

The Effect of Auditor Competence, Audit Complexity, and Auditor Time Budget Pressure on Audit Quality with The Information System Understanding as Moderating Variable

Risya Khaerun Nisa

*Department of Islamic Accounting, Faculty of Islamic Economics and Business,
UIN Sunan Kalijaga Yogyakarta*

Corresponding author: risya.nisa@uin-suka.ac.id

Abstract

Purpose: The progress of a company can be seen from the position of its financial statements. Therefore the financial statements must be audited by a qualified Public Accountant or Auditor to show that the financial statements are presented fairly. The auditor must perform a quality audit to provide reliable and trustworthy information. This study aims to determine the effect of auditor competence, audit complexity, and auditor time budget pressure on audit quality with the information systems understanding as moderating variable.

Methodology: This study conducted on auditors working at the Public Accounting Firm of DKI Jakarta recorded in the directory of Indonesian Institute of Accountants. The samples of this study consist of 20 Public Accounting Firm. Data collection technique used primary data. Primary data obtained through the survey by distributing questionnaires to respondents. The questionnaires were distributed directly to the auditors at 20 Public Accounting Firm. Data analysis technique used moderated regression analysis (MRA).

Findings: The result of the research shows that: Auditor competence has a positive effect on audit quality, audit complexity does not effect audit quality, and auditor time budget pressure has negative effect on audit quality. The interaction of information system understanding between auditor competence with audit quality is an independent variable. The interaction of information system understanding between audit complexity with audit quality is not a moderation variable. Meanwhile, the interaction of information system understanding between auditor time budget pressure with audit quality is a quasi moderator.

Novelty: This paper uses auditor competence that distinguishes it from previous studies.

Keywords: Auditor Competence, Audit Complexity, Auditor Time Budget Pressure, Audit Quality, Information System Understanding

Article History:

Received: November 2022; Accepted: December 2022

Introduction

Progress of a company can be seen from the position of its financial statements. Therefore, the financial statement should be audited by a qualified Public Accountant or Auditor to show the financial statements are presented fairly. Auditors should conduct quality audit to provide reliable information. Audit quality can be reliable if it contains objective finding and audit conclusion and provide good recommendation, so with high audit quality will produce reliable information for decision-making

consideration. Auditors in auditing should check all client company report and auditors are often exposed to audit complexity. Restuningdiah and Indriantoro (2000) in Prasita and Adi (2007) stated that the complexity of the audit is based on the individual's perception of the difficulty of audit task, this perception raises the possibility that an audit task is difficult for a person, but easy for others. According to Josoprijonggo (2005) research in Setyorini (2011) for audit produced by qualified auditor, auditor should perform their work professionally, including when dealing with complex audit issues. The auditor should be able to meet the demands desired by the client, despite how high the level of complexity is given so that clients feel satisfied with their work and keep using the services of the same auditor in the future.

Auditors are faced with working in time constraint. The demand for quality report with limited time budget is of course a personal pressure for auditors. A tight time budget pressure will increase the stress level of the auditors because the auditors have to perform the audit work with a tight time, even in the time budget can not complete the audit with the necessary audit procedures (Kelley, 2005). In the facing of audit complexity and time budget pressure, the auditors must have a competence to affect audit quality. Trotter (1986) in Tjun et al. (2012) a competent person is a person who with the skills to do the job easily, fast, intuitive and very rarely or never make mistakes. In line with Trotter's opinion, then Bedard (1986) in Tjun et al. (2012) defines competence as a person who possesses extensive procedural knowledge and skills demonstrated in the audit experience. Research conducted by Libby and Fredrick (1990) in Tjun et al. (2012) found that experienced auditors have a better understanding of financial statements. They are also better able to provide a reasonable explanation for mistakes in financial statements and can classify errors based on audit objectives and the structure of the underlying accounting system.

Bierstaker et al. (2001) in Setyorini (2011) states that the rapid and sophisticated technology developments, auditors are required to anticipate, that is by understanding and mastering information system. Understanding the auditor of the information system will be very helpful to support the smooth auditing report activities better. The information technology is expected to auditors can provide information more quickly, accurately, and reliably (Halim, 2004). Understanding of information systems is expected to assist auditors in determining appropriate audit procedure that can reduce the complexity of auditing activities, reduce the pressure of limited time budget and assist auditors with minimal competence. This research is a replication of research conducted by Prasita and Adi (2007) with two independent variables, namely audit complexity and time budget pressure, and research conducted by Suraida (2005) in Sukriah (2009) that is auditor competence as independent variable.

Literature Review

Audit Quality

Audit quality is the probability of an auditor in finding and reporting an error or misappropriation that occurred in a client accounting system. The quality of this audit is reflected in (a) Input Orientation, including: Assignment of personnel by Public Accounting Firm, to execute agreements, Consultation, Supervision, Appointment, Professional Development, Promotion and Inspection; (b) Process Orientation, including: Independence, Compliance with audit standards, Audit control, and Auditor competence. (c) Output Orientation, including: Auditor performance, Acceptance and continuity of cooperation with clients; and due professional care; follow-up on audit recommendations, including: Client management ranks support the implementation of the Auditor's recommendations; The client's internal regulations allow for the implementation of audit recommendations; Systems in client companies allow to implement audit recommendations; The culture in the client company makes it possible to implement the recommendations of the auditor, and the physical facilities in the client company make it possible to implement the recommendations of the auditor (Tandiontong, 2016: 80).

Auditor Competence

Auditor competence is an auditor whose knowledge and experience are sufficiently explicit and able to audit objectively, and thoroughly (Agusti and Pertiwi, 2013). Highly educated auditors will have a lot of knowledge about the field they are working on, so they can find out more about the problems in more depth. In addition, with considerable knowledge, auditors will be easier in following the increasingly complex developments. Complex audit analysis requires a wide spectrum of expertise, knowledge and experience (Meinhard et al., 1987 in Darayasa and Wisadha 2016).

Audit Complexity

Restuningdiah and Indriantoro (2000) in Prasita and Adi (2007) stated that the complexity of the audit is based on the individual's perception of the difficulty of an audit task. This perception raises the possibility that an audit task is difficult for a person, but may also be easy for others. Complexity arises from weak ambiguity and structure, both in the main tasks as well as in other tasks. In ambiguous and unstructured tasks, alternatives can not be identified so that data can not be obtained and the output is unpredictable.

Auditor Time Budget Pressure

Sososutikno (2003) in Aisyah (2015) states that Time Budget Pressure is a condition that indicates that auditors are required to make efficiency on the time budget that has been prepared or there are very tight and rigid budget restrictions. De Zoort (2002) in Prasita and Adi (2007) defines the time budget pressure as a form of pressure arising from the limited resources that can be provided to carry out the task. Resources can be interpreted as the time used by the auditor in the execution of its duties. Time budget pressure is a factor affecting one's performance (Ahituv and Igbaria 1998 in Prasita and Adi 2007). For the KAP itself time pressure is an unavoidable condition in the face of competition climate among KAP.

Information System Understanding

Advantages of information technology such as the ability to process the number of complex transactions in huge volumes at low cost leads to institutions using information technology in the financial reporting process. One advantage of IT is its ability to improve internal control by using computer controls in transaction processing activities on a daily basis. Replacement of manual procedures with pre-programmed controls to implement check and balances mechanisms for each processed transaction can reduce the human error that often occurs in the traditional environment by manual means. A well-controlled IT system is a great potential to reduce misstatement because computers process information consistently (Murwanto et al., 2006: 346).

Hypothesis Development

The Effect of Auditor Competence with Audit Quality

Competence relates to expertise, knowledge and experience so that a competent auditor is an auditor who has sufficient knowledge, training, skills and experience to be able to successfully complete his audit work. In the past, a competent auditor was an auditor who only mastered bookkeeping techniques (Tandiontong, 2016). However, Lee (1993: 66) argues that today's auditors are expected to have substantial professional competence in various interrelated areas that affect their audit assignments. According to Lee and Stone (1995) in Darayasa and Wisadha (2016) states that competence as sufficient expertise can explicitly be used to audit objectively. Carolita (2012) states that the competence of auditors is the ability of an auditor to apply the knowledge and experience he has had in conducting audit so that auditors can conduct audits carefully, thoroughly, and objectively. The results of Saputra (2012) study in

Elen and Mayangsari (2013) show that competence positively affects audit quality. This is the hope that the accountant has a desire to maintain the standard of professional idealism that will describe the high level of professional competence. Thus, the hypothesis can be as follows:

H₁: Auditor competence has a positive effect on audit quality.

The Effect of Audit Complexity with Audit Quality

Restuningdiah and Indriantoro (2000) in Prasita and Adi (2007) state that the complexity of an audit is based on an individual's perception of the difficulty of an audit assignment. This perception raises the possibility that an audit assignment is difficult for someone, but may also be easy for others. Complexity arises from ambiguity and weak structure, both in the main tasks and other tasks. In ambiguous and unstructured tasks, alternatives cannot be identified, so data cannot be obtained and outcomes cannot be predicted. Difficulty level of task and task structure are two aspects of compiler of task complexity. The difficulty level of the task is always associated with the amount of information about the task, while the structure is related to information clarity (Jamilah et al., 2007). Restuningdiah and Indriantoro (2000) in Prasita and Adi (2007) suggest that increasing complexity in a task or system will decrease the success rate of the task. Associated with auditing activities, the high complexity of these audit can lead accountants to behave dysfunctionally resulting in a decrease in audit quality. From the above explanation can be concluded as follows:

H₂: Audit complexity has a negative effect on audit quality.

The Effect of Auditor Time Budget Pressure with Audit Quality

Sosusutikno (2003) in Aisyah (2015) stated that Time Budget Pressure is a condition in which the auditor is required to perform efficiency on the time budget that has been prepared or there is a very tight and rigid budget time arrangement. De Zoort (2002) in Prasita and Adi (2007) states that time budget pressure as a form of pressure arises from the limited resources that can be given to carry out the task. Resources can be interpreted as the time used by the auditor in the execution of its duties. Time budgets are also regarded as factors that lead to under-standard audit work and encourage violations of auditing standards and unethical behaviors. McDaniel (1990) in Prasita and Adi (2007) found that time budget pressure led to decreased effectiveness and efficiency of auditing activities.

H₃: Auditor time budget pressure has a negative effect on audit quality.

Information Systems Understanding

Supporting information systems for auditors are needed for making decisions oriented to professional judgments and complex assignments. Pennington et al. (2006) in Herusetya (2010) uses the term Electronic Information System Technology (EIST) or electronic technology information system for all supporting information systems used by auditors. EIST is needed by the auditor given the complex nature of audit assignments (audit assignments), where decision making is required both individually and as a team, audit decisions are analytical, fast and require communication between audit teams without having to meet face to face. Utilization of information systems based on electronic technology gives a positive influence on audit task performance (Herusetya, 2010). According to research results Bierstaker et al. (2007) in Setyorini (2011) shows that the understanding of information systems will make it easier for the auditor to determine the selected audit procedures, facilitate auditing activities, and in turn can result in a higher quality audit report. From both the results of the hypothesis that can be proposed are:

H₄: The interaction of auditor competence and information system understanding has a positive effect on audit quality.

H₅: The interaction of audit complexity and information system understanding has a positive effect on audit quality.

H₆: The interaction of auditor time budget pressure and information system understanding has a positive effect on audit quality.

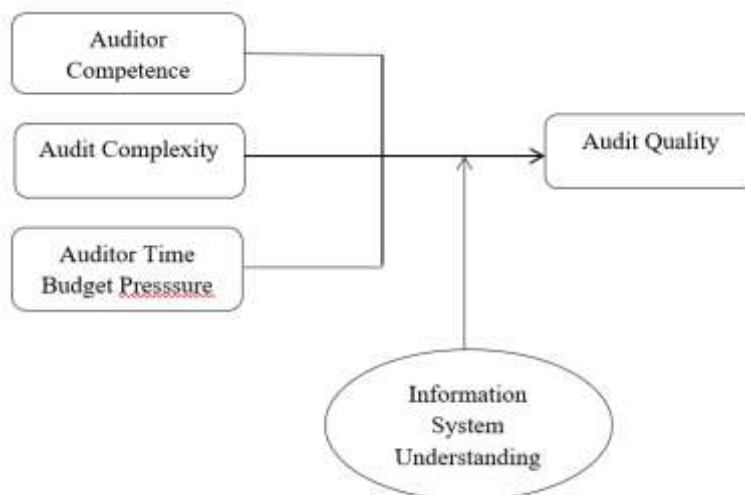


Figure 1. Research Framework

Methodology

The population of this research is all auditors who work at Public Accounting Firms (KAP) which are registered in the Indonesian Institute of Accountants (IAI) directory in DKI Jakarta. The sample in this study is an auditor who works at 20 KAPs in DKI Jakarta. Sampling in this study used simple random sampling. Data collection techniques in research using primary data. Primary data was obtained through a survey by distributing research questionnaires to respondents. The questionnaires was distributed directly to the auditors at 20 KAPs in DKI Jakarta. The operationalization of the variables in this study were all measured using a set of empirical indicators taken from previous researchers Prasita and Adi (2007) and Suraida (2005) in Sukriah (2009). According to Ghozali (2016: 215) to test the relationship between the independent variables and the dependent variable, a simple regression equation model can be used. Meanwhile, to test the effect of moderating variables using two procedures, namely subgroup analysis and moderated regression analysis (MRA). Subgroup analysis is used to identify whether there is a type of Homologizer moderator. Subgroup analysis was tested using the Ramsey Test analysis tool. The Ramsey Test was developed by Ramsey in 1969. Data analysis used moderated regression analysis (MRA) with reference to the model developed by Baron and Kenny (1986).

Results and Discussion

Results

The results of hypothesis testing using the ramsey test and moderate regression analysis (MRA) with Eviews 4.1 program, to test the hypotheses H1, H2, H3, H4, H5, and H6. The results of the ramsey test are as follows:

Table 1. Ramsey Test Results

Equation	A/B	
	F (count)	F (table)
1 dan 2	2,95038801	2,729011
2 dan 3	0,99227438	2,729121
4 dan 5	7,20695894	2,729011
5 dan 6	0,01335919	2,729121
7 dan 8	5,59558389	2,729011
8 dan 9	4,91510888	2,729121

Source: The Processed Primary Data (2017)

Table 2. MRA Test Results

	Equation	Value F (Sig)	R ²	Result	Conclusion
1.	$Y = \beta_0 + \beta_1 \text{KpA} + e$ $Y = 22,24115 + 0,200518 \text{KpA} + e$ Sig (0,0000) (0,0000)	32,15301 Sig. 0,000000	R ² Old 0,129569	KpA has a positive influence on audit quality	Supported
2.	$Y = \beta_0 + \beta_1 \text{KpA} + \beta_4 \text{PSI} + e$ $Y = 21,08643 + 0,187102 + 0,138950 \text{PSI} + e$ Sig (0,0000) (0,0000) (0,0873)	17,69676 Sig. 0,000000	R ² New 0,141352	PSI is an independent variable	Not supported
3.	$Y = \beta_0 + \beta_1 \text{KpA} + \beta_4 \text{PSI} + \beta_5 \text{KpA} * \text{PSI} + e$ $Y = 29,07840 + 0,055776 - 0,417941 + 0,009071 \text{KmA} * \text{PSI} + e$ Sig (0,0006) (0,6836) (0,4601) (0,3203)				
4.	$Y = \beta_0 + \beta_2 \text{KmA} + e$ $Y = 32,83457 + 0,088688 \text{KmA} + e$ Sig (0,0000) (0,2328)	1,431525 Sig. 0,232827	R ² Old 0,006584	KmA has no effect on audit quality	Not supported
5.	$Y = \beta_0 + \beta_2 \text{KmA} + \beta_4 \text{PSI} + e$ $Y = 29,85388 + 0,077193 + 0,224706 \text{PSI} + e$ Sig (0,0000) (0,2929) (0,0078)	4,339819 Sig. 0,014200	R ² New 0,038804	PSI is not a moderating variable	Not supported
6.	$Y = \beta_0 + \beta_2 \text{KmA} + \beta_4 \text{PSI} + \beta_6 \text{KmA} * \text{PSI} + e$ $Y = 30,34172 + 0,049050 + 0,192156 + 0,001870 \text{KmA} * \text{PSI} + e$ Sig (0,0000) (0,8475) (0,5146) (0,9083)	2,884371 Sig. 0,036692	R ² New 0,038864		
7.	$Y = \beta_0 + \beta_3 \text{TAW} + e$ $Y = 32,29817 + 0,123903 \text{TAW} + e$ Sig (0,0000) (0,0741)	3,221865 Sig. 0,074059	R ² Old 0,014697	TAW has a negative influence on audit quality	Supported
8.	$Y = \beta_0 + \beta_3 \text{TAW} + \beta_4 \text{PSI} + e$ $Y = 30,12419 + 0,080933 + 0,204435 \text{PSI} + e$	4,442991	R ² New	PSI is a quasi moderator	Not supported

	Sig (0,0000) (0,2535) (0,0189)	Sig. 0,039690 0,012860	
9.	$Y = \beta_0 + \beta_3 \text{TAW} + \beta_4 \text{PSI} + \beta_7 \text{TAW} * \text{PSI} + e$		
	$Y = 38,98997 - 0,479991 - 4,654325$	R2 New	
	$0,391720 + 0,037065 \text{TAW} * \text{PSI} + e$		
	Sig (0,0000) (0,0689) (0,1666) (0,0277)	Sig. 0,061251 0,003573	

Source: The Processed Primary Data (2017)

Discussion

Equation (1) in Table 2 is used to test H1. The R2 value of the equation is 0.129569, so it can be concluded that the audit quality variable (Y) as the dependent variable can be explained by the auditor's competency variable (KpA) of 12.9569%, while the rest is explained by other factors outside the model. Equation (1) in Table 2 shows an F-statistic value of 32.15301 with a p-value of 0.000000 which is less than α (10%). The conclusion that can be drawn is the regressor in equation (1), namely auditor competence (KpA) has a positive influence on audit quality (Y). The t-statistic value in equation (1) shows the coefficient of the auditor's competency variable of 0.200518 and a p-value of 0.0000 which is smaller than α (10%). So this study supports H1 which states that auditor competence has a positive influence on audit quality.

Equation (4) in Table 2 is used to test H2. The R2 value of the equation is 0.006584, so it can be concluded that the audit quality variable (Y) as the dependent variable can be explained by the audit complexity variable (KmA) of 0.6584%, while the rest is explained by other factors outside the model. Equation (4) in Table 2 shows an F-statistic value of 1.431525 with a p-value of 0.232827 which is greater than α (10%). The conclusion that can be drawn is the regressor in equation (4), namely audit complexity (KmA) does not affect audit quality (Y). The t-statistic value in equation (4) shows the audit complexity variable coefficient of 0.088688 and a p-value of 0.2328 which is greater than α (10%). So this study does not support H2 which states that audit complexity has a negative effect on audit quality.

Equation (7) in Table 2 is used to test H3. The R2 value of the equation is 0.014697, so it can be concluded that the audit quality variable (Y) as the dependent variable can be explained by the time budget pressure (TAW) variable of 1.4697%, while the rest is explained by other factors outside model. Equation (7) in Table 2 shows an F-statistic value of 3.221865 with a p-value of 0.074059 which is smaller at α (10%). The conclusion that can be drawn is the regressor in equation (7) on α (10%), namely the auditor's time budget pressure (TAW) affects audit quality (Y). The t-statistic value in equation (7) shows the coefficient of the auditor's time budget pressure variable of 0.123903 and a p-value of 0.0741 which is smaller at α (10%). So this study supports H3 which states that auditor time budget pressure has a negative effect on audit quality.

Equations (2) and (3) in Table 2 are used to test the interaction of the information system understanding variable (PSI) between the auditor competency variable (KpA) and audit quality (Y). The main requirement before carrying out this interaction test is the acceptance of H1 which states that the auditor's competency variable has a positive influence on audit quality. The results of the Ramsey test calculations in Table 1 show the results that in equations 1 and 2 the calculated F value is 2.95038801, or greater than the F table on α (10%) which has a value of 2.729011 [FINV(0.1; 1.215)]. Equations 2 and 3 have a calculated F value of 0.99227438, or smaller than the F table at α (10%) which has a value of 2.729121 [FINV(0.1;1;214)]. The test shows that each addition of moderating variables and their interactions has an influence on the research regression model. This is shown by increasing R2 from equations (1), (2), and (3). Table 2 shows the significance value of β_4 PSI in equation (2) is 0.0873 less

than α (10%). The significance value of β_5 KPA*PSI in equation (3) is 0.3203 greater than that of α (10%). If equation (2) β_4 PSI has a significant value and equation (3) β_5 KPA*PSI is not significant, then the PSI variable is an independent variable. These results do not support H4 which states that the interaction of auditor competence and understanding of information systems has a positive effect on audit quality.

Equations (5) and (6) in Table 2 are used to test the interaction of information systems understanding (PSI) variables between audit complexity variables (KmA) and audit quality (Y). The main requirement before conducting this interaction test is acceptance of H2, but in the audit complexity regression equation on audit quality it has no effect because equation (4) in Table 2 above shows a significance value of 0.2328 greater than α (10%), so that it can be concluded that the audit complexity variable (KmA) has no effect on audit quality (Y). The significance value of β_4 PSI is 0.0078 less than α (10%) and the significance value of β_6 KmA*PSI is 0.9083 greater than α (10%). These results do not support H5 which states that the interaction of audit complexity and understanding of information systems has a positive effect on audit quality.

Equations (8) and (9) in Table 2 are used to test the interaction of information system understanding (PSI) variables between the auditor's time budget pressure (TAW) and audit quality (Y) variables. The main requirement before carrying out this interaction test is the acceptance of H3, in the regression equation time budget pressure has an influence on audit quality, because equation (7) in Table 4.14 above shows a significance value of 0.0741 which is smaller than α (10%). The results of the calculation of the Ramsey test test in Table 1 show the result that in equations 7 and 8 the calculated F value is 5.5955838 or greater than the F table at level α (10%) which has a value of 2.729011 [FINV(0.1; 1,215)]. Equations 8 and 9 have a calculated F value of 4.9151088 or greater than the F table at level α (10%) which has a value of 2.729121 [FINV(0.1;1;214)]. The test shows that each addition of moderating variables and their interactions has an influence on the research regression model. This is shown by increasing R2 from equations (7), (8), and (9). Table 2 shows the significance value of β_4 PSI in equation (8) is 0.0189 less than α (10%). The significance value of β_7 TAW*PSI in equation (9) is 0.0277 which is smaller than α (10%). If equation (8) β_4 PSI has a significant value and equation (9) β_7 TAW*PSI is significant, then the PSI variable is a quasi moderator. These results do not support H6 which states that the interaction of auditor competence and understanding of information systems has a positive effect on audit quality.

Conclusions

The results of research that has been carried out by researchers, it can be concluded as follows: Auditor competence (KPA) has a positive influence on audit quality. The results of this study illustrate that in the audit process auditor competence is very necessary because with the existence of auditor competence, an auditor can apply his knowledge and experience to produce better audit quality. Tests on audit complexity (KmA) have no effect on audit quality. Meanwhile, auditor time budget pressure (TAW) has a negative effect on audit quality (Y). The research illustrates that time budget pressure causes a decrease in the effectiveness and efficiency of audit activities. In the moderating variable interaction test; (a) the interaction of information system understanding between auditor competence (KpA) and audit quality (Y) is an independent variable. Research on the information system understanding as an independent variable, namely the results of Jumaili's research (2005) states that trust in new information systems and new information system technologies for improving individual performance shows positive results. (b) interaction test of information system understanding between audit complexity (KmA) and audit quality (Y) variables has no effect and information system understanding is not a moderating variable. (c) interaction test of information system understanding between time budget pressure (TAW) and audit quality (Y) is a quasi moderator variable.

Research that supports information system understanding as a quasi moderator, namely Setyorini's research (2011) states that time budget pressure has a negative effect on audit quality, but

the effect turns positive with an understanding of information systems. The results of Maharsi's research (2000) show that the presence of information technology provides benefits for companies, namely: (a) being able to alleviate complex business activities; (b) produce reliable, relevant, timely, complete and understandable information; (c) tested in the framework of management planning, control and decision making; (d) as well as improving the company's operations and performance. In addition, the company's operating efficiency and company performance can also be improved. As a result, companies can survive in the information age and be able to face global market competition. This study has limitations that should be considered by future researchers. Some of the limitations that existed in the study were: (a) the limitations in this study were the limited sample of only 20 KAP samples and the research was only conducted in DKI Jakarta. (b) in this study there is a model that has heteroscedasticity. This can be due to the influence of each KAP on the distribution of respondents which includes; gender, age, educational background, position/title, and work experience of the auditor. (c) the questionnaires were not delivered directly to the respondents, namely the auditors, but mostly through KAP receptionists so that the respondents were not accompanied when filling out the questionnaires. The researcher did not know whether those who filled out the questionnaire were the correct respondents according to the researchers' expectations. By taking into account the limitations of the research that has been disclosed, it is hoped that further research that is similar to this research will improve these limitations.

Some suggestions in this research are as follows: 1. Further research needs to consider taking a wider sample and the research area can be carried out in other areas, apart from DKI Jakarta. 2. The model in this study should be free from heteroscedasticity, for example by paying more attention to the criteria for the distribution of respondents. 3. In this study, information system understanding is not proven as a moderating variable that can help auditors produce quality audit reports on audit complexity and available time budget pressures. Future research is expected to use other variables or factors that are indicated to help the auditor reduce audit complexity and pressure caused by limited time budgets, for example managerial ability factors, bonuses/compensation or other factors.

References

- Aisyah, E. Asti. 2015. "Hubungan Pengalaman, Time Budget Pressure, Kompensasi terhadap Kualitas Audit pada Kantor Akuntan Publik (KAP) di Kota Semarang" *Jurnal Universitas Negeri Semarang*.
- Agusti, Restu dan Nastia P. Pertiwi. 2013. "Pengaruh Kompetensi, Independensi, dan Profesionalisme terhadap Kualitas Audit (Studi Empiris pada Kantor Akuntan Publik Se-Sumatera)" *Jurnal Ekonomi Universitas Riau*.
- Baron, R. M. And David A. Kenny. 1986. "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Consideration" *Journal of Personality and Social Psychology*, 51 (6), 1173-1182.
- Carolita, K. Metha. 2012. "Pengaruh Pengalaman Kerja, Independensi, Objektivitas, Integritas, Kompetensi, dan Komitmen Organisasi terhadap Kualitas Hasil Audit" *Skripsi SI Fakultas Ekonomi Universitas Diponegoro*.
- Darayasa, I Made, dan I Gede Supartha Wisadha. 2016. "Etika Auditor sebagai Pemoderasi Pengaruh Kompetensi dan Independensi pada Kualitas Audit di Kota Denpasar" *E-Jurnal Akuntansi Universitas Udayana*.
- Elen, Trismayarni dan Sekar Mayangsari. 2013. "Pengaruh Akuntabilitas, Kompetensi, Profesionalisme, Integritas, dan Objektivitas Akuntan Publik terhadap Kualitas Audit dengan Independensi sebagai Variabel Moderating" *Jurnal Akuntansi dan Auditing Universitas Trisakti*.

- Ghozali, Imam. 2016. *Aplikasi Analisis Multivariate dengan Program IBM SPSS 23*. Ed. 8, Semarang: BP UNDIP.
- Halim, Abdul. 2004. *Auditing dan Sistem Informasi (Isu-isu Dampak Teknologi Informasi)*. Yogyakarta: Akademi Manajemen Perusahaan YKPN.
- Herusetya, Antonius. 2010. "Pengaruh Sistem Informasi Teknologi Elektronik Atas Task Performance Auditor Kantor Akuntan Publik BIG 4" *Jurnal Akuntansi dan Keuangan Universitas Indonesia*.
- Jamilah, Siti, Zaenal Fanani, dan Grahita Chandrarin. 2007. "Pengaruh Gender, Tekanan Ketaatan, dan Kompleksitas Tugas terhadap Audit Judgement" *Simposium Nasional Akuntansi X. Makassar*.
- Jumaili, Salman. 2005. "Kepercayaan terhadap Teknologi Sistem Informasi Baru dalam Evaluasi Kinerja Individual" *Simposium Nasional Akuntansi VIII. Makassar*.
- Kelley, T., Dianne Pattinson and Loren Margheim. 2005. "An Empirical Analysis of The Effects of Auditor Time Budget Pressure and Time Budget Pressure and Time Deadline Pressure" *The Journal of Applied Business Research*, Vol. 21. No. 1.
- Lee, T.A. 1993. *Corporate Audit Theory*. London: Chapman & Hall.
- Maharsi, Sri. 2000. "Pengaruh Perkembangan Teknologi Informasi terhadap Bidang Akuntansi Manajemen" *Jurnal Akuntansi dan Keuangan Universitas Kristen Petra*.
- Murwanto, Rahmadi, Adi Budiarmo, dan Fajar Hasri Ramadhana. 2011. *Audit Sektor Publik Suatu Pengantar Bagi Pembangunan Akuntabilitas Instansi Pemerintah*. Jakarta: Lembaga Pengkajian Keuangan Publik dan Akuntansi Pemerintah (LPKPAP) Badan Pendidikan dan Pelatihan Keuangan (BPPK) Departemen Keuangan RI.
- Prasita, Andin dan Priyo Hari Adi. 2007. "Pengaruh Kompleksitas Audit dan Tekanan Anggaran Waktu terhadap Kualitas Audit dengan Moderasi Pemahaman terhadap Sistem Informasi" *Jurnal Ekonomi dan Bisnis Fakultas Ekonomi Universitas Kristen Satya Wacana*.
- Restuningdiah, Nurika dan Nur Indriantoro, 2000, "Pengaruh Partisipasi terhadap Kepuasan Pemakai dalam Pengembangan Sistem Informasi dengan Kompleksitas Tugas, Kompleksitas Sistem, dan Pengaruh Pemakai sebagai Moderating Variable", *Jurnal Riset Akuntansi Indonesia*, Vol.3, No.2.
- Setyorini, Andini Ika. 2011. *Pengaruh Kompleksitas Audit, Tekanan Anggaran Waktu, dan Pengalaman Auditor terhadap Kualitas Audit dengan Variabel Moderating Pemahaman terhadap Sistem Informasi*. Skripsi. Semarang: Universitas Diponegoro.
- Sukriah, Ika. 2009. "Pengaruh Pengalaman Kerja, Independensi, Obyektifitas, Integritas dan Kompetensi terhadap Kualitas Hasil Pemeriksaan" *Simposium Nasional Akuntansi XII. Palembang*.
- Tandiontong, Mathius. 2016. *Kualitas Audit dan Pengukurannya*. Bandung: Alfabeta.
- Tjun, Lauw Tjun, Elyzabet Indrawati Marpaung, dan Santy Setiawan. 2012. "Pengaruh kompetensi dan Independensi Auditor terhadap Kualitas Audit" *Jurnal Akuntansi Universitas Kristen Maranatha*.