JURNAL
TATA KELOLA DAN AKUNTABILITAS
KEUANGAN NEGARA
e-ISSN 2549-452X | p-ISSN 2460-3937

Volume 7, Number 1, Jan-Jun 2021, 95-112

The effect of audit cost, information technology, and auditor's competence on audit quality during the COVID-19 Pandemic

Indra[1], Rindu Rika Gamayuni[2], Usep Syaipudin[3]

Badan Pemeriksa Keuangan Republik Indonesia, Indonesia[1],

Faculty of Economics and Business, Universitas Lampung, Indonesia[2, 3]

indra7726@bpk.go.id[1], rindu.gamayuni@yahoo.com[2]

usepsyaipudin@gmail.com [3]

ABSTRACT

The Corona Virus Disease (COVID-19) is endemic in Indonesia and affects many sectors, including the economic and government sectors. During the COVID-19 pandemic, BPK, as the government's external auditors, continued to carry out the audit to maintain accountability for state finances despite budget refocusing and large-scale social restrictions (Pembatasan Sosial Berskala Besar, PSBB). This study aims to determine the significance of audit costs due to budget refocusing, IT utilization, and auditor competence on audit quality during the work from home (WFH) policy. This study processed questionnaire data from 70 auditors from three representative offices of BPK in provinces under three different categories, namely A, B, and C. The research data was processed using SmartPLS software to analyze data with measurement models and structural models with a 90 percent confidence level. Data processing shows that the effect of audit costs and the use of information technology on audit quality during the COVID-19 pandemic have a feeble and insignificant effect; thus, the hypothesis is not supported. Meanwhile, the competence of auditors has a significant effect on the quality of audit results; ergo, the hypothesis is supported.

KEYWORDS:
COVID-19; audit; government; accountability; financial statements.

DOI: 10.28986/jtaken.v7i1.527

ARTICLE HISTORY:
Received at : 29 March 2021
Published at : 28 June 2021

INTRODUCTION

The Corona Virus Disease (COVID-19) is endemic worldwide and has hit many sectors in Indonesia, including the economic and government sectors. The Indonesian government implements a Large-Scale Social Restriction (Pembatasan Sosial Berskala Besar, PSBB) policy in various provinces throughout Indonesia, especially Jakarta, after the World Health Organization (WHO) declared COVID-19 as an infectious disease and endangering human health. This policy led the government to issue a work from home regulation to prevent a broader contagion of COVID-19. Such an approach has an immediate effect and changes the way employees work and behave in carrying out their duties. The government also reallocated the government budget to focus on preventing the spread of COVID-19 nationally and regionally. Those including the Audit Board of the Republic of Indonesia (Badan Pemeriksa Keuangan, BPK) as the government's external auditor. BPK responds to the government's directive by enforcing a work from home (WFH) policy and setting up budget reallocations that apply to work units at the head office and representatives in all provinces. In addition, the WFH policy for auditors resulted in audits being more focused on utilizing information technology.

According to Law number 15 of 2004 concerning The State Financial Management and Accountability Audit, BPK must submit an audit report on government financial statements to the House of Representatives (Dewan Perwakilan Rakyat, DPR) two months after receiving the financial statement from the government. The audit of the financial statements for the financial year of 2019 shall be carried out in April and must be submitted to related parties by 31 May 2020. The COVID-19 pandemic was still affecting several provinces in Indonesia when the audit took place. Therefore, auditors must be more competent, professional and acquire the ability to adapt to changes and prevail limitations with the increasing public demand for clean government with complex task dimensions during the COVID-19 pandemic. Auditors with competencies, notably information and technology (IT) competency in auditing activities during the COVID-19 pandemic, are expected to produce high-quality BPK audit reports that meet stakeholders' expectations even though auditors performed audits under limited conditions.

Despite the auditor's competencies, the implementation of the audit certainly requires the support of audit fees. Salehi, Jafarzadeh, and Nourbakhshhosseiny (2017) conclude that audit costs positively affect audit quality. Moreover, in their research, it was stated that the audit quality would decrease if there was a reduction in audit costs. In contrast, audit quality will increase if the audit cost increases. Nurintiati and Purwanto (2017) prove that audit costs have a significant effect on audit quality. According to them, companies that pay audit costs are more in compliance with the audit services provided as it will improve the quality of audit results. Therefore, if the costs allocated for audit are less, it will likely reduce the audit quality. According to Arisinta (2013), audit cost has a positive and significant effect on audit quality. High audit costs will plan higher quality audits compared to low audit costs. The research of Kurnianingsih and Rohman (2014) proves that audit costs simultaneously and partially have a significant effect on audit quality.

On the contrary, according to Ramadhan and Laksito (2018), audit costs did not significantly affect audit quality. Senjaya and Firnanti (2017) proved that audit costs did not affect audit quality either. Furthermore, Ettredge, Fuerherm, and Li (2014) provide preliminary evidence regarding the significant impact of economic recession on audit

costs and its effect on audit quality. His research results prove that audit costs have a negative effect on audit quality during a recession. However, the relationship between audit costs and decreased audit quality is confined to recession because of the marginal cost pressures. Finally, Albitar, Gerged, Kikhia, and Hussainey (2020) prove that social distancing due to the COVID-19 pandemic can affect audit costs, which negatively impact audit quality. Thus, based on some of the previous studies, there is no definite conclusion on whether audit costs positively or negatively affect audit quality.

According to Eu Gene, Yeow, Choon Ling, and Grigoriou (2017), IT knowledge and audit quality positively and significantly related. Farida, Thurasamy, and Azman (2018) stipulate that IT governance plays a significant role in ensuring the successful use of audit technology; therefore, it impacts audit quality. Furthermore, Mazza, Azzali, and Fornaciari's (2014) research prove that outsourcing information technology control and information technology audit quality significantly and positively affects audit quality. Research by Lee, Whitworth, and Hermanson (2015) proves that the result of their research conforms with the idea that investment in IT can provide significant benefits for companies in terms of audit efficiency. However, such a notion is different from that of the research conducted by Mardian and Avianti (2019), which proves that the quality of the audits produced by auditors has not been determined significantly by the application of Computer Assisted Audit Techniques (CAATs). Moreover, in their research, they explained that the application of CAATs by auditors did not have a significant effect on audit quality. Hence, based on some previous studies, there is no definite conclusion on whether the use of information technology positively or negatively impacts audit quality.

Furiady and Kurnia (2015) explain that auditor competencies positively and significantly affect audit quality. By increasing the competence of auditors, they will have more in-depth knowledge and provide better assessments to achieve audit quality. Tjun, Marpaung, and Setiawan (2012) confirm that competence partially has a positive and significant effect on audit quality. Nonetheless, the research conducted by Ningrum and Wedari (2017) suggests otherwise, which shows that integrity and competence do not have a significant effect on audit quality. Dewi, Maulana, and Mahatir's (2017) research proves that work experience and auditor competence partially do not affect audit quality. Based on previous studies, no definite conclusion on whether auditor competence positively or negatively affects audit quality.

Based on such explanation, this study uses the audit cost, information technology, and auditor competencies as the variables to measure the quality of the government's financial statement audits of the Fiscal Year 2019 by BPK. The scope of events limited to Semester I of 2020 or when the COVID-19 outbreak. Furthermore, the audit was only conducted at representative offices with types A, B, and C in three provinces. Therefore, the selection of three research variables is relevant according to the existing conditions as auditing government financial statements during the COVID-19 pandemic must be carried out by auditors despite several challenges. These challenges are in the form of changes in budget policy, dependence on information technology, and auditors' ability to adapt.

LITERATURE REVIEW

This study is based on agency theory in good governance. Agency theory is part of a group of positivist theories derived from the financial economics literature. Adams (1994)

states that agency theory consists of the contractual relationship between the owner (principal) of economic resources and the manager (agent) who is assigned to use and control these resources. Agents with motives tend to take the opportunity to act against the interests of their owners, e.g., agents take part in high levels of consumption, and this is a problem of "moral hazard." Another type of agency problem that arises is "negative selection." Negative selection occurred when the owner did not have access to all the available information when the manager's decisions were made in strategic policy. To minimize the risk of fraud and conflict in the agency concept, the principal needs to pay for supervision. According to Indra (2020), the government acts as an agent that carries out development programs for the welfare of the people, while DPR acts as the principal who represents citizens in the government system. Furthermore, according to his research, accountability is requisite to avoid conflicts of interest.

External auditors participate as third parties enabling them to bridge interests in agency theory. The external auditor is required to report the results to the owner. The audit report will be used as information in decision-making by various parties, especially the mandate (Primastuti & Suryandari, 2014). Good audit quality is needed as a form of accountability to produce good quality information. Amiruddin, Pagalung, Kartini, and Arifuddin (2016) determined that audit quality would be used as a guarantee to compare actual conditions in the field with conditions expected by stakeholders. The results of audits conducted by auditors are evaluated based on elements of technical and functional quality.

Peecher (2005) in Salehi et al. (2017) explains various definitions of audit quality. Audit quality is often defined as the level of observations that conform to relevant or generally accepted standards or rules. The State Financial Audit Standards (Standar Pemeriksaan Keuangan Negara, SPKN), specifies that:

a. Auditors are required to prepare an Audit Report (Laporan Hasil Pemeriksaan, LHP) in a timely, complete, accurate, objective, convincing, clear, and concise manner.
b. BPK is obliged to submit LHP to the representative institution, the person in charge, and the party authorized to receive the LHP according to the laws and regulations promptly. The LHP must be delivered on time so that the information conveyed can be of maximum benefit. Furthermore, SPKN explained that late submission of reports was less valuable for LHP users despite its meticulous preparation.
c. Auditors must disclose the findings in the LHP if they find any discrepancy between the condition and criteria. LHP must be comprehensive, containing all the information from the evidence needed to fulfill the purpose of the audit. The LHP must also provide detailed information so that users have a better understanding of the matters examined, findings, and audit conclusions (BPK RI, 2017).

Audit quality is defined as the extent to which the audit process is carried out and communicates the results in meeting the stakeholders' expectations. The quality aspect of the audit does not represent the results but the process itself. The auditors should have the ability to identify matters of interest to management regarding financial, internal control, or general business management to provide their opinion on the accuracy of the financial statements. In addition, auditors must understand business processes and see the needs of their clients and skills in communication (Hayes, Dassen, Schilder, & Wallage, 2007).

Auditors work to get a reward in the form of audit costs. El-Gammal (2012) defines audit

costs as the number of fees/wages charged for the audit process carried out by auditors for auditing financial statements. The audit cost is determined based on the contract between the auditor and the auditee in adjusting the time required, the services required, and the number of staff required for the audit process. The amount of the audit cost is compiled and determined before the audit process is carried out. The higher the audit cost is, the higher the audit result's quality as the auditor's audit procedures become more extensive. Hence the audit results are reliable and accurate. Auditors with high audit costs will carry out broader and in-depth audit procedures for client companies; so, the possibility of irregularities in the client's financial statements can be detected (Zam & Rahayu, 2015). Therefore, audit costs can affect the quality of the audit. High costs can encourage auditors to improve their business, which positively affects audit quality (Ramadhan & Laksito, 2018). Agoes and Hoesada (2012) define audit costs as the number of costs depending on the risk of the assignment, the complexity of the services provided, the level of expertise required to carry out these services, the cost structure, and other professional considerations.

In this study, based on Ramadhan and Laksito (2018) also Agoes and Hoesada (2012), the authors argue that reallocation of audit fees due to the COVID-19 pandemic will affect audit quality, as such fees will support audit implementation. The higher the audit costs are allocated for audit activities by auditors, the better the auditors will perform their duties according to applicable standards to produce quality audit reports. Moreover, auditors will also produce quality audit reports if they are highly incentivized or given a significant award. A large amount of awards is made possible due to more audit hours or the ability and audit experience of the auditors.

IT has changed the way audit data is stored, retrieved, and utilized. The new information technology system has brought about fundamental changes in the conduct of audits to achieve its objectives (Supriadi, Mulyani, Soepardi, & Farida, 2019). Auditors who use Computer-Assisted Audit Techniques (CAATs) as tools or media in conducting audits and responding to the results obtained from using CAATs improve the quality of audit results. The introduction of CAATs can improve the quality of the audits performed. This is because the use of audit technology will help the audit team, where management will be more involved in the daily work of the audit team (Mardian & Avianti, 2019). Good IT management can play an important role in ensuring the successful use of information technology in conducting audits (Farida et al., 2018). IT knowledge has a significant correlation with IT audit quality. Therefore, information and IT competencies are relevant and needed to improve audit quality (Eu Gene et al., 2017). Thottoli and Thomas (2020) state that the use of customized audit software by auditing companies increases the number of auditors to complete audit tasks on time. According to them, auditing companies should move away from traditional Information Communication Technology (ICT) audit methods and improve audit practices by using ICT. Furthermore, their research states that when audit practices are in accordance with and following the principles of ICT, it can increase the efficiency of audit practices in the audit company. Thus, the more ICT is adopted, the higher the professional practice of auditing, which will ultimately improve the audit quality.

Based on statements by Supriadi et al. (2019), Mardian and Avianti (2019), Farida et al. (2018), also Eu Gene et al. (2017), the authors argue that the use of IT in audit activities during the WFH policy throughout the COVID-19 pandemic affects the quality of audit results. Auditors use the more opti-

mal IT in the audit process, the better the quality of the audit report produced, and vice versa. However, if the IT utilization is not optimal, the quality of audit results will decrease; for example, there will be delays in conducting audits. According to Law Number 15 of 2004, as set forth in the agency theory, it specifies that government external auditors must submit the audit results to DPR as people's representatives no later than two months after receiving the unaudited financial statements. Should there be any undocumented audit evidence, either manually or through IT, a concern will arise that the evidence would not be strong enough to reveal audit findings, and as a result, it may potentially be canceled or excluded in the report. Based on such explanation, this study is intended to examine the effect of IT utilization on audit quality carried out by BPK.

According to Supriadi et al. (2019), the notion of competence is an individual attitude that a person has consisting of technical and non-technical factors such as personality and behavior, soft skills, and hard skills. Meanwhile, their research concludes that auditor competence is a skill that an auditor must possess to carry out his duties properly, which consists of knowledge, skills, abilities, suitability of personal behavior so that the audit results are objective. According to Nugroho and Fitriany (2019), audit competence has a relationship with audit costs and audit quality. Competence arising from adequate professional expertise is a quality that is needed to carry out an audit objectively. However, competence cannot be built upon experience alone; other qualities need to be taken into consideration in order for the auditor to arrive at the right decision, as a person relies on other attributes in addition to experience (Ilmiyati & Suhardjo, 2012). According to Furiady and Kurnia (2015), it is evident that auditor competence positively affects audit quality. They stipulated that the increase in auditor competence shows that auditors have great curiosity, have broad insight, can handle uncertainty, and can work in teams. Research conducted by Cheng, Liu, and Chien (2009) aims to determine the relationship between human capital and auditor quality to determine audit quality. The empirical results of their research indicate that the quality of auditors is positively related to human capital, thus determines the quality of audits given to clients. Zahmatkesh and Rezazadeh (2017) prove that the professional competence of auditors has a significant effect on audit quality. Auditors acquire more profound knowledge and better assessments to achieve audit quality by increasing their professional competence.

During the COVID-19 pandemic, it is essential that auditors improve their competencies to face unusual audit conditions. The auditor must be able to adapt to the situation and condition while still producing qualified audit reports. For that reason, researchers are interested in understanding the effect of auditor competence on audit quality. Based on the statements by Supriadi et al. (2019), Nugroho and Fitriany (2019), Ilmiyati and Suhardjo (2012), also Furiady and Kurnia (2015), the authors argue that during the WFH policy in the COVID-19 pandemic, the more competent auditors are in performing audit task, the more quality the audit result will likely to have. Likewise, if there is a lack or absence of competence, the audit quality will decline. Based on such explanation, this study also intended to examine the effect of auditor competence on audit quality. Based on the background and literature review that has been mentioned, this study develops three hypotheses, namely

H1: Audit costs have an effect on the quality of BPK audit during the COVID-19 pandemic;

H2: The utilization of IT has an effect on the quality of BPK audit during the COVID-19 pandemic; and

H3: Auditor competence affects the quality

of BPK audit during the COVID-19 pandemic.

RESEARCH METHOD

This research was conducted at three representative offices in three provinces. With such circumstances, the conclusions generated at the end of this study do not represent BPK auditors as a whole throughout Indonesia but only in 3 representative offices with types A, B, and C. The sampling technique used in this study is the purposive sampling method, where the sampling unit is selected based on specific considerations to obtain a representative sample unit according to the specified criteria. The criteria include junior, mid-level, and senior auditors assigned to BPK representative offices type A, B, and C holding active auditor status during the COVID-19 pandemic. In addition, the sample selection took into account that the auditor conducted an audit of the government's financial statements during the COVID-19 pandemic.

This study uses primary data from the field obtained by using a questionnaire which contains respondents' perceptions of variables. The questionnaire generally consists of two components; where the first component contains questions regarding the respondent's data. The second component contains questions related to research variables. The questionnaire provided by the researchers was designed using a 5-point Likert scale. The questionnaires were distributed via google forms by utilizing WhatsApp groups. The online data collection process was carried out for approximately two weeks, from 28 February to 13 March 2021. The questionnaires distributed online were collected, and as many as 70 respondents representing 230 auditors at three representatives were given the assumption of a 10% error allowance.

The independent variable in this study consists of audit cost, IT utilization, and auditor competence, while the dependent variable is audit quality. Description and measurement indicators for each variable presented in Appendix 1. The collected data will be analyzed statistically at the data analysis stage to see whether the hypothesis has been supported. Therefore, the research hypothesis was tested through appropriate statistical analysis (Sekaran & Bougie, 2010). The analysis method used in this research is the path analysis method using the Structural Equation Model (SEM) Partial Least Squares (PLS) with the SmartPLS 3 software, which is used to assess the measurement model and the structural model of the study. This study uses PLS because on the predictor side; PLS can handle many independent variables, even when the predictors display multicollinearity. PLS is characterized as the most suitable technique where the research objective is predictive or exploratory modeling. In addition, the sample data taken in PLS does not have to be large (Garson, 2016). Therefore, based on the explanation above, this study is deemed suitable to use PLS.

The Measurement Model/Outer Model Test is carried out by testing the validity and reliability of the research instrument. This measurement model is divided into two tests, namely the validity test and the reliability test. Reliability testing is done by looking at the composite reliability and Cronbach's alpha value. An indicator and latent variable is said to be good or has a high level of reliability if it has a Cronbach's alpha value and composite reliability greater than 0.7. Ghozali (2008) in Rifai (2015) explains that there are criteria in data analysis techniques using PLS to test validity, namely:

a. Convergent Validity is assessed based on the correlation between the score components calculated by the SmartPLS appli-

cation. An indicator is valid if the loading factor value is >0.7 (Hair, Hult, Ringle, & Sarstedt, 2017);

b. Average Variance Extracted (AVE) is used to assess convergent validity as the model is said to have good convergent validity of the AVE value is >0.5;
c. Discriminant Validity is used to prove that a latent construct predicts a different size than other constructs using the Fornell-Larcker method; compares the square roots of AVE with latent vertical correlation.

The Structural Model/Inner Model Test examines the relationship between constructs or latent variables as seen from the coefficient of determination/R-Square (R^2) of the research model. The stability of this estimate was evaluated using a statistical t-test obtained through the bootstrapping method of the sample. Bootstrapping is used to minimize the problem of abnormal research data. According to Chin (1998) in Ardi and Isnayanti (2019), the R^2 value is a test carried out to measure the level of Goodness of Fit in a structural model. R^2 value is used to measure how much influence a certain independent latent variable has on the latent dependent variable. Furthermore, it was stated that a model with R2>0.67 is categorized as good, R2 between 0.33 and 0.67 is categorized as moderate, and R2<0.33 is categorized as weak.

The hypothesis is the main research instrument that provides suggestions for new experiments and observations (Kothari, 2004). Hypothesis testing uses the bootstrap method. Hypothesis testing can be seen from the t-statistic value and probability value. The hypothesis will be accepted if the t-statistic >1.65 and the p-value <0.10 or considered significant.

RESULT AND DISCUSSION

There are 70 questionnaires that respondents have filled out and validated, representing 230 respondents from 3 representative offices, type A (32 respondents), B (23 respondents), and C (15 respondents). The results of the collected questionnaire data are then processed using SmartPLS software. An independent sample t-test with a significance level of 10 percent was used to answer the research questions. Data related to respondents is presented in Table 1.

Table 1. Respondent Data

	Category	Number of Respondent	Percentage (%)
Gender	Male	47	67,14
	Female	23	32,86
	Total	**70**	**100,00**
Position	Junior Auditor	23	7,79
	Mid-level auditors	34	53,25
	Senior auditor	18	23,38
	Total	**70**	**100,00**
Work Experience	1 to 3 years	8	11,42
	4 to 6 years	10	14,19
	More than 6 years	18	74,92
	Total	**70**	**100,00**
Experience using the audit application	No/Never	7	10,00
	Once	14	20,00
	2 to 3 Times	17	24,29
	More than 3 Times	32	45,71
	Total	**70**	**100,00**
Educational level	DV/S1 (diploma/ undergraduate)	43	61,43
	S2	27	37,57
	Total	**70**	**100,00**

Based on the respondents' experience as auditors, they have more than three years of experience (14.19%), and most of them have more than six years (74.92%) of experience. In addition, 32 respondents were dominated by auditors who have experience using audit applications more than three times (45.71%). Thus, respondents relatively have sufficient experience to convey their perceptions regarding auditing problems during the COVID -19 pandemic, including using an audit application.

Measurement Model Testing/Outer Model

The results of data processing using SmartPLS can be seen in Appendix 2 by looking at the loading factor value of each indicator. Loading factor value >0.70 is declared valid and can be used for further testing. In contrast, the indicator with a loading factor value <0.70 is declared invalid and must be removed from the measurement model. This is intended to increase the model's predictive value, allowing a research path model with a loading factor value that increased previously. Based on the loading factor test result, the audit cost variable has eight valid indicators. The IT utilization variable has ten valid indicators. The auditor competency variable has ten valid indicators, and the audit quality variable has eight valid indicators.

The model is said to have good convergent validity with an AVE value >0.5. Based on the PLS result, the AVE value is greater than 0.50 for each variable, as shown in Table 2.

Table 2. Average Variance Extracted (AVE) Value

Variable	AVE Value (> 0,50)	Result
Audit costs	0,598	Valid
Auditor Competence	0,699	Valid
Audit Quality	0,708	Valid
Utilization of Information Technology	0,598	Valid

Thus it can be concluded that the measurement model in this study is valid.

Discriminant Validity can be done using the Fornell-Larker Criterion methods. Good discriminant validity is shown from the Fornell-Larker Criterion value for each construct which must be greater than the correlation between other constructs (Hair et al., 2017). Table 3 is the Fornell-Larker criterion value for determining discriminant validity. Based on the Fornell-Larker criterion estimation results, it is shown that the vertical latent construct correlation value with the indicator is greater than the value of other constructs.

Table 3. Fornell-Larker Criterion Value

Variable	Audit costs	Competence Auditor	Audit Quality	Utilization of IT
Audit costs	**0,774**			
Competence Auditor	0,467	**0,836**		
Audit Quality	0,515	0.,760	**0,841**	
Utilization of Information Technology	0,596	0,720	0,608	**0,773**

Reliability Test used to evaluate the outer model by looking at the construct reliability of latent variables measured by two criteria. Those two criteria are Cronbach's alpha, and the composite reliability of the indicator block measuring constructs with Cronbach's alpha value must be >0.6 or the composite reliability value >0.7. The results are presented in Table 4. The overall value of Cronbach's alpha and the composite reliabi-

Table 4. Reliability Test Result

Variable	Cronbach's Alpha	Composite Reliability	Result
Audit costs	0,903	0,922	Reliable
Competence Auditor	0,952	0,959	Reliable
Audit Quality	0,941	0.,951	Reliable
Utilization of Information Technology	0,925	0,937	Reliable

lity value is above 0.7 and even above 0.90. According to Hair et al. (2017), the composite reliability value >0.90 indicates a small/minor error variant value. Thus it can be concluded that all constructs have good reliability.

Structural Model Testing/Inner Model

Structural model testing is carried out to see the relationship between constructs or latent variables as seen from the coefficient of determination/R-Square (R^2) of the research model. From the inner Model Test results, the variable audit costs, IT utilization, and auditor competence can explain the R-Square (R^2) of 0.611 variants on the overall measurement of audit quality variables. Therefore the model is included in medium/moderate models but has approached the excellent category.

Hypothesis Testing

The t-table is calculated with the provisions of the alpha (α) 0.10 and the degree of freedom (DF) of N-2. The amount of data used in this study was 70, so that DF was 68. Therefore, the t-table value for DF 68 and (α) 0.10 was 1.667. The results of hypothesis testing through bootstrapping procedure are shown in Table 5.

Audit costs have a positive relationship with audit quality because the path coefficient is positive (0.198), the t-statistics is 1.566 (< p-table) and the p-value is also greater than 0.10. In other words, the audit cost variable is not related to the quality of audit results. Therefore, based on the observations, reducing audit costs due to the COVID-19 pandemic will not reduce the quality of BPK audits. This indicates that the budget reallocation during COVID-19 empirically does not affect or will not reduce audit quality. In addition, the audit costs received by auditors in auditing assignments/workloads that the government has provided have empirically not been able to contribute to the improvement of audit quality by BPK auditors. In detail, the test results show that the indicators which explain the income structure is not proportional to the risk and job responsibilities have a more negligible effect on the audit costs variable compared to other indicators. While the indicators that explain the structure of income are by the experience/service period received by the auditors have the highest level of influence on audit quality compared to other indicators in the audit costs variable.

This proves that to obtain quality audit results, BPK should not only focus on costs but must pay attention to the team's composition in the assignment by considering educational background and experience. In addition, the respondents of this study were only functional officers or auditors, not including structural officers. The income received by the auditor is not based on the placement of the type of representative but based on the career path, rank, and class.

The theory of audit costs in El-Gammal's (2012) study states that the determination of audit costs is adjusted to the time required, the services required, and the number of staff required for the audit process. As in theory, it is common knowledge that the

Table 5. Hypothesis Testing

Hypothesis	Path Coefficient	t-statistics	p-value	Results
H1	0,198	1,566	0,118	Not significant
H2	0,025	0.,157	0,875	Not significant
H3	0,654	6,918	0,000	Significant

amount of time required for an audit during the COVID-19 pandemic does not differ much from normal conditions. According to the results of this study, a hefty audit fee does not affect improving audit quality because an audit performed within a long period will not guarantee that the results will increase, depending on the output produced and the stages of the audit procedures performed by the auditor. Thus, the results of this study indicate that the first hypothesis (H1) which states that audit costs have an effect on audit quality during COVID-19 pandemic is not supported.

The utilization of IT has a positive relationship with audit quality because the path coefficient is positive (0.01), and it has a t-statistics of 1.566 < p-table (1.667) also a p-value of 0.8785 or greater than 0.10. In other words, the utilization of IT variable is not related to the audit quality. Based on the observations, the utilization of IT is not effective in improving audit quality. This shows that IT with the Audit Application Information System (Sistem Aplikasi Pemeriksaan Laporan Keuangan, SiAP LK) is still not effective and efficient enough to improve audit quality during the COVID-19 pandemic. This opinion was strengthened by the fact that several respondents acknowledged that they did not agree with the existing application program in supporting the implementation of the audit task and did not agree with the availability of an adequate audit application. On the other hand, most respondents answered agree and strongly agree the support from leadership/management in terms of the use of IT in the audit. That means the leadership/management's support is needed to supports the audit task. The level of influence of the indicator is the highest on audit quality compared to other indicators.

In addition, from the number of respondents, it is apparent that 38 auditors (54.29%) out of 70 respondents use the application less than 3 times during the assignment, even though they have been working as auditors for more than 6 years (74.29%). This shows that auditors who have worked for a long time and senior auditors must continue to renew their interests and abilities in Information Technology.

The IT audit theory in the research conducted by Senft and Gallegos (2008) describes that all types of audits can take advantage of software in order to achieve a more efficient and effective performance. The software helps auditors reduce the amount of time spent on administrative tasks by automating the audit function and integrating information collected as part of the audit process. Based on this theory, according to the results of the research analysis, it has been identified that the use of IT thus far has not been effective in supporting audit activities as the existing application is only limited to the audit work paper documentation. It also has not yet reached the stage of processing audit data, so it is not as expected and actually increases the workload of auditors. Given the situation, the management needs to take into account the standard requirements for IT facilities and infrastructure, both hardware and software in order to meet the auditors' needs. In addition, it is necessary to update the application so that the menu available in the application is in accordance with the auditors' needs. Based on the discussion, the results of this study indicate that the second hypothesis (H2) stating that the effect of IT use on the quality of audit results during the COVID-19 pandemic is not supported.

Auditor competence has a positive relationship with audit quality because the path coefficient is positive (0.654), the t-statistics is 6.918 (> p-table), and the p-value is less than 0.10. These results indicate that the auditor competence variable is effective in improving audit quality. Therefore, a suitable theory and statistical analysis can be a reference for

top management to improve the capabilities and competencies of auditors to develop competencies and adapt to any conditions, including extraordinary events such as the COVID-19 pandemic. By doing so, the audit result can be more precise and has an impact on audit quality. In addition, improving competencies can be done by providing professional certification programs, additional training hours, forums for knowledge transfer, and accurate employee competency mapping, especially in the IT sector. It is critical because the audit result can be used as a reference for governments to determine policy measures and increase the accountability of state financial management in the future.

According to theory, competence refers to education, knowledge, experience, and/or professional knowledge that a person has in auditing and certain matters or fields. Thus, competence is the ability or capability in one's field of expertise (BPK RI, 2017). Based on the analysis in this study, it has been identified that although IT has not been effective and efficient, the auditors were still able to carry out their duties according to their competence. This has been proven by the majority of respondents acknowledging that they agree and even strongly agree that the audit results meet the SPKN, even though they encounter constraints due to the COVID-19 pandemic.

The results of this study are in line with the research conducted by Furiady and Kurnia (2015). They affirmed that an increase in auditors' competencies proves that auditors have curiosity, insight, the ability to face uncertainty and work with teams. According to their research, the most important factor for an audit assignment during the COVID-19 pandemic is the ability of auditors to handle uncertainty. Therefore, the results of this study indicate that the third hypothesis (H3) is supported, which confirms that the competence of auditors affects audit quality.

CONCLUSION

Based on the results of data analysis, it is concluded that the audit costs and IT utilization do not affect the quality of audits by government external auditors, whereas auditor competence has a positive correlation and has a significant effect on audit quality performed by government external auditors. The audit cost variable is not related to the quality of audits by the government's external auditors. Therefore, to obtain quality audit results, BPK as the external auditor should not only focus on costs but must pay attention to the composition of the team in the assignment by considering educational background and experience. The utilization of IT variable has nothing to do with audit quality during the pandemic. Given the situation, BPK needs to consider the standard requirements for IT facilities and infrastructure, both hardware and software, to meet the auditors' needs. Auditor competence has a positive and significant effect on audit quality performed by government external auditors during the COVID-19 pandemic. The result of this study indicates that although IT utilization has not been effective and efficient, the auditors are still able to carry out their duties according to their competence. So BPK must continue to improve the competence of its auditors both in terms of knowledge and ability to adapt in various situations.

This study had several limitations, including the selection of respondents who only consisted of functional officials and was carried out only in three representative offices. The changes or additions of respondents will be able to give different results. Therefore, for further research, the author suggests for adding more respondents, adding new variables, and improving research methods to enrich the research results.

REFERENCES

Adams, M. B. (1994). Agency theory and the internal audit. *Managerial Auditing Journal*, *9*(8), 8–12. DOI: 10.1108/0268690941007 1133

Agoes, S., & Hoesada, J. (2012). *Bunga rampai auditing* (Edisi Kedua). Jakarta: Salemba Empat.

Albitar, K., Gerged, A. M., Kikhia, H., & Hussainey, K. (2020). Auditing in times of social distancing: The effect of COVID-19 on auditing quality. *International Journal of Accounting & Information Management, 29*(1), 169 -178. DOI: 10.1108/IJAIM-08-2020-0128

Amiruddin., Pagalung, G., Kartini., & Arifuddin. (2016). The effects of time pressure, work-family conflict and role ambiguity on work stress and its effect on audit quality reduction behavior. *International Journal of Law and Management, Emerald Publishing Limited*, *10*(12), 1–23. DOI: 10.1108/IJLMA-09-2017-0223

Ardi, N., & Isnayanti. (November, 2019). Structural Equation Modelling-Partial Least Square to determine the correlation of factors affecting poverty in Indonesian provinces. *International Conference on Applied Sciences, Information and Technology*. Padang, Indonesia. DOI: 10.1088/1757-899X/846/1/012054

Arisinta, O. (2013). Pengaruh kompetensi, independensi, time budget pressure, dan audit fee terhadap kualitas audit pada kantor akuntan publik di Surabaya. *Jurnal Ekonomi Dan Bisnis Airlangga, 23*(3), 266–278.

BPK RI. (2014). Decree of the Secretary General of BPK RI Number 139/K/X-XIII.2/4/2014 concerning the Guidelines for the Implementation of Audit Performance Assessment (Keputusan Sekretaris Jenderal BPK RI Nomor 139 Tahun 2014 tentang Petunjuk Pelaksanaan Penilaian Kinerja Pelaksanaan Pemeriksaan pada BPK RI).

BPK RI. (2017). BPK Regulation Number 1 Year 2017 concerning State Financial Audit Standards (Peraturan Badan Pemeriksa Keuangan Republik Indonesia Nomor 1 Tahun 2017 tentang Standar Pemeriksaan Keuangan Negara). Retrieved from http://www. spkn. bpk. go. id.

Cheng, Y. S., Liu, Y. P., & Chien, C. Y. (2009). The association between auditor quality and human capital. *Managerial Auditing Journal, Emerald Insight*, *24*(6), 523–541. DOI: 10.1108/026869009 10966512

Dewi, R. N., Maulana, I., & Muhadzib, M. (2017). The influence of auditor independence, work experience, job satisfaction, and auditor competency against audit quality. *Indonesian Management and Accounting Research*, *16*(2), 47–65. DOI: 10.25105/imar.v16i2.4687

El-Gammal, W. (2012). Determinants of audit fees: Evidence from Lebanon. *International Business Research*, *5*(11), 136–145. DOI: 10.5539/ibr.v5n11p136

Ettredge, M., Fuerherm, E. E., & Li, C. (2014). Fee pressure and audit quality. *Accounting, Organizations and Society, Elsevier*, *39*(4), 247–263. DOI: 10.1016/j.aos.2014.04.002

Eu Gene, S., Yeow, P. H. P., Choon Ling, T., & Grigoriou, N. (2017). Factors affecting IT audit quality□: An exploratory study. *Communications of the IBIMA*, 11. DOI: 10.5171/2017.802423

Furiady, O., & Kurnia, R. (2015). The effect of work experiences, competency, motivation, accountability and objectivity towards audit quality. *Procedia - Social and Behavioral Sciences*, *211*, 328–335. DOI: 10.1016/j.sbspro.2015.11.042

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Los Angeles, USA: SAGE Publication Inc.

Hayes, R. S., Dassen, R., Schilder, A., & Wallage, P. (2007). *Principles of auditing: An introduction to International Standards on Auditing* (Second Edition). Pearson Education Limited.

Hiro, A., & Kei, K. (2020). Examination of factors affecting the utilization of information technology. *IAIC Transactions on Sustainable Digital Innovation (ITSDI)*, *2*(1), 61–68. DOI: 10.34306/itsdi.v2i1.353

Ilmiyati, F., & Suhardjo, Y. (2012). Pengaruh Akuntabilitas dan kompetensi auditor terhadap kualitas audit (Studi empiris pada kantor akuntan publik di Semarang). *JURAKSI*, *1*(1), 43–56.

Indra. (2020). The effect of human resources and information technology on the revaluation of government. *Jurnal Tata Kelola dan Akuntabilitas Keuangan Negara*, *6*(2), 129–142. DOI: 10.28986/jtaken.v6i2.469

Kothari, C. R. (2004). *Research methodology: Method and techniques* (2nd Edition). New Delhi, India: New Age International Publisher.

Kurnianingsih, M., & Rohman, A. (2014). Pengaruh fee audit, audit tenure, dan rotasi audit terhadap kualitas audit. *Diponegoro Journal of Accounting*, *3* (3), 549–558.

Law of The Republic of Indonesia Number 15 Year 2004 concerning The State Financial Management and Accountability Audit (Undang-Undang Republik Indonesia Nomor 15 Tahun 2004 tentang Pemeriksaan Pengelolaan dan Tanggung Jawab Keuangan Negara). Retrieved from https://www.kemenkeu.go.id/sites/default/files/pdf-peraturan/uu%20nomot%2015%20tahun%202004.pdf

Lee, L., Whitworth, J., & Hermanson, S. (2015). The effects of information technology innovativeness on audit efficiencies. *Review of Business Information Systems*, *19*(1), 25–38. DOI: 10.19030/rbis.v19i1.9256

Mardian, S., & Avianti, I. (2019). Improving audit quality: adopting technology and risk management. *International Journal of Innovation, Creativity and Change, 8*(3), 89-103.

Mazza, T., Azzali, S., & Fornaciari, L. (2014). Audit quality of outsourced information technology controls. *Managerial Auditing Journal, Emerald Insight*, *29*(9), 837–862. DOI: 10.1108/MAJ-10-2013-0956

Ningrum, G. S., & Wedari, L. K. (2017). Impact of auditor's work experience, independence, objectivity, integrity, competency, and accountability on audit quality. *Journal of Economics & Business, Atma Jaya*, *01*(1), 019–033.

Nugroho, B., & Fitriany. (2019). Impact of abnormal audit fees on audit opinion and quality in ASEAN countries. *Pertanika Journal of Social Sciences and Humanities*, *27*(2), 1959–1977.

Nurintiati, A. A., & Purwanto, A. (2017). Pengaruh tenure KAP, ukuran KAP, spesialisasi auditor dan audit fee terhadap kualitas audit dengan moderasi komite audit. *Diponegoro Journal of Accounting*, *6*(1), 100–112.

Primastuti, F. D., & Suryandari, D. (2014). Pengaruh time budget pressure terhadap kualitas audit dengan independensi sebagai variabel intervening (Studi kasus pada BPK RI Perwakilan Provinsi Daerah Istimewa Yogyakarta). *Accounting Analysis Journal*, *3*(4), 446 –456. DOI: 10.15294/aaj.v3i4.4206

Ramadhan, I. N., & Laksito, H. (2018). Pengaruh reputasi Kantor Akuntan Publik (KAP), audit tenure, dan biaya audit terhadap kualitas audit. *Diponegoro Journal of Accounting*, *7*(4), 1–13.

Rifai, A. (2015). Partial Least Square-Structural Equation Modeling (PLS-SEM) untuk mengukur ekspektasi penggunaan repositori lembaga (Pilot studi di UIN Syarif Hidayatullah, Jakarta). *Jurnal Komunikasi dan Informasi Perpustakaan Al-Maktabah, 14*(1), 56–65.

Salehi, M., Jafarzadeh, A., & Nourbakhshhosseiny, Z. (2017). The effect of audit fees pressure on audit quality during the sanctions in Iran. *International Journal of Law and Management*, *59* (1), 66–81. DOI: 10.1108/IJLMA-10-2015-0054

Sekaran, U., & Bougie, R. (2010). *Research methods for business a skill building approach*. New Jersey, United States: Wiley Publisher.

Senft, S., & Gallegos, F. (2008). *Information technology control and audit* (Third Edition). United States: Auerbach Publications.

Supriadi, T., Mulyani, S., Soepardi, E. M., & Farida, I. (2019). Influence of auditor competency in using information technology on the success of e-audit system implementation. *EURASIA J Math Sci Tech, 15*(10). DOI: 10.29333/ejmste/109529

Thottoli, M. M., & Thomas, K. V. (2020). Characteristics of information communication technology and audit practices: Evidence from India. *VINE Journal of Information and Knowledge Management Systems*. DOI: 10.1108/VJIKMS-04-2020-0068

Tjun, L. T., Marpaung, E. I., & Setiawan, S. (2012). Pengaruh kompetensi dan independensi auditor terhadap kualitas audit. *Jurnal Akuntansi*, *4*(1), 33–56.

Zahmatkesh, S., & Rezazadeh, J. (2017). The effect of auditor features on audit quality. *Tékhne*, *15*(2), 79–87. DOI: 10.1016/j.tekhne.2017.09.003

Zam, D. R. P., & Rahayu, S. (2015). Pengaruh tekanan anggaran waktu (time budget pressure), fee audit dan independensi akuntan publik di wilayah Bandung). *E-Proceeding of Management*, *2*(2), 1800–1807.

APPENDICES

Appendix 1. Indicators of Variables

Variable Description	Dimension	Indicator
Audit Cost (X1) Defines cost audits as the amount of costs depending on, among others, the risk of the assignment, the complexity of the services provided, the level of expertise required to carry out these services, the cost structure and other professional considerations (Agoes & Hoesada, 2012)	1. Assignment risk	a) The risks and scope of audits received by auditors during COVID-19 pandemic (BA1)
	2. The complexity of the services provided	a) The large amount of information processed by the auditor (BA2) b) The number of procedures that must be undertaken (BA3)
	3. Skill level	a) Auditor education (BA4)) b) Experience of auditors (BA5)
	4. Cost Structure	a) Appropriate Salary (BA6) b) Other benefits other than salary (BA7) c) Overhead expenses related to inspection assignments (BA8) d) Number of hours available for a given period (BA9)
Utilization of Information Technology (X2) Several indicators of the utilization of information technology are an environmental factor, personal feelings, task suitability, long-term consequences (complexity), long-term consequences, enabling conditions, and use of information technology (Thompson et al., 1991 in Hiro & Kei 2020).	1. Environmental factor	a) Motivation of peers in the team (TI1) b) Leadership support (TI2) c) Organizational support (TI3)
	2. Personal Feelings	a) Work pleasantly supported by information technology (TI4) b) Interesting task (TI5)
	3. Task suitability	a) Application of support tasks (TI6) b) Interesting tasks use more information technology (TI7)
	4. long-term consequences -complexity	a) Advancing career (TI8) b) Flexibility at work (TI9)
	5. Facilitating conditions	a) Adequate hardware and software available (TI10) b) There is an inspection application program guide (TI11) c) Helpdesk is available in case of difficulties (TI12)
	6. Uses	a) Intensity of use of inspection applications (TI13) b) Number of applications available (TI14)

Variable Description	Dimension	Indicators
Auditor Competence (X3) The audit performance assessment (Penilaian Kinerja Pelaksanaan Pemeriksaan, PKPP) is an individual performance management process consisting of planning, guidance and assessment (BPK RI, 2014).	1. Job goals	a) Audit according to individual work program (KA1) b) Audit according to guidelines (KA2) c) Time according to the set target (KA3)
	2. Non-Technical/ Behavioral Aspects	a) Able to cooperate and engage in a good discussion (KA4) b) Able to clarify data/ information obtained (KA5) c) Attending inspection education and training related to the use of IT (KA6) d) Have an educational background/ expertise in accordance with the exam assignment (KA7)
	3. Technical aspects	a) Able to understand the audit business process (KA8) b) Able to collect data electronically for proof of examination (KA9) c) Able to process data using computer applications during the COVID-19 pandemic (KA10) d) Able to analyze and document evidence of inspection by utilizing information technology (KA11) e) Able to compile examination results properly during the COVID-19 pandemic (KA12)
Audit Quality (Y) Auditors must compile audit results reports in a timely, complete, accurate, objective, convincing, clear and concise (BPK RI, 2017).	1. Accuracy	a) Commitment to complete the audit on time (AQ1) b) The audit results provide information that is supported by sufficient and complete evidence (AQ2) c) Commitment to complete the audit on time (AQ1) d) The audit results provide information that is supported by sufficient and complete evidence (AQ2)
	2. Objective	a) Balanced and impartial (AQ4) b) Honest and in accordance with facts in the field (AQ5)
	3. Relevant	a) Balanced and impartial (AQ4) b) Honest and in accordance with facts in the field (AQ5)
	4. Reassuring	a) Report all findings supported by clear information and strong evidence (AQ8)
	5. Clear and Concise	a) The audit report is cross-reviewed for quality assurance (AQ9) b) Audit reports are verified in stages to provide adequate information (AQ10)

Appendix 2. Loading Factor Indicator Value

Indicators	Audit Cost	Use of IT Audit Quality	Auditor Competence	Audit Quality	Results
BA1	0,705				Valid
BA2	0,698				Invalid
BA3	0,712				Valid
BA4	0,875				Valid
BA5	0,867				Valid
BA6	0,741				Valid
BA7	0,756				Valid
BA8	0,799				Valid
BA9	0,712				Valid
TI1		0,588			Invalid
TI2		0,780			Valid
TI3		0,734			Valid
TI4		0,682			Invalid
TI5		0,673			Invalid
TI6		0,702			Valid
TI7		0,764			Valid
TI8		0,682			Invalid
TI9		0,798			Valid
TI10		0,784			Valid
TI11		0,816			Valid
TI12		0,780			Valid
TI13		0,776			Valid
TI14		0,789			Valid
KA1			0,613		Invalid
KA2			0,685		Invalid
KA3			0,784		Valid
KA4			0,830		Valid
KA5			0,836		Valid
KA6			0,735		Valid
KA7			0,839		Valid
KA8			0,902		Valid
KA9			0,862		Valid
KA10			0,815		Valid

Indicators	Audit Cost	Use of IT Audit Quality	Auditor Competence	Audit Quality	Results
KA11			0,885		Valid
KA12			0,859		Valid
AQ1				0,794	Valid
AQ2				0,644	Invalid
AQ3				0,844	Valid
AQ4				0,880	Valid
AQ5				0,900	Valid
AQ6				0,825	Valid
AQ7				0,549	Invalid
AQ8				0,915	Valid
AQ9				0,825	Valid
AQ10				0,820	Valid