm as moderating variable? (c) does audit tenure have effect on audit quality through the amount of fee audit as moderating variable? The objective of study is to examine contingency effect (the size of PAF or fee audit) on audit tenure as well as its implication with audit quality. This study is addressed to give advantage to various parties, among others, companies, academicians, government, and community about contingency effect (the size of PAF or fee audit) on audit tenure as well as its implication with audit quality.

2 THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

2.1. Audit in Agency Theory

Agency theory is a theory that gives explanation on the relationship between principal and agent. Agency relationship is known as a contract where a party as principal bonding another party as agent to conduct a job for principal's importance, that is followed by delegation of decision making authority by principal to agent (Jensen dan Meckling, 1976). Conflict of interest between principal and agent will be

minimalized by conducting a supervisory mechanism that can limit the opportunity of agent to do opportunistic behavior. Audit is one form of supervising done in minimalizing agency conflict conducted by management as a mean to do beneficial action for themselves or group (Jensen and Meckling, 1976, and Watts and Zimmerman, 1983). Audit done by independent party enables to verify numbers in financial report made by management in order to be spared from misleading financial information.

2.2. Audit Quality

Audit quality is a component of auditor independency that really has to be maintained by professional public accountant. Independency, in this matter, means that public accountant prioritizes more on public benefit over management benefit or auditor herself/hiself in making audited report. DeAngelo (1981), use public accountant firm size approach as a benchmark of audit quality, while Bedard and Michelene (1993), use outcome oriented approach and process oriented approach as a benchmark of audit quality. Based on the explanation of the approach, process oriented approach is more capable to give illustration on how auditor conduct his/her job for producing an audit quality that can be measured. Li (2004), shows a measure used in process oriented approach which is submission of auditor to Public Accountant Professional Standard (PAPS). Coram *et al.* (2008) defined that audit quality is how much the possibility of an auditor in finding the existence of unintentional/intentional error from corporate financial report, and how much the possibility of the finding to be reported and listed in his/her audit opinion. Coram *et al.* (2008) also claimed that the low accounting information quality usually causes a serious economic consequence, and what is worse, it will generate greater management fraud in the future. In this matter, it is described how important the role of qualified audit is in reducing fraud. Theoretically, high quality of audit must be able to control the possibility of fraud to appear, and otherwise. Meanwhile, Silver *et al.* (2008) stated that it is necessary to be more emphasized on the responsibility of audit committee for conducting prevention, detection, and correction towards the emergence of fraud, when the responsibility of the audit committee runs well, then, it likely will help to maintain external audit quality in the future.

2.3. Audit Tenure

Audit tenure is the period of employment from Public Accountant Firm (PAF) in giving audit service to their clients. Regulatory agencies in some countries have issued regulations to set employment period of auditor in auditing an entity or a client. The government of Indonesia Republic has published regulation on audit tenure that has been explained in The Decree of Financial Ministry of Indonesia Republic No. 359/KMK.06/2003 article 2 about "Public Accountant Service". The regulation is a changing on The Decree on Financial Ministri Number 423/KMK.06/2002 that giving general audit service on financial report of an entity done by PAF in 5 (five) years of accounting in a row and by a public accountant who has been working for 3 (three) years of accounting in a row. The regulation is then renewed by issuing The Regulation of Financial Ministry of Indonesian Republic Number 17/PMK.01/2008 about "Public Accountant Service" article 3. The regulation regulates that giving general audit service on

financial report from an entity done by PAF, the longest is for consecutive 6 (six) years of accounting and by a public accountant, the longest is for consecutive 3 (three) years of accounting. Accountant public and accountant by a public accountant are allowed to receive tenure again after one year of accounting and do not give audit service to the client above.

2.4. The Scale of Public Accountant Firm (PAF)

The size of audit firm according to Deis and Giroux (1992) is measured from the number of clients and percentage of audit fee in its effort to keep its clients from not moving to other PAFs. Meanwhile, Guy *et al.* (2002) clarified that PAF based on its operation area is divided into: International PAF, National PAF, Regional PAF, and local PAF. Several studies using the size of Public Accountant Firm are based on the reputation of PAF that is categorized as the following (1) Big-four PAF, and (2) Non Big-four PAF. The business form of PAF in Indonesian law is divided into 2 forms, which are (1) PAF in the form of private business, and (2) PAF in the form of cooperation business with partner. Sekar (2002) stated that studies on PAF in Indonesia often use the terms of affiliating and non-affiliating with foreign accountant firm, it is also claimed that investor perceives auditor who affiliates with foreign accountant has high quality because the auditor has characteristic that can be related to quality. It is supported by the study of Goetz, *et al.* (1991) that quality of auditor is increased along with the size of PAF.

2.5. Fee Audit

Fee audit is the amount of audit service received by auditor with consideration of assignment risks and various complexity of service given, level of skills needed to conduct the service. Indonesian Accountant Ethical Code (SPAP, 2011), has organized that professional service reward is not allowed to depend on result or finding on the implementation of service, however, several study results found the existence of relationship between audit quality and the scale of audit service fee. Simunic (1980) argued that audit fee is determined by how big or small the company being audited is, audit risk, and audit complexity. The study result from Simunic (1980) found that market generally is competitive. Big 5 PAFs charge lower fee compared to small audit firm (it is consistent with economic scale of big firm). Meanwhile, DeAngelo (1981) argued that audit fee is income that its number is varied depending on several factors in audit assignment such as the size of client's company, audit service complexity faced by auditor, audit risk taken by auditor from client as well as the name of Public Accountant Firm conducting audit service. On the other side, Simon *et al.* (1986) conducting study in India and Hongkong found the result that there is a significant relationship between the size of company and audit fee.

2.6. The Effect of Audit Tenure on Audit Quality

Audit tenure is the duration of the auditor consecutively having conducted audit work in a company. The study result of Davis *et al.* (2009) found that long audit tenure can decrease audit quality in the form of audit report because the long relationship between auditor and client may lower the level of auditor independency. Otherwise, several researchers found that long audit tenure (above 9 years) will increase auditor competence to conduct audit process, so it can reduce the ability of management to conduct accrual-based management earnings

(Gul *et al.* 2009). The study result of Johnson *et al.* (2002) found the evidence that short audit tenure (2-3 years) has higher unexpected accrual level compared to middle tenure, but they did not find any evidence that middle-term audit tenure (4-8 years) has lower unexpected accrual compared to long audit tenure (more than 9 years). Study result from Johnson *et al.* (2002) did not find any evidence that longer audit tenure will reduce the quality of financial reporting. Meanwhile, the study result of Mansi *et al.* (2004) found evidence that longer audit tenure will reduce conservatism in financial reporting. The other evidence found by Mansi *et al.* (2004) is that the longer audit tenure, the greater cost of debt will be borne by the company. Several newest research results mostly stating that audit tenure that has contradictive result, among others is Ghosh and Moon (2003) resulted finding that audit quality is increasing along with longer audit tenure. However, it contradicts with the study of Mai *et al.* (2008) finding evidence that the longer audit tenure, the lower its audit quality. Study conducted by Fargher *et al.* (2008) found evidence that in early years of new audit tenure period (tenure period), quality of accountancy policy is decreasing, however, when rotation occurs, quality of accountancy policy is increasing in the beginning of the year. Carcello and Nagy (2004) actually found evidence that audit fraud will be found more in short audit tenure when it is compared to long audit tenure. Myers *et al.* (2003) also found evidence that earnings quality will increase when audit tenure is longer. Based on the above explanation and the prior studies, then, hypothesis can be formulated as the following:

H₁: Audit tenure affects positively on audit quality

The above hypothesis predicts that shorter audit tenure more positively affects qualified audit result.

2.7. The effect of Audit Tenure on Audit Quality through the Scale of PAF as Moderating Variable

Proliferation of financial scandals involving the role of auditor Arthur Andersen is one of the biggest public accountant firm, The Big Four. Various cases of financial scandals both outside the country and in the country generate questions about audit quality produced by Big Four PAF and non-Big Four PAF in auditing client's financial reports. In Enron's case, public accountant firm "Arthur Andersen" was noted having a relationship with a company for almost 20 years. PAF, as big as Arthur Andersen that had the relationship with the company for 20 years, was not able to take problems in Enron's organization. Enron's case shows that auditor does not have independency in conducting his/her task, that at last, causes the auditor to lost objectivity in his/her job. The study result of Hakim and Omri (2010) found evidence that audited result from non-big four PAF has greater bid-asp spread compared to big four PAF. It shows evidence that reputation of PAF really determines the level of information asymmetry in audited financial report. Law (2008) found evidence that Big Four PAF is more independent than non-Big Four PAF. If it is analyzed that big four PAF has more reputation compared to non-Big Four, then it can be said that auditor reputation affects audit quality. Meanwhile, Nieschwietz and Woolley (2009) found evidence that perception of investor on quality of big four PAF way higher than non-big four PAF. Francis and Yu (2009) found evidence that big four PAF more likely tends issue going concern opinion compared to non-big four PAF. In study of Francis and Yu (2009), it used proxy of going concern opinion

as the measure of audit quality. Meanwhile, Boon *et al.* (2008) conducted study about attributes of audit quality. The study result of Boon *et al.* (2008) found evidence that the most important attributes in evaluating audit quality are skill, experience, technical competence, quality, ethical standard, and due care, while in professionalism attributes and size of audit firm are found not significant. Based on the above explanation and prior studies, the hypothesis can be formulated as the following:

H₂: The size of PAF has important role in affecting Audit tenure towards audit quality.

The hypothesis above predicts that the larger Public Accountant Firm, the more positively affects audit tenure towards audit quality, as well as, the shorter audit tenure is, the better audit quality will be.

2.8. The Effect of Audit Tenure on Audit Quality through Fee Audit as Moderating Variable

Audit is one form of supervision in minimalizing conflict between principle and agent. To minimize contradicting interest, public accountant is expected to produce qualified audited report that can be used by all parties. Fee problem is a dilemmatic problem because auditor receives fee from the company (client) that being audited. Where on one side, auditor must be independent to give opinion, but on the other side, auditor also receives reward from the client over the job that has been done. The study result of Jong-Hag, *et al.* (2010), found that great fee audit can make auditor to agree on pressure from the client, and it affects audit quality that is resulted. Study result of Abdul *et al.* (2006) found evidence that fee audit significantly affects audit quality. Study result of Abdul *et al.* (2006) is in line with study result of Dhaliwal *et al.* (2008) found evidence that fee audit significantly affects audit quality. Meanwhile, Hoitash *et al.* (2007) found evidence that when auditor negotiating with management about the amount of fee must be paid by management towards job result of audited report, reciprocal concessions that will reduce quality of audited report, most likely occur. Carrera *et al.* (2007) found evidence that most negotiations of auditor-client really affect quality of audited report. It means that indirectly unethical actions from negotiation process will reduce audit quality in making opinion on client's financial report. Gul *et al.* (2007) found evidence that the decreased amount of higher audit fee is probably caused by financial report bias for company with long audit rotation. This result is consistent with a view that longer audit rotation facilitates higher audit quality so that auditor gets deep knowledge about business operation, process, and corporate system of auditee. The study result also found evidence that long appointment of auditor gives more effective supervision. On the other side, higher amount of fee non-audit charged by auditor with shorter audit tenure can show that effectiveness of auditor supervision is reduced to please their client's company. Based on the explanation and study result before, the next hypothesis can be formulated as the following:

H₃: Fee audit has an important role in affecting audit tenure towards audit quality.

Hypothesis above predicts that the greater fee audit received by auditor, the more negatively affects audit tenure towards audit quality with shorter audit tenure so that audit result is more unqualified..

3 RESEARCH METHOD

3.1. Population and Sample

Population and sample in this study are manufacturing companies that are listed in Indonesian Stock Exchange (IDX) during period of 2012 - 2017. Base of sample selecting determination is sample that fulfills data completion. Sampling method used is purposive sampling. Purposive sampling method is a sampling method based on study objective. Requirement of sample used in this study is sample that presents complete information in the form of financial report and name of PAF auditing the company of auditee in period of t-1.

Table 2.
Sample Selection (Sampling)

Criteria	Total
Manufacturing companies listed in Indonesian Stock Exchange in period of 2012-2017	146 (584)
Manufacturing companies presenting incomplete audited financial report information	94 (376)
Total of all sample (manufacturing companies audited by Non-Big Four PAF and Big Four PAF)	52 (208)
Manufacturing companies audited by Non-Big Four PAF	31
Manufacturing companies audited by Big Four PAF	21

3.2. Research Variable and Definition of Operational Variable

3.2.1. Dependent Variable

Audit quality is as the possibility that auditor will find and report violation in accounting system of the client (Deis dan Giroux, 1992). Audit quality is measured by using total accrual. The use of total accrual as proxy of audit quality is also done by Chih- Ying *et al.* (2008), Hoitash *et al.* (2007), and Jackson *et al.* (2008) as the following:

$$TAt = \Delta CA_t - \Delta Casht - \Delta CL_t + \Delta DCL_t - DEPt$$

Information:

ΔCA_t : is the changing of current assets year t;

$\Delta casht$: is the cash changing and cash equivalent year t

ΔCL_t : is the changing of current liabilities year t

ΔDCL_t : is the changing of debt including hutang lancar year t

$DEPt$: is beban depreciation and amortization year t

3.2.2. Independent Variable: Audit Tenure

Audit tenure is the period of employment from PAF in giving audit service for auditee's company. In this study, audit tenure is duration of auditor from PAF that is similar, used consecutively more than 3 years by auditee's company. The measure of Audit Tenure uses interval measure scale. If employment period from PAF is used consecutively more than 3 years, its score is (3); if employment period from PAF is used consecutively no longer than 2 years, its score is (2); if employment periode from PAF is used consecutively no longer than a year, its score is (1).

3.2.3. Moderating Variable: The size of PAF

The size of PAF in this study is PAF affiliating with the Big Four and PAF that does not affiliate with the Big Four. The size of PAF uses dummy variable. If a company is audited by a Big Four PAF, it is given score 1. Meanwhile, if a company

is audited by a non Big Four PAF, it is given score 0. As for auditors including in the group of Big Four are (a) Deloitte Touche Tohmatsu (DTT) affiliating with Osman, Ramli, Satrio and partners, (b) Ernst & Young (EY) affiliating with Sarwoko, Purwanto, and Sandjaja, (c) Klynveld Peat Marwick Goerdeler (KPMG) affiliating with Siddharta dan Widjaja, and (d) Price water house Coopers (PWC) affiliating with Haryanto Sahari and partners.

3.2.4. Moderating Variable

Fee audit is the amount of fee received by auditor with the consideration of tenure risk and various service complexities given, level of skill needed for conducting the service. Fee audit in this study is measured by proxy of auditee's company size as conducted by Simunic (1980), DeAngelo (1981), and Simon et al. (1986). The size of auditee's company in this study uses the number of assests owned by the company based on annual report.

3.3. Linear Regression Model and Hypothesis Testing

To investigate the effect of contingency of Public Accountant Firm Size (UBK) and Audit Fee (AF) on the relationship between Audit Tenure (AT) and Audit Quality (KA). The model of hypotheses 2 and 3 testing shows the relationship between the changing of AT towards the changing of KA (effect ∂AT on ∂KA). Derivate result of AT and KA relationship is the function of $AT/KA = f(UBK, AF)$ or in other words, variable UBK and AF moderate the relationship between AT towards KA. The analysis instrument used to test the hypothesis is model of multiple regression model. Multiple regression model can explain and relate one dependent variable to several independent variables. This study uses linear regression model as the following:

$$KA = b_0 + b_1AT + b_2UBK + b_3FA + b_4AT * UBK + b_5AT * AF + e$$

3.3.1. Hypothesis 1 Testing Model

To test the first hypothesis (H1) in order to see the effect of Audit Tenure towards audit quality, analysis of linear regression will done with the model as the following:

$$KA = b_0 + b_1AT + e$$

3.3.2. Hypothesis 2 Testing Model

$$KA = b_0 + b_1AT + b_2(1) + b_3AT * UBK + e = (b_0 + b_2) + b_1AT + b_3AT * UBK$$

To test the second hypothesis (H2) in order to see the contingency effect of PAF size towards Audit Tenure and audit quality, multiple linear regression will be done with the model as the following:

$$KA = b_0 + b_1AT + b_2UBK + b_3AT * UBK + e$$

UBK = Big Four PAF, it will be given score 1

$$KA = b_0 + b_1AT + b_2(0) + b_3AT * UBK + e = b_0 + b_1AT + b_3AT * UBK$$

UBK = Non Big Four PAF, it will be given score 0

3.3.3. Hypothesis 3 Testing Model

To test the third hypothesis (H3) in order to see the contingency effect of audit fee (the amount of auditor service) towards audit tenure and audit quality, multiple linear regression analysis will be done with the model as the following:

$$KA = b_0 + b_1AT + b_2AF + b_3AT * AF + e$$

4 CITATIONS

Descriptive Statistic Analysis

This analysis is used to give description on variables of study (Audit Quality, Audit Tenure, PAF Size, and Fee Audit) as seen on Table 3.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Audit Quality	208	.64	7.38	.82881	.77786
Audit Tenure	208	.00	1.10	.65951	.45775
Size of PAF	208	0	1	.543	.496
Fee Audit	208	.30	7.40	.98144	.88879
Valid N (listwise)	208				

Table 3. Descriptive Statistical Analysis

Based on Table 3 above, it seems that audit quality poxied by total accrual has the average of 0.82881 with deviation standard of 0.77786. Meanwhile, audit tenure has the average of 0.65951 with deviation standard of 0.45775, while the size of PAF has the average of 0.543 with deviation standard of 0.496, and fee audit has the average of 0.98144 with deviation standard of 0.88879. The testing result on classical assumption of each variable can be concluded that normality test with Smirnov-Kolmogorov test on residual value of regression model shows that the result scores of audit quality and fee audit are 0.062 and 0.126. Multicollinearity testing is done by looking at the value of Variance Inflation Factor (VIF) on each variable that less than 10 and tolerance value more than 0.10, so it can be concluded that there is no multicollinearity among independent variables in regression model. Heteroscedasticity is tested with scatter plot graphic among dependent variable scores (ZPRED) with their residual scores (SRESID). Decision taken if clear pattern and spots that are scattered above and below 0 on axis Y do not occur, is that heteroscedasticity does not occur. Meanwhile, autocorrelation testing done with Durbin-Watson test (DW-test) obtain that score of Durbin-Watson is 1.463, DW score = 1.463, less than dl and du (1.463 < 1.738 < 1.779). Therefore, each variable has fulfilled classical assumption consisting of normality, multicollinearity, heteroscedasticity, and autocorrelation tests.

4.2. Multiple Linear Regression Model and Hypothesis Testing

4.2.1. Multiple Linear Regression Model

From the analysis result of multiple linear regression model (Table 4), the equation obtained is as the following:

$$KA = 0.078 + b_1 0.264 - b_2 0.148 + b_3 0.964 + b_4 0.130$$

Table 4. Multiple Linear Regression Model

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		

1	(Constant)	.078	.057		1.364	.174
	Audit Tenure	.264	.069	.155	3.833	.000
	The size of PAF	-.148	.055	-.095	-2.720	.007
	Fee Audit	.964	.044	1.101	22.097	.000
	Contingency Effect of AT*UBK	.130	.060	.074	2.159	.032
	Contingency Effect of AT*FA	-.297	.050	-.336	-5.899	.000

a. Dependent Variable: Audit Quality

4.2.2. Hypothesis Testing

Based on Table 4 above, multiple linear regression model obtains that regression coefficient score of Audit Tenure variable on audit quality is 0.078 with positive direction. The testing result of Audit Tenure effect on audit quality shows that calculated t score is 3.833 with significance of 0.000. The significance score of the testing is less than significance level of $\alpha = 0.05$. Therefore, Audit Tenure affects positively and is significant towards audit quality. It means that **hypothesis 1 is accepted**. Regression coefficient score of contingency effect of PAF size on Audit Tenure and audit quality obtains the score of 0.130 with positive direction. The testing result of PAF size contingency effect on Audit Tenure and audit quality shows calculated t score of 2.159 with significance of 0.032. The testing significance score is less than significance level of $\alpha = 0.05$. Therefore, contingency effect of PAF size on Audit Tenure positively affects and is significant towards audit quality. It means that **hypothesis 2 is accepted**. Regression coefficient score of fee audit contingency effect on Audit Tenure and audit quality is 0.297 with negative direction. The testing result of fee audit contingency effect on Audit Tenure and audit quality shows calculated t score of -5.899 with significance of 0.00. The testing significance score is less than significance level of $\alpha = 0.05$. Therefore, contingency effect of fee audit on Audit Tenure negatively affects and is significant towards audit quality. It means that **hypothesis 3 is accepted**. Next, regression model testing on contingency effect of PAF size and fee audit towards Audit Tenure and audit quality is done with distribution F. The testing result of PAF size contingency effect and fee audit towards Audit Tenure and audit quality shows calculated F score of 169.373 with significance of 0.00 (Table 5). The testing significance score is less than significance level of $\alpha = 0.05$. Therefore, regression model on contingency effect of PAF size and fee audit simultaneously affects significantly on Audit Tenure and quality.

Table 5.
Testing of Multiple Linear Regression Model

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	101.128	5	20.226	169.373	.000 ^a
	Residual	24.122	202	.119		
	Total	125.250	207			

a. Predictors: (Constant), Contingency Effect of AT*FA , The Size of PAF, Contingency Effect of AT*UBK, Audit Tenure, Fee Audit
b. Dependent Variable: Audit Quality

Determination coefficient (R^2) score obtained is 0.807 (Table 6). It means that 80.7 % of variable KA can be explained by variables UBK, FA, contingency effect of UBK and FA, while the rest is 19.3 % is affected by other factors that are not included in the model of study.

Table 6. Testing of Determination Coefficient Model (R^2)

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.899 ^a	.807	.803	.34556

a. Predictors: (Constant), Contingency Effect of AT*FA , The Size of PAF, Contingency Effect of AT*UBK, Audit Tenure, Fee Audit
b. Dependent Variable: Audit Quality

4.4. Discussion

Study result of Ghosh and Moon (2003) produced finding that audit quality is increasing along with longer audit tenure because auditor has understood and known business environment of client. Hypothesis 1 examines the effect of audit tenure on audit quality in order to predict that shorter audit tenure more positively affects quality of audit result. Testing results obtained that short audit tenure (3 years) has positive effect and is significant towards audit quality. It means that short audit tenure can give qualified audit result. This result supports the study of Johnson *et al.* (2002), Carcello and Nagy (2004), Mai *et al.* (2008), and Davis *et al.* (2009). Johnson *et al.* (2002) found evidence that short audit tenure (2-3 years) has higher level of unexpected accrual compared to middle tenure, but they did not find evidence that middle audit tenure (4-8 years) has lower level of unexpected accrual compared to long audit tenure (more than 9 years). Study result of Johnson *et al.* (2002) did not find evidence that longer audit tenure will decrease more the quality of financial reporting. Carcello and Nagy (2004) found evidence that audit fraud will be found more in short audit tenure compared to long audit tenure. Mai *et al.* (2008) found evidence that the longer audit tenure, the lower its audit quality, while Davis *et al.* (2009) found that long audit tenure can decrease audit quality in the form of audit report. Otherwise, study of Ghosh and Moon (2003) produced finding that audit quality is increasing along with the length of audit tenure. Hypothesis H₂ examines contingency effect (the size of PAF) on audit tenure and audit quality, in other words, the size of PAF has important role in affecting audit tenure on audit quality in order to predict that larger Public Accountant Firm more positively affects audit

tenure on audit quality with shorter audit tenure, then, audit quality is better. Testing result obtained that contingency effect of large PAF (Big Four PAF) with shorter audit tenure positively affects and is significant towards audit quality. Meanwhile, the size of PAF (Non Big Four PAF) towards Audit Tenure negatively affects and is significant towards audit quality. This result supports the study of Law (2008), Francis and Yu (2009), and Nieschwietz and Woolley (2009). Study result of Law (2008) found evidence that Big Four PAF is more independent than Non-Big Four PAF. Big Four PAF has more reputations compared to Non-Big Four PAF, then, it can be said that reputation of auditor affects audit quality. Francis and Yu (2009) found evidence that Big Four PAF often tends to issue going concern opinion more than non-Big Four PAF. Meanwhile, Nieschwietz and Woolley (2009) found evidence that perception of investor on quality of big four PAF is way higher than on non-Big Four PAF. Problems of fee audit amount and short audit tenure sometimes put an auditor in dilemmatic position, in one side auditor must be independent in giving opinion on financial report equity, but in the other side auditor also must fulfill the demand wanted by the client. Otherwise, lower fee audit tends to reduce a number of job vacancies, for example does not conduct certain audit procedure that really affects audit quality. Testing result obtained that contingency effect of fee audit on audit tenure negatively affects and is significant towards audit quality. Hypothesis H₃ examines the contingency effect (fee audit) on audit tenure and audit quality, in the other words, fee audit has important role in affecting audit tenure towards audit quality in order to predict that the greater fee audit received by auditor, the more negatively affects audit tenure towards audit quality with shorter audit tenure, then, audit result is less qualified. Testing result obtained that contingency effect of fee audit on audit tenure negatively affect and is significant towards audit quality. This result supports the study of Carrera *et al.* (2007, Gul *et al.* (2007, and Jong-Hag, *et al.* (2010). Study result of Carrera *et al.* (2007) found evidence that most of negotiations of auditor-client really affect audited report quality. It indirectly means that non ethical behavior from negotiation process will reduce audit quality in making opinion on client's financial report. Meanwhile, Gul *et al.* (2007) found evidence that amount reduction of higher audit fee is possibly caused by financial report bias for company with long audit rotation. While study result of Jong-Hag, *et al.* (2010), found that large fee audit can make auditor agree on pressure form client, and it affects on the quality of resulted audit.

5 CONCLUSION, LIMITATION, AND IMPLICATION OF STUDY

From the testing result, conclusions obtained are as the followings: (1) Audit Tenure affects positively and is significant towards audit quality in order to predict that the shorter audit tenure, the more positively affects qualified audit result. Testing result obtained that short audit tenure (3 years) has positive effect and is significant towards audit quality. It means that short audit tenure can give qualified audit result; (2) Contingency effect of PAF size on Audit Tenure affects positively and is significant towards audit quality in order to predict that the larger Public Accountant Firm, the more positively affects audit tenure towards audit quality with shorter audit tenure, then, audit quality is better. Testing result obtained that contingency effect of PAF size (big four PAF) with short audit tenure positively affects and is significant

towards audit quality. Meanwhile, the size of PAF (Non big four PAF) on audit tenure negatively affects and is significant towards audit quality; (3) Contingency effect of fee audit on audit tenure negatively affects and is significant towards audit quality in order to predict that the greater fee audit received by auditor, the more negatively affects audit tenure towards audit quality with shorter audit tenure, then, audit result is less qualified; (4) Regression model on contingency effect of PAF size and fee audit simultaneously significantly affects audit tenure and quality; and (5) Contingency effect of UBK and FA (80.7 % of variable KA can be explained by variables AT, UBK, FA) while the rest of 19.3 % is affected by other factors that are not included in study model. Limitation of this study focuses on manufacturing listed in Indonesian Stock Exchange in period of 2012-2017. Audit quality is measured by proxy of total accrual, while fee audit is proxied by the size of auditee's company. The limitation of this study is expected to be developed in the next study by adding several variables such as audit risk, education level, auditor commitment, audit committee, and independent commissioners. Expected implication from this study is to give important contribution both to auditor and Public Accountant Firm as well as other parties who concern, among others are Indonesian Accountant Association (IAA), companies, academicians, government, and community.

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