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Foreword

The development of the global economy and environment is changing rapidly. The COVID-19 pandemic, which has hit the entire world, has impacted changes in the pattern of digitizing activities in all fields, including in the public sector. Public governance continues to become more complex, and stakeholders are increasingly seeking results-oriented accountability. Along with the government's transformation in responding to these changes, BPK, as a supreme audit institution tasked with auditing the government's accountability in managing state finances, must also evolve. BPK must continuously adapt to become agile and effective also remain an independent institution.

Auditing approaches, methodology, organizational culture improvements, and innovations must always be carried out but adhere to standards and laws. Auditors should meet auditing standards by using professional judgment and maintaining professional skepticism throughout the audit. The role of auditors is therefore essential. Nevertheless, this role is often misunderstood because different stakeholders have different expectations of what an audit is and what the auditors should do.

The audit expectation gap always looms since the public's expectations will continue to build up, as discussed in the article "An Investigation of Audit Expectation Gap in Indonesia's Public Sector." The study aims to investigate to what extent the audit expectation gap occurs in Indonesia's public sector. It also examines the effectiveness of the additional information in the audit report as mandated by the state financial auditing standards.

There is no denying that auditors are expected to provide quality and value-added to audit reports. One approach mostly used by auditors is a Risk-Based Audit (RBA). The article entitled "Ergonomic Interventions in the Implementation of Risk-Based Audit to Overcome Dysfunctional Auditor Behavior" tries to incorporate ergonomics elements to intervene in the weakness of RBA, which does not consider human factors in performing audits.

Environmental protection and promoting environmental accountability are part of the environmental dimension of the development of the SDGs. Promoting environmental accountability lies in the vital role of public sector environmental performance audits. Through a qualitative research method, the article "Assessing Public Sector Environmental Accountability Through Performance Audit: The Case of Maldives" discusses the importance of environmental performance auditing in creating public sector accountability in the Maldives. The article also alluded to the role of the Maldives SAI in creating environmental accountability in the public sector.

The fourth and fifth articles present audit quality during the COVID-19 pandemic. "The Effect of Financial Audit Guidelines and Fraud Detection Awareness on Quality Audit Results During the COVID-19 Pandemic" conclude the importance of auditors' fraud detection awareness and continuous evaluation of the guidelines during the pandemic because auditors face different audit challenges, which is the increased risk of fraud. While "The Effect of Skepticism, Time Pressure, and Remote Audit During the COVID-19 Pandemic on Audit Quality: A Study of Auditors' Perception" shows that remote audit does not moderate the relationship between professional skepticism and audit quality during the pandemic.

Article entitled "The Role of Village Fund Allocation (ADD) in Improving Community Welfare Through Village Potential" aims to study and analyze the effect of village fund allocation on community welfare through village potential. This study employs all provincial governments in Indonesia as the population during 2017-2019 and analyzes using the panel data

FOREWORD

regression. Lastly, the article “Factors Determining Low Regional Financial Independence: Financial Autonomy and Degree of Decentralization” presents a case study on local governments that are obliged to maximize their respective own-source revenues. Those to reduce the ratio of regional financial dependence on central government finances in exercising successful regional autonomy.

Unlimited thanks to the authors who chose Jurnal Tata Kelola dan Akuntabilitas Keuangan Negara as a medium in contributing their ideas and thoughts. We always welcome journal readers to participate through articles with a scope related to governance and accountability of state finances. We also thank reviewers and various parties who helped publish this journal during these years.

Finally, we hope the articles presented in the June 2022 edition can be helpful to enhance the knowledge of readers and become a reference for the development of academics and practitioners also policy formulation.

Editor in Chief



Emmy Mutiarini, S.E., Ak., M.Si., CA, CSFA.

An Investigation of Audit Expectation Gap in Indonesia's Public Sector

Agus Joko Pramono, Riefqi Hanief

Jurnal Tata Kelola dan Akuntabilitas Keuangan Negara, 8(1) 2022: 1 - 21

The audit expectation gap has been studied since the early 1970s, and several approaches have been used to resolve this problem. However, such a gap persists both in the private and public sectors. Meanwhile, there are only a few studies related to this topic in the public sector, so the need to undertake more research in this area is encouraged. This study investigates to what extent the audit expectation gap occurs in Indonesia's public sector. It also examines the effectiveness of the additional information in the audit report as mandated by the state financial auditing standards (SPKN, 2017) in closing the gap. A questionnaire was developed and administered to auditors, government officers, and students to capture their views. ANCOVA and Kruskal-Wallis were used to analyze the data collected from the questionnaires. The study discovered that the audit expectation gap in Indonesia's public sector is related to the auditor's responsibility. Such a gap is also found in frauds and errors in unqualified financial statements.

Keywords:

Audit expectation gap; public sector; audit report; responsibility perception; unqualified

DOI: 10.28986/jtaken.v8i1.674

Ergonomic Interventions in the Implementation of Risk-Based Audit to Overcome Dysfunctional Auditor Behavior

Putri Anggraini, Iis Istianah

Jurnal Tata Kelola dan Akuntabilitas Keuangan Negara, 8(1) 2022: 23-44

It is undeniable that auditors are expected to develop a strong audit plan to produce value-added audit reports. Given the preceding, current practice in auditing shows that many auditors use Risk-Based Audit (RBA) to determine an appropriate audit scope. RBA could effectively guide auditors to define audit scope based on the assessed risk. However, RBA does not consider human factors in performing audits. Consequently, most auditors encounter time budget pressure in meeting tight audit deadlines. Such an issue could adversely affect auditors' productivity and health. On the other hand, ergonomics is a discipline that focuses on human capabilities in completing tasks. The study also guides employees to adapt to the job while improving their well-being and increasing the quality of work results. Therefore, this study aims to intervene the principles of RBA with ergonomics. RBA consists of three stages: risk assessment, response, and reporting. The authors have concluded that ergonomics could intervene in RBA in the risk response step once the risk level is determined in the risk assessment phase by conducting a literature review study. Therefore, the auditors should balance the time budget allocation based on the assessed audit risk (low, moderate, or high). As the entity's risk is high, the audit team should be given an extended time allocation and vice versa. The findings suggest that auditors should develop an appropriate time budget scheme for specific audit procedures based on the assessed risks resulting from RBA implementation.

Keywords:

Risk-based audit; time budget pressure; ergonomics

DOI: 10.28986/jtaken.v8i1.627

Assessing Public Sector Environmental Accountability Through Performance Audit: The Case of Maldives

Rabeea Ibrahim, Aminath Shuaau Mohamed

Jurnal Tata Kelola dan Akuntabilitas Keuangan Negara, 8(1) 2022: 45-63

Keywords:

Public sector environmental accountability; environmental performance auditing; SDGs

Environmental accountability has gained much-needed attention due to the growing concern about climate change and its impact. Given that environmental management has been a function of government, especially in developing countries like the Maldives, the country's economy is dependent on its environment and natural resources, and the numerous efforts by the government toward environmental protection, promoting environmental accountability becomes crucial. At the heart of promoting environmental accountability lies the important role of public sector environmental performance audits. Through a qualitative research method of content analyses and unstructured interviews, this study aims to discuss the importance of environmental performance auditing in creating public sector accountability by alluding to the importance of environmental accountability and SAI Maldives' role in creating public sector environmental accountability.

DOI: 10.28986/jtaken.v8i1.755

The Effect of Financial Audit Guidelines and Fraud Detection Awareness on Quality Audit Results During the COVID-19 Pandemic

Sonly Nendarie, Siti Musyarofah, Tarjo

Jurnal Tata Kelola dan Akuntabilitas Keuangan Negara, 8(1) 2022: 65-80

Keywords:

Pandemic; audit; fraud; financial statements; COVID-19

Many elements of society have experience disadvantages as a result of an array of problems in financial reporting. Given the preceding situation, a financial statement audit conducted by the auditor as an independent party is expected to achieve reliable audit quality. However, under the current situation of the pandemic, the auditor faced numerous challenges that have never been encountered before in carrying out audits. An Auditor must be more creative in conducting audits and comply with audit standards. The possibility of fraud risk in financial audits is also greater during the pandemic. This study aims to explain the role of financial audit guidelines and fraud detection awareness in providing quality audit results during the COVID-19 pandemic. This research was conducted upon auditors of BPK Representative of East Java province who were involved in financial audits. There were 91 respondents involved in this study. The research method applied multiple regression data analysis with the Partial Least Squares (PLS) approach through the help of the SmartPLS 3.0 program. The study would produce financial audit guidance variables and fraud detection awareness that will significantly positively affect quality audit results.

DOI: 10.28986/jtaken.v8i1.842

The Effect of Skepticism, Time Pressure, and Remote Audit During the COVID-19 Pandemic on Audit Quality: A Study of Auditors' Perception

Kristiyanto Bayu Saputro, Ratna Mappanyukki

Jurnal Tata Kelola dan Akuntabilitas Keuangan Negara, 8(1) 2022: 81-98

This study aimed to determine the impact of professional skepticism, audit time pressure, and remote audit during the COVID-19 pandemic on audit quality and the effect of remote audits on the relationship between professional skepticism and audit quality. The study was conducted through a questionnaire survey to The Audit Board of The Republic of Indonesia (BPK RI) auditors and analyzed using Smart PLS quantitative analysis methods. The results showed that professional skepticism, audit time pressure, and remote audit affected audit quality. Meanwhile, the remote audit does not moderate the relationship between professional skepticism and audit quality, classified as predictor moderation.

Keywords:

Audit quality;
remote audit;
skepticism; time
pressure; COVID-
19

DOI: 10.28986/jtaken.v8i1.914

The Role of Village Fund Allocation (ADD) in Improving Community Welfare Through Village Potential

Eva Herianti, Litdia

Jurnal Tata Kelola dan Akuntabilitas Keuangan Negara, 8(1) 2022: 99-115

Corruption in village fund allocation involving village officials has become a grave concern for the government. This condition will undoubtedly reduce the community's welfare, given that village fund allocation is used to satisfy personal gains instead of fulfilling the primary needs of the community. Therefore, this study aims to examine and analyze the effect of village fund allocation on community welfare through village potential. The sample of this study comprises provincial governments using the purposive sampling method, which reports village financial data from 2017 to 2019. The panel data regression method was used in this study to test the hypothesis with the help of Eviews version 11. This study revealed that the allocation of village funds had a positive and significant effect on community welfare. However, village potential cannot strengthen the influence of village fund allocation on community welfare. This study also discovered that the level of community welfare was high due to the village revenue effectiveness. However, no significant difference was found under the category of village spending efficiency on community welfare. In other words, village fund allocation that is spent optimally by the village government for its various strategic programs will positively impact community welfare. This study aims to address the gap found in previous literature by formulating the measurement of the variable allocation of village funds and village potential, which is still limited by using secondary data.

Keywords:

Village fund
allocation; village
potential;
community
welfare

DOI: 10.28986/jtaken.v8i1.752

Factors Determining Low Regional Financial Independence: Financial Autonomy and Degree of Decentralization

Frida Agustina, Agus Joko Pramono, Bahrullah Akbar, Alma'arif

Jurnal Tata Kelola dan Akuntabilitas Keuangan Negara, 8(1) 2022: 117-130

Keywords:

Financial
autonomy; local
government;
mandatory
spending

This study aims to assess the Tulang Bawang Regency's fiscal independence and determine the factors that affect it. This study used the data of the 2015-2019 Statement of Budget Realization of Tulang Bawang Barat Regency and primary data from interviews. The research method applies a qualitative approach with an inductive methodology using several financial ratios such as the effectiveness of Local Own-source Revenue management, the ratio of the degree of decentralization, the ratio of regional financial dependence, and the ratio of regional financial independence. Based on the results, the ratio of regional financial independence shows an average of 1.54%, within the 0-25% interval, and classified under the shallow criteria. It may be inferred that regional financial independence in meeting its funding needs for the administration of government affairs is still very low. The regional financial dependence ratio shows an average of 85.99%, categorized as a very high dependency. The calculation of the ratio results proves that the local own-source revenue of Tulang Bawang Barat Regency is still low. Furthermore, a large number of mandatory spending from the central government and national budgeting politics causes the regional financial independence of Tulang Bawang Barat Regency to become low.

DOI: 10.28986/jtaken.v8i1.701

An Investigation of Audit Expectation Gap in Indonesia's Public Sector

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ABSTRACT

The audit expectation gap has been studied since the early 1970s, and several approaches have been used to resolve this problem. However, such a gap persists both in the private and public sectors. Meanwhile, there are only a few studies related to this topic in the public sector, so the need to undertake more research in this area is encouraged. This study investigates to what extent the audit expectation gap occurs in Indonesia's public sector. It also examines the effectiveness of the additional information in the audit report as mandated by the state financial auditing standards (SPKN, 2017) in closing the gap. A questionnaire was developed and administered to auditors, government officers, and students to capture their views. ANCOVA and Kruskal-Wallis were used to analyze the data collected from the questionnaires. The study discovered that the audit expectation gap in Indonesia's public sector is related to the auditor's responsibility. Such a gap is also found in frauds and errors in unqualified financial statements.

KEYWORDS:

Audit expectation gap; public sector; audit report; responsibility perception; unqualified

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INTRODUCTION

In a recent development, the audit profession has focused on improving audit quality following the global financial crisis, company failures, and scandals in many countries. Auditors are constantly criticized whenever businesses fail, or auditors fail to detect fraud after an unqualified audit opinion (Ruhnke & Schmidt, 2014). When auditors issue an unqualified/unmodified opinion on a financial statement, it implies that the financial statement presents an accurate and fair view in all material respect (International Standard on Auditing (ISA) 700 Revised, 2016). However, frequently, an unqualified opinion is perceived by users as an absolute assurance that their financial statement is free from any fraud and error. Previous studies reported that the public's expectation of auditors' responsibilities exceeded auditors' actual responsibilities, referred to as an audit expectation gap (Ruhnke & Schmidt, 2014).

Literature renders different definitions to express the audit expectation gap. Researchers, professional bodies, and related parties in the audit practice agree that the audit expectation gap remains an important topic in the audit practice, an issue that needs to be resolved, regardless of the various definition and underlying explanations of the existence of the gap. The audit expectation gap threatens the legitimacy of the audit profession, which can pose a severe problem to the profession (Ruhnke & Schmidt, 2014). An institution must be able to meet the public's expectations in order to be legitimate in the eyes of the public, or if it cannot fulfill the public's expectation, the organization has to communicate and justify why such condition cannot be achieved (Unerman & Deegan, 2011).

In resolving the matter, Porter (1993) expands the concept of the audit expectation

gap. She argues that audit expectation comprises two variables, notably reasonableness gap and performance gap. The reasonableness gap is the difference between what the public expects auditors to accomplish and what the auditor reasonably could achieve. In contrast, the performance gap is the difference between what the public could reasonably expect auditors to achieve and what auditors believe in achieving. Several researchers use this model (e.g., Köse & Erdogan, 2015; Masoud, 2017) to analyze the audit expectation gap.

In an attempt to analyze the cause of the audit expectation gap more recently, Ruhnke and Schmidt (2014) introduced three types of failure attributed to the audit expectation gap: the public's failure, the auditor's failure, and the standard's failure. Failure of the public exists when the public does not recognize the responsibilities and capabilities of the auditor as mandated by the standard and regulation, or there is a divergence between auditors' actual performance and auditors' performance as perceived by the public. Failure of the auditor occurs when the auditor fails to fulfill their responsibilities or view their duties that differ from the standard and regulation. Failure of the standard-setter exists when the current audit standard could not communicate auditors' responsibility clearly to the public or provide an inconsistent standard.

As stated by Porter (1993), failure of the public relates to a reasonable gap, while the failure of the auditor refers to a performance gap. Both Porter (1993) also Ruhnke and Schmidt (2014) agree that examining the specific area where the audit expectation gaps exist are important in determining the effective approach to close or narrow the audit expectation gap. Thus, while investigating the gap existence, this study also attempts to investigate the cause of the gap in Indonesia's public sector based on the concept of

Ruhnke and Schmidt (2014), focusing only on the failure of the public and the failure of the auditor. The failure of the standard-setter is not observed as it requires respondents to read and interpret specific standards. At the same time, this study aims to analyze financial statement users' perceptions of an audit report.

The audit profession encompasses both the private and public sectors. While audit techniques are similar in both sectors, auditors in the public sector have a broader role due to different institutional and legal backgrounds (Jones & Pendlebury, 2000). Their duty is not limited to providing assurance regarding the financial statements but also assessing the stewardship and performance of government policies, programs, and operations (International Organization of Supreme Audit Institutions – INTOSAI, 2013). The audit report users (users of financial statements) include but are not limited to societies, parliament members, regulatory/oversight agencies, audit institutions, other parties who partake in the process of donation, investment, and loans, as well as the government (Government Regulation Number 71 of 2010). These significant roles and various users potentially lead to the development of the audit expectation gap in the public sector if users do not have sufficient knowledge of auditing or auditors are not aware of their responsibilities. Most of the research that addresses the audit expectation gap was conducted in the private sector and left the gap in the public sector remain unexplored. Only a few studies have examined the gap in the public sector. The study to analyze the approach to narrow the gap is limited to one approach (the influence of education).

Specific statutes and regulations resulted in public sector audit being administered and executed by different institutions than auditing private company accounts (Jones & Pendlebury, 2000). This institution refers to the

supreme audit institution, an oversight body for the Government, which the Constitution establishes. The Audit Board of the Republic of Indonesia (BPK) is an institution responsible for auditing government bodies and state-owned enterprises in Indonesia. BPK acts as an independent auditor for the Indonesian Government and a standard-setter for public sector audits. In January 2017, BPK issued a new State Financial Auditing Standard (Standar Pemeriksaan Keuangan Negara, SPKN 2017), replacing the previous standard used, which remained unchanged since 2007. The new standard comprises of general standard (Standar Pemeriksaan Keuangan Negara-Pernyataan Standar Pemeriksaan, SPKN-PSP 100), audit practice standard (SPKN-PSP 200), and audit reporting standard (SPKN-PSP 300).

This new audit reporting standard now provides an audit report template, thereby standardizing the audit reports' structure and wording. The standard requires auditors to explain BPK's responsibility and the Government's responsibility for the financial statements in the audit report. The new standard aims to improve the quality of audit reports so that the message conveyed by the auditors can be perceived by the users as intended. The first objective of this study is to investigate the existence of the audit expectation gap in Indonesia's Public Sector. The second purpose of the study is to examine whether additional information in the audit report concerning the responsibility of the Government and the auditor, as mandated by the SPKN 2017, can close the audit expectation gap.

This research contributes to the study concerning the audit expectation gap in the public sector in two main ways. First, it provides additional evidence of the existence of the gap (in Indonesia's public sector). Investigating the existence of the gap is the first step in aligning the audit practice and the public's

expectation of the audit practice. Second, it examines the effectiveness of the additional information in the audit report in closing the gap which has never been examined before in the public sector. This examination will help the standard-setter develop and design an effective audit report format to communicate the audit result and reduce the expectation gap.

LITERATURE REVIEW

The Theoretical Framework

This study investigates any different perceptions between the auditors and the users of the financial statement in the current state, focusing on the gap caused by the public's failure and the failure of the auditor (Ruhnke & Schmidt, 2014). These failures indicate that the public does not have sufficient information regarding the audit or that the auditor fails to understand their responsibilities. As a result, additional information on the related matter possibly shifts their perception and reduces the gap.

Provided that the second objective of this study is to examine the effectiveness of the new audit report format in resolving the gap issue, the gap area will be focused on the auditors' responsibility, the government's responsibility, and the unqualified opinion of the financial statements. These variables are where the standard-setter aims to improve user understanding through the audit report.

The theoretical framework is developed, as seen in Figure 1.

The existence of audit expectation gap in Indonesia

Early studies on audit expectation gap report the existence of such in the UK (Hatherly, Innes, & Brown, 1991; Innes, Brown, & Hatherly, 1997), USA (Kneer, Reckers, & Jennings, 1996), New Zealand (Porter, 1993; Porter, Hógartaigh, & Baskerville, 2012), and Australia (Monroe & Woodliff, 1994). Followed by recent studies in other parts of the world, such as in Libya (Masoud, 2017), The Netherlands (Litjens, Buuren, & Vergoossen, 2015), Turkey (Köse & Erdogan, 2015), Lebanon (Sidani, 2007), China (Lin & Chen, 2004), Malaysia (Fadzly & Ahmad, 2004), and Singapore (Best, Buckby, & Tan, 2001). These studies signal that the gap is not unique to a particular country or region. In Indonesia, research on audit expectation has been done in the scope of Local Government (e.g., Yulianti, Winarna, & Setiawan, 2007; Rusliyawati, 2007; Setyorini, 2010; and Yandi, 2015) and has reported the existence of an audit expectation gap. These studies in various regions of Indonesia provide some insight to predict the existence of the gap in the broader scope of the central government.

The previous research involved participants with different degrees of knowledge and experience in audit and financial reporting, composed of financial analysts (Porter, 1993), bankers (Lin & Chen, 2004), supervi-

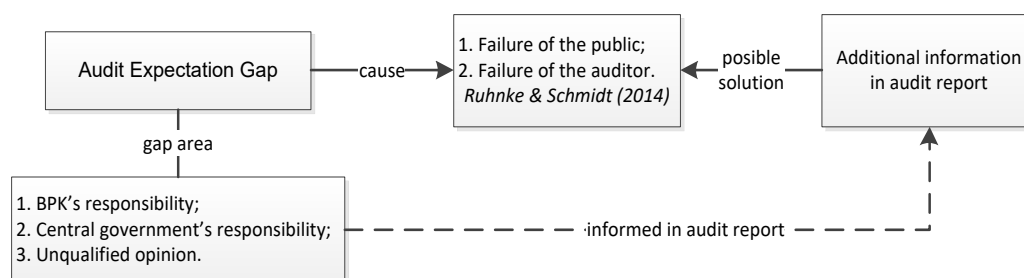


Figure 1. Theoretical Framework

sory board members (Ruhnke & Schmidt, 2014), government officials (Lin & Chen, 2004), judges (Lowe, 1994), a financial journalist (Ruhnke & Schmidt, 2014), and students (Gold, Gronewold, & Pott, 2012). There are frequent discoveries that users with more experience and knowledge of auditing have a slightly different perception of auditors than the gap between auditors and unsophisticated users. Government officials and students are selected in this study to represent users of the audit report.

In the public sector, Chowdhury, Innes, and Kouhy (2005) observed the different perceptions regarding audit reporting, accountability, auditor independence, auditor competence, audit evidence, and performance audit between the Supreme Audit Institution of Bangladesh (Comptroller and Auditor General, CAG) and the financial statement users, represented by Public Accounts Committee of the Parliament and International Funding Agencies. However, the study did not emphasize the influence of users' experience or knowledge on the audit expectation gap even though they compared the perception between the user groups. The result reports a different perception in those dimensions between the groups. The user groups believe that the audit report and auditor's performance should be improved as it has not satisfied their expectation. In contrast, the auditors perceive that they have accomplished their tasks and fulfilled their responsibilities. Even though they did not empirically analyze an approach to reduce the gap, they suggested that training provided to all parties involved may narrow the gap.

In Romania, Dana (2011) focused on students' perception concerning auditor's independence, public auditor's responsibility, and credibility to be compared with a benchmark based on literature (e.g., international published articles, audit standards and manuals, and information from Romanian Court

of Account). The research reports that students who have finished an advanced audit course have a different perception regarding auditor's independence, public auditor's responsibility, and credibility compared to the benchmark. However, the gap between the students who have not completed the course and the benchmark is bigger. Dana's study supports Chowdhury et al. (2005), confirming that training for specific users may be provided to narrow the gap. However, financial statement users in the public sector are widely diverse. Therefore, assuming that all financial statement users have formal education in accounting or auditing is somehow unrealistic. This implies that the gap between auditors and users with less knowledge remains unresolved.

Assuming the previous studies in Indonesia pointed out that an audit expectation gap exists in the scope of local authorities, and the conclusion in other countries regarding the existence of the gap can be generalized to a broader scope of Indonesia, it is predicted that the audit expectation gap in the context of central government still exists. However, given that government officials have more experience in government accounting practice and financial management, their perception of audits may be closer to the auditor. On the other hand, students who do not have any experience with government practice may ascribe responsibility to auditors. In connection with the preceding, the hypothesis proposed are:

- H1a: BPK's auditors and the report users (i.e., government officers and students) have a significantly different perception of BPK's responsibility under the new state audit report standard.
- H1b: BPK's auditors and the report users (i.e., government officers and students) have a significantly different perception of the central government's responsibility under the new state audit report standard.

H1c: BPK's auditors and the report users (i.e., government officers and students) have a significantly different perception of unqualified audit opinion responsibility under the new state audit report standard.

The Effectiveness of Additional Information in Closing The Gap

As indicated, the study in the public sector is limited in examining the influence of education in narrowing the gap. This study extends the previous study in the public sector by considering another possible approach (additional information in the audit report) to reduce the gap which has not been empirically examined in the public sector. For that reason, this study focuses on the capability of an audit report in influencing the reader's perception by referring to the studies in the private sector.

Monroe and Woodliff (1994) studied the wording change of audit reports in Australia. They pointed out that the modified wording impacts the view of the financial statement users related to the nature of the audit and the responsibilities of auditors and the management. Kneer *et al.* (1996) also agreed that users' perception of auditors' responsibilities could be influenced by language style in the audit report. However, Chong and Pflugrath (2008) explained that different formats of audit reports, including one with plain language, did not significantly affect readers' perceptions.

In the different types of audit report modification, Hatherly *et al.* (1991) examined the ability of expanded audit reports based on Statement on Auditing Standards (SAS) 58 to shift readers' perception in the UK. Compared to the short form of the audit report, which was used in the UK at the time of the study, the expanded version included a description of managers' responsibility and au-

ditors' responsibility, including the scope and nature of the audit. The result showed that the expanded report shifted readers' perception, thereby reducing the gap. Miller, Reed, and Strawser (1993) support the notion that additional information affects the perception of audit report users. Based on their observation, bank loan officers who read audit reports containing a paragraph specifying the responsibilities of the management and auditors and the audit scope have a better understanding of the responsibilities.

In addition, a survey conducted by Ruhnke and Schmidt (2014) in Germany revealed that the users of audit reports had the view that change in audit reporting had a significant influence to narrow the audit expectation gap compared to institutional change. In a slightly different experiment, Fadzly and Ahmad (2004) suggest that reading material informing users effectively provides a better understanding of the auditors' responsibilities and removes misconceptions regarding the responsibilities to prepare financial statement accounts between auditors and investors. However, Gold *et al.* (2012) and Litjens *et al.* (2015) concluded that the role of additional information in the audit report in closing the audit expectation gap was limited. The reason is that the information provided could not affect users' existing perception of what the auditor should be capable of doing and what information should be included in financial statements and audit reports.

As previously described, the attempt of the studies to examine the effectiveness of various audit reports modifications to narrow the audit expectation gap could not conclude the same result. Such mixed results indicate two issues. First, the audit expectation gap may not be removed, taking into account that public expectation constantly changes due to uncertainties in the related environ-

ment (Dana, 2011; Ruhnke & Schmidt, 2014). Ergo, any approaches applied to close the gap can only be effective temporarily, and as soon as the public's expectations change, the gap will again manifest. Second, a particular method may be only effective in certain conditions. Examining the same method in a different setting is essential (Gold *et al.*, 2012).

Concerning the capability of the modified audit report to close the gap, several studies reported that wording changes and additional information in the audit report are deemed effective to improve users' understanding of the audit. On the contrary, some studies presented a different result. Those studies argued that the effect of such modification was not significant in shifting users' perceptions. Given these mixed results and the fact that there is no previous study examining a similar approach in the public sector, it is difficult to expect any results. However, given the evidence that more informed financial statement users (users with more experience and knowledge) lead to a smaller degree of a gap, it can be predicted that additional information could narrow down the audit expectation gap. With the assumption that users pay attention and understand the information provided. Ergo, the following hypotheses of this study are:

H2a: Additional information in the audit report reduces the differences in perception between BPK's auditors and the report users (i.e., government officers and students) concerning BPK's responsibilities.

H2b: Additional information in the audit report reduces the differences in perception between BPK's auditors and the report users (i.e., government officers and students) concerning Central Government's responsibilities.

H2c: Additional information in the audit report reduces the differences in perception between BPK's auditors and the

report users (i.e., government officers and students) concerning unqualified audit opinions.

RESEARCH METHOD

This study is intended as an empirical study of Indonesia's public sector and employs questionnaires to collect data. The study uses a quantitative approach which implies that research involving the collection of quantitative data (numerical data) and data analysis (Bryman, 2016) can verify or falsify the hypothesis. The participants were selected based on an assessment to meet the research objectives. The participating auditors (senior engagement team members) in BPK were assigned to conduct central government audits. Senior auditors are assumed to have more knowledge and understanding than junior auditors due to their experience regardless of the quality standards applied at BPK, which require all auditors to master competencies. Hence, their responses represent the nature of central government audits.

Users of financial statements are drawn from two different groups based on their experience in public sector financial reporting and auditing, following most of the research in this area (e.g., Fadzly & Ahmad, 2004; Chowdhury *et al.*, 2005; Dana, 2011; Gold *et al.*, 2012). Government officers from the Ministry of Finance with more than five years of experience were asked to participate in this study. This group represents experienced and internal users. It is assumed that based on their experience in government financial management and their involvement in preparing the financial statement, they would have sufficient information regarding audit and financial reporting.

Students studying at the Indonesian State College of Accountancy (PKN STAN) were

invited to participate in this study to represent inexperienced and external users. The information regarding an audit for this group is only provided from courses and classes without having experience in real-world practice. As a result, their audit knowledge is limited by the courses and classes they enroll in. This selection of financial statement users' groups allows the study to observe users' perceptions from two different perspectives.

Most of the studies on audit expectation gaps use questionnaires to extract participants' perceptions concerning the gap variables studied. The variables of the gap focused on in this study are BPK's responsibility, the central government's responsibility, and an unqualified opinion. BPK's responsibility is the responsibility attached to the auditor in conducting an audit, while the central government's responsibility is the responsibility of the government related to financial reporting and management. An *unqualified opinion* is an essence that characterizes the unqualified audit opinion. A questionnaire adapted from the instrument used in several studies was developed to extract the partici-

pants' perceptions concerning these variables (Gold *et al.*, 2012; Holt & Moizer, 1990; Hatherly *et al.*, 1991; Miller *et al.*, 1993; Ruhnke & Schmidt, 2014).

Table 1 illustrates the main questionnaire items in this study. Question 1 assesses the extent to which the participants assign the responsibility related to fraud and misappropriation of assets detection and prevention, the effectiveness of internal control, and the preparation and accuracy of the financial statement toward the auditor (relate to H1a & H2a). Question 2 assesses the extent to which the participants assign responsibility to fraud and misappropriation of assets detection and prevention, the effectiveness of internal control, and the preparation and accuracy of the financial statement toward the central government (relate to H1b & H2b). Question 3 assesses the perception of the participants regarding the unqualified audit opinion on financial statements (relate to H1c & H2c).

All the items in the questionnaire were scored on 5-point Likert Scale and labeled

Table 1. Instrument to Assess the Audit Expectation Gap

Q1. BPK is responsible for (H1a; H2a):
Detecting all fraud and misappropriation of assets (1);
Preventing all fraud and misappropriation of assets (1);
The effectiveness of internal control of the entity (1);
Preparing and producing the financial statements (1);
The accuracy of the financial statements (1).
Q2. The Central Government is responsible for (H1b; H2b):
Detecting all fraud and misappropriation of assets (5);
Preventing all fraud and misappropriation of assets (5);
The effectiveness of internal control of the entity (5);
Preparing and producing the financial statements (5);
The accuracy of the financial statements (5).
Q3. The unqualified financial statements mean that (H1c; H2c):
Report users can have absolute assurance that financial statements are free from material misstatements (1);
The audited financial statements present a true and fair view of the financial position of the entity (1);*
The entity is free from fraud (1);
The audited financial statements comply with accepted accounting practice (1);*
The audited financial statements contain no errors (1).
Q4. Does the audit report above provide an explanation about the responsibility of the central government and the BPK? (Yes/No)
*Reverse scoring.

with 'strongly disagree' (score 1) at one end and 'strongly agree' (score 5) at another end. Participants were requested to rate all of the main items in the questionnaire using this scale. However, reverse scoring was applied to two items that measure the perception regarding unqualified opinions (see Table 1). Ergo, for these items, score one labeled as 'strongly agree' while the 'strongly disagree' label weighted 5 points. This data transformation (i.e., reverse scoring) maintains consistency in the response scoring (Sekaran & Bougie, 2016).

The expected score for all items concerning BPK's responsibility variable is 1, while the expected score for all the elements concerning the central government's responsibility variable is 5. Hence, the responsibilities concerning fraud and misappropriation of assets detection and prevention, the effectiveness of internal control, also the preparation and accuracy of the financial statement are more appropriately attached to the central government than BPK's auditor. The expected score for all items regarding the variable of the unqualified financial statement is 1. Thus, the unqualified financial statements do not indicate that users can have absolute assurance that financial statements are free from material misstatements, the entity is free from fraud, and the audited financial statements contain no errors. The unqualified financial statements imply that the audited financial statements present an accurate and fair view of the entity's financial position also comply with accepted accounting practice.

One of the purposes of this study is to examine the ability of additional information in the audit report to influence the readers' perception. Cramer (1994) explained that two important structures were applied in examining the effect of one or more variables' alteration on the other variables. First, only the existence of the variables whose effects are examined should be varied, and, second, the partic-

ipants should be randomly assigned to the circumstance representing these differences. Hence, two versions of the questionnaire were generated. Questionnaire 1 contains unqualified audit reports (full-version), which include additional information about the responsibilities of the auditor and central government as suggested by the SPKN-PSP 300. In contrast, Questionnaire 2 has an opinion-only audit report (short-version), excluding additional information. Notwithstanding the audit report provided, both questionnaires have the same questions. Thus, the only difference between those questionnaires was the explanation paragraph related to the responsibilities of the auditor and central government.

The data collection was conducted via a web-based survey administered with cloud-based software. An invitation email that includes a link to the questionnaire was sent to 360 senior auditors in BPK, 300 government officers in the Ministry of Finance, and 150 students in PKN STAN. The link was set to direct the participants randomly to one of the questionnaires to avoid bias. Thereby each respondent had an equal probability of being assigned to either questionnaire. The participants were asked to read an unqualified audit report before being asked to rate their opinion on several statements related to the variables studied. Within each respondent, the order of the statements was randomized to avoid response bias. To check their awareness of the additional information, the participants asked whether the audit report provided in the questionnaire included additional information related to the auditor and central government (Question 4; see Table 1). At the end of the questionnaires, the participants were asked demographic questions (e.g., name, working/studying experience).

The main analysis in this research is to examine the mean difference between re-

spondent groups (test of difference) by using a statistical model. This study applied a parametric test following Gold *et al.* (2012), who examined the audit expectation gap in Germany's private sector. This study used ANCOVA to examine the difference in means between the respondents and the influence of additional information in the audit report on the respondents' perceptions. In addition, Kruskal-Wallis (nonparametric) was used to confirm the result of the main test. Additional Post Hoc Test was undertaken to compare the means between respondent groups. Only the data provided by the respondents assigned to Questionnaire 1 was used to test the first hypothesis. By doing so, the existence of the audit expectation gap under the current state can be determined without being affected by the participants' responses who read the modified audit report (Questionnaire 2). Next, the data collected from both questionnaires were tested to see any significant difference between the responses from both questionnaires.

RESULT AND DISCUSSION

The initial sample consisted of 360 auditors, 300 government officers, and 150 students. Responses were received from 100 auditors;

most had 5-10 years of work experience (74%), while the rest had been an auditor for more than a decade. There was a total of 69 government officers answered and completed the questionnaire. About 59% of them had 5-10 years of work experience, and around 41% had been working for more than a decade. Sixty-five students completed the questionnaire with various levels of education, ranging from the first to the third year of college. Of 235 respondents, nine responses were deemed inappropriate and thus could not be used (Table 2) and were excluded from the analysis. However, the statistical test result was indifferent with or without the non-useable data.

Table 3 reports the response rate for each participant. Even though the number of responses received is considered small, it is sufficient to execute the analyses. Roscoe (1975, quoted in Sekaran & Bougie, 2016, p. 264) proposes that a sample size between 30 and 500 is appropriate when the sample is divided into subsamples for most research. Each subsample should have a minimum sample size of 30. In addition, a small sample size between 10 and 20 is possible to undergo a simple experiment with tight experimental controls. The response rate is also considered favorable compared to the re-

Table 2. Questionnaire Responses

Respondent	Response			
	Targeted	Received	Non-useable	Useable
Questionnaire 1				
Auditors	180	49	2	47
Government Officers	150	35	1	34
Students	75	33	1	32
Questionnaire 2				
Auditors	180	51	3	48
Government Officers	150	34	2	32
Students	75	33	-	33
Total	810	235	9	226

sponse rates for a similar study. For instance, Gold *et al.* (2012) reported a response rate of 11.24% and 28.61% from auditors and students, respectively, to a questionnaire for testing the effectiveness of explanation as instructed by the ISA 700 (revised) in narrowing the audit expectation gap.

Tabel 3. Response Rate

Respondent	Useable Response	Target	Response Rate
Auditors	95	360	26.39%
Government Officers	66	300	22.00%
Students	65	150	43.33%

The responses also demonstrate how good the respondents' awareness is of the additional information in the audit report. Table 4 shows that most of the respondents who complete Questionnaire 1 agree that they have read an audit report that explains the responsibility of the central government and BPK's auditor.

Tabel 4. Awareness of the Additional Information

Respondent	The audit report provides an explanation about the responsibility of the auditor and the entity (Q4)			
	Yes		No	
	Unit	%	Unit	%
Auditors	44	93.62	3	6.38
Government officers	30	88.24	4	11.76
Students	26	81.25	6	18.75

The variables of the audit expectation gap (i.e., BPK's responsibility, central government's responsibility, an unqualified audit opinion) were assessed with several items in the questionnaire. Cronbach's Alpha was undertaken to verify whether all items measuring the variable were reliable as a set of measurements. In general, a reliability test score of less than 0.60 is considered low, and the reliability of the data is questionable. Those in the range of 0.70 represent acceptable reliability, while over 0.80 is considered high, and the data is reliable (Sekaran &

Bougie, 2016). If the items are reliable as a group, the main statistical test can be performed based on the average score of the item. On the other hand, a low-reliability score requires the items to be tested separately. The result for BPK's responsibility (Q1) and central government's responsibility (Q2) reveals a high Cronbach's Alpha score (score > 0.80) for both questionnaires. Subsequently, the variables were tested on the average score basis of all items measuring the variable. However, the reliability test for the unqualified audit opinion variable resulted in a low Cronbach's Alpha score for both questionnaires (score < 0.60), thus, a statistical test for this variable was conducted for each item.

The Result for Hypothesis 1 Test

ANCOVA and Kruskal-Wallis H were performed with the responsibility set as the dependent variable and respondent groups set as the independent variable to test H1a. Both tests indicate a significant difference in means between those surveyed at a 0.01 significant level (Table 5). The result supports H1a that BPK's auditors and the report users (i.e., government officers and students) have a significantly different perception regarding BPK's responsibility under SPKN 2017.

Further Post Hoc Test indicates a significant difference between auditor's and students' perceptions (p-value < 0.01). While there is a different perception between auditors and government officers ($\Delta = -0.175$), the difference is not statistically significant (p-value > 0.05). Moreover, the perception gap between auditors and students ($\Delta = -0.679$) is higher compared to the perception gap between auditors and the government officers ($\Delta = -0.175$). However, the result indicates that the difference between the gaps is not statistically significant at a 0.05 significant level (p-value = 0.055).

Tabel 5. Statistical Test Result for H1a

Table 3. Statistical Test Result for H1a							
ANCOVA					Kruskal-Wallis H		
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Chi-Square	Asymp. Sig
Respondent	9.024	2	4.512	5.888	0.004	11.927	0.003
Error	84.291	110	0.766				
Post Hoc Test							
Respondent			Mean Difference		Std. Error		Sig.
Auditor	Government Officer		-0.0175		0.19708		0.648
	Student		-0.0679		0.20062		0.003
Student	Government Officer		0.0504		0.21560		0.055

These findings indicate the existence of an audit expectation gap between BPK's senior auditors and the financial statement users (i.e., government officers and students) concerning BPK's responsibilities. The findings support most of the prior (e.g., Anderson, Maletta, & Wright, 1998; Best *et al.*, 2001; Gold *et al.*, 2012), which conclude that users of financial statements have a different perception regarding auditor's responsibilities than the auditors. The findings also agree that users of financial statements, such as government officers and students, impose greater responsibility upon the auditors. Those responsibilities include the prevention and detection of fraud and misappropriation of assets, the effectiveness of internal control, and the preparation and accuracy of the financial statements compared to what the auditors expect to accomplish.

According to BPK Regulation Number 1 of 2017, BPK's responsibilities related to fraud are limited to initial indication of fraud (red flags) that has a material impact on the financial statements (BPK RI, 2017). The auditors do not have any responsibilities to maintain the effectiveness of internal control and prepare the financial statement. The auditor is not liable to prevent and detect all fraud and misappropriation of assets. According to Ruhnke and Schmidt (2014), such a gap can

be considered a public failure, bearing in mind that the gap exists due to the users' inability to recognize the auditor's responsibilities as mandated by the standard and regulations. This examination is consistent with Dana (2011), who reports that students place greater expectations upon auditors to fulfill their responsibility beyond what has been mandated by the standard. The suggested approach to narrow the gap resulting from public failure is to educate the financial statement users on the actual responsibilities of auditors as mandated by the standard. Such an approach can be pursued in various ways (e.g., formal education, reading materials, additional information on audit reports).

The survey's average result concerning the responsibilities assigned to the central government, as indicated in Question 2, suggests that most of the respondents strongly agreed that such responsibility should rest on the central government. Both tests by ANCOVA and Kruskal-Wallis confirmed that the auditors and the user groups did not have significantly different perception concerning the central government's responsibilities (p -value > 0.005). The Post Hoc test supports the results because all means of comparison between respondent groups are insignificant (Table 6). Ergo, the results are inconsistent with H1b, which predicted that BPK's audi-

tors and the report users (government officers and students) have a significantly different perception of the central government's responsibility under SPKN 2017.

These findings indicate that government officers are aware of their responsibilities. Moreover, students and auditors agree that the responsibilities in the prevention and detection of fraud, the effectiveness of internal control, and the preparation and accuracy of the financial statement lie on the government instead of the auditor. Thus, there is no evidence of an audit expectation gap concerning the central government's responsibilities. This result is consistent with Gold *et al.* (2012), who reported that auditors and users had reached a consensus regarding the management's responsibility.

Taking into account the result of the H1a test, it reveals that regardless of the user groups' view that the responsibilities lie on the government rather than the auditor, they expect the auditors to perform the same responsibilities apply. This deduction supports the literature, suggesting that the expansion of auditor's responsibilities may likely narrow the audit expectation gap (Humphrey, Mozier, & Turley, 1993; O'Malley, 1993). Further study is required to see the possibilities and the effectiveness of this approach in the public sector.

Statistical tests were undertaken for each measurement item (e.g., absolute assurance, accurate, and fair view) to test H1c. The measurement item was the dependent variable, and the respondent was the independent variable. The ANCOVA and Kruskal-Wallis H tests show an insignificant result for variables concerning absolute assurance, accurate and fair view, and accounting practice compliance (Table 7). Hence there is no evidence of the audit expectation found regarding these variables. On the other hand, a significant result at a 0.01 significant level was identified in the variables concerning statements that are free from fraud and error perceptions. As a result, auditors and users have a significantly different perceptions concerning these variables.

Further Post Hoc Test reports significant differences between all groups of respondents concerning statements that are free from fraud perception at 0.01 and 0.05 significant levels (Appendix 1). In addition, it shows that the gap between auditors and students ($\Delta = -1.404$) is significantly greater at a 0.05 significant level ($p\text{-value} = 0.048$) compared to the gap between auditors and government officers ($\Delta = -0.784$). Moreover, there is no statistically significant difference between auditors and government officers concerning free from error perception ($p\text{-value} > 0.05$). However, the gap between auditors and government officers ($\Delta = 0.023$) significantly differs at 0.01 significant level ($p\text{-value} = 0.004$) with the gap be-

Tabel 6. Statistical Test Result for H1b

ANCOVA						Kruskal-Wallis H	
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Chi-Square	Asymp. Sig.
Respondent	0.779	2	0.389	1.254	0.289	1.016	0.003
Error	34.160	110	0.311				
Post Hoc Test							
Respondent		Mean Difference		Std. Error		Sig.	
Auditor	Government Officer	0.014		0.12546		0.993	
	Student	0.190		0.12772		0.302	
Student	Government Officer	-0.176		0.13725		0.409	

Table 7. Statistical Test Result for H1c

ANCOVA					Kruskal-Wallis H		
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Chi-Square	Asymp. Sig
Absolute assurance							
Respondent	0.889	2	0.444	0.392	0.677	1.113	0.573
Error	124.669	110	1.133				
True and fair view							
Respondent	0.022	2	0.011	0.031	0.970	0.441	0.802
Error	38.916	110	0.354				
Free from fraud							
Respondent	38.611	2	19.305	17.415	0.000	25.162	0.000
Error	121.938	110	1.109				
Accounting practice compliance							
Respondent	2.727	2	1.364	2.517	0.085	3.584	0.167
Error	59.591	110	0.542				
Free from error							
Respondent	16.475	2	8.237	7.107	0.001	12.128	0.002
Error	127.490	110	1.159				

tween auditors and students ($\Delta = -0.838$). These findings partially support H1c that BPK's auditors and the report users, notably government officers and students, have a significantly different perception of unqualified audit opinion responsibilities under SPKN 2017.

By observing the means of the responses' score for the absolute assurance item, it can be taken into consideration that the absence of an audit expectation gap is due to the perception of auditors that shifts toward the perception of financial statement users. The auditor's means, greater than 3 (on a 5-point scale), represents the level of agreement on the measurement item. It indicates that the auditors at a certain level believe that an unqualified opinion represents an absolute assurance that the financial statement is free from material misstatement. It is suspected that this condition was because the auditor's perception was affected by the constant demand of users asking for more assurance

provided by the audit service. As a result, auditors are inadvertently attempting to provide assurance or get the sense that they have provided such assurance to be accepted by the users. Holm and Zaman (2012) explained that auditors had the ultimate goal to gain trust from the users to legitimize. In addition, auditors attempt to meet the public's interest in regaining legitimation, thereby accepting such excessive expectations (Masoud, 2017).

However, BPK Regulation Number 1 of 2017 stated that the audit is planned and performed to obtain reasonable assurance, as opposed to an absolute one, that financial statements are free from material misstatement. Even though there is no presence of an audit expectation gap regarding the item, this condition can be considered a failure of the auditor as auditors have their views regarding the level of assurance of an unqualified audit opinion that differs from the standard. Training or education may be nec-

essary to improve the auditor's understanding of this matter.

Moreover, the result suggests that auditors and the user groups agree that unqualified financial statements present an accurate and fair view of the entity's financial position and that the financial statements comply with accepted accounting practices. However, while auditors understand that unqualified financial statements are not necessarily free from fraud and error, the user groups expect that financial statements are free from fraud and error. About Ruhnke and Schmidt (2014), these gaps result from the public's failure. This result is consistent with a prior study in Indonesia's public sector (Rusliyawati, 2007), which reports an audit expectation gap in the perception of unqualified opinion between BPK's auditors and parliament members, local government officers, and the public. As mentioned in the preceding, a possible approach to narrow down the gap due to the public failure would be to inform users of the financial statement on the factors that have caused the gap.

The Result for Hypothesis 2 Test

Responses from all questionnaires were used to assess the effectiveness of additional information in reducing the audit expectation gap. ANCOVA was tested with BPK's responsibility and entered as the dependent variable, and respondent groups and audit report types were entered as independent variables

to test H2a. The test shows a significant result for the respondent factor. However, the audit report and the interaction between respondents and the audit report did not significantly influence the respondents' perception regarding BPK's responsibility (Table 8). This finding does not support H2a, which predicts that additional information in the audit report reduces the differences in the perception concerning BPK's responsibility between BPK's auditors and the report users (i.e., government officers and students).

ANCOVA was performed with Central Government's responsibilities as the dependent variable, while respondent and audit reports were keyed in as independent variables to test H2b. The result indicates no significant influence of the independent variables tested on the respondents' perception concerning the Central Government's responsibilities (Table 9). The result rejects H2b, which predicts that additional information in the audit report reduces the differences in the perception of the Central Government's responsibility between BPK's auditors and the report users (i.e., government officers and students).

The H2a and H2b tests contrast with the previous study, which reports the modified audit report's capability to narrow the audit expectation gap (e.g., Hatherly *et al.*, 1991; Miller *et al.*, 1993). However, it is consistent with Gold *et al.* (2012), who discovers that additional information provided in audit re-

Table 8. Statistical Test Result for H2a

ANCOVA					
Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	17.651	5	3.530	4.563	0.001
Respondent	15.374	2	7.687	9.935	0.000
Audit report	0.925	1	0.925	1.195	0.275
Respondent x Audit report	1.498	2	0.749	0.968	0.382
Error	170.224	220	0.774		

Table 9. Statistical Test Result for H2b

ANCOVA					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.411	5	0.282	0.735	0.598
Respondent	0.574	2	0.287	0.747	0.475
Audit report	0.496	1	0.496	1.293	0.257
Respondent x Audit report	0.249	2	0.125	0.324	0.723
Error	84.498	220	0.384		

ports as mandated by revised ISA 700 does not affect the users' expectations. It is also consistent with Litjens *et al.* (2015), which conclude that the ability of additional information regarding the entity and the audit process on narrowing the audit expectation gap is limited. Three possible reasons can be drawn from this result. The first reason would be that the respondents ignored the additional information provided. Second, the respondents read the additional information, but the reader did not clearly understand the additional information. Third, the respondents have understood the additional information, but the information provided could not influence their perception, which demanded that auditors provide a higher assurance level (more responsibilities).

The response of user groups who read the full version audit report to Question 4 indicated that the user groups were aware of the additional information. Most of the respondents representing government officers (88.24%) agreed that they had read an audit report which included an explanation of the responsibility of the central government and BPK. In comparison, 81.25% of participants representing students confirmed that the audit report did contain such additional information. The first reason regarding the ineffectiveness of additional information in the audit report to close the audit expectation gap is not applicable. This experiment, however, could not analyze the remaining reasons. Further study is necessary to provide in

-depth knowledge on the possibilities of additional information to reduce the audit expectation gap concerning auditor and entity's responsibilities.

Further ANCOVA was conducted for each measurement item for the unqualified opinion variable to assess the influence of additional information in the audit report on the variable. The test results show the effect of audit report type on each measurement item tested (see Appendix 2). There is no significant influence of the audit report type on the perception regarding absolute assurance and accurate and fair view of unqualified financial statements (p values > 0.05). On the other hand, the interaction between respondents and audit report type significantly influences respondents' perception of statements that are free from fraud, accounting practice compliance, and free from error of the unqualified financial statements. These findings partially support H2c, which assumes that additional information in the audit report reduces the differences in perception regarding unqualified audit opinion between BPK's auditors and the report users (i.e., government officers and students) in all items measuring the variable.

These findings are inconsistent with the result of Gold *et al.* (2012), which concludes that additional information in the audit report based on the revised ISA 700 does not bring users' perception related to the reliability of financial statements closer to the audi-

tors' perception. H1c test result indicates no evidence of an expectation gap in the perception of accounting practice compliance in unqualified financial statements under the current state. Because of that, it can be inferred that the additional information in the audit report, as mandated by the SPKN 2017, effectively closes the audit expectation gap in this dimension. Moreover, the additional information effectively narrows the gap in the perception of fraud and error-free unqualified financial statements even though the expectation gap persists under the current condition.

In summary, the hypothesis test result shows a significantly different perception between BPK's auditors and the report users, notably government officers and students, concerning the perception of BPK's responsibilities (H1a). However, a different perception is not found in the perception of the central government's responsibilities (H1b). The result also indicates that a significantly different perception between the auditor and the users concerning unqualified audit opinion is limited to the perception of fraud and error in an unqualified financial statement (H1c).

It can be concluded that additional information in the audit report could not reduce the differences in the perception between BPK's auditors and the report users (i.e., government officers and students) concerning BPK's responsibility (H2a) and Central Government's responsibility (H2b). The capability of the additional information in reducing the different perceptions between BPK's auditors and the report users is limited in reducing the gap concerning the accounting practice compliance and the presence of fraud and error in an unqualified financial statement (H2c).

CONCLUSION

The findings of this study report the existence of the audit expectation gap in Indonesia's public sector between auditors, government officers, and students. The gap exists in the perception regarding BPK's responsibilities and the presence of fraud and error in an unqualified financial statement. The findings are consistent with Chowdhury *et al.* (2005) and Dana (2011), who discover the existence of the gap in the Bangladesh and Romania's public sectors, respectively. This study also affirms most of the studies that address the audit expectation gap (e.g., Anderson *et al.*, 1998; Best *et al.*, 2001; Gold *et al.*, 2012), wherein the gap between auditors and inexperienced users (i.e., students) is greater than the gap between auditors and experienced users (i.e., government officers).

However, in line with Gold *et al.* (2012), this study fails to foresee the presence of the gap concerning the central government's responsibility. Further examination of the result concludes that the gap in Indonesia's Public sector is due to public failure in recognizing the responsibilities of the auditor and the meaning of unqualified financial statements as referred to in the standard. Moreover, the auditor's failure to understand the level of assurance service that they provide has shifted auditors' perception toward users' perception.

This study also revealed that the capability of the additional information in the audit report as provided by SPKN 2017 in closing the audit expectation gap is limited. The additional information is only effective in closing the gap concerning the accounting practice compliance of an unqualified financial statement. Furthermore, it effectively reduces the gap relating to the presence of fraud and errors in unqualified financial statements. The findings are consistent with the study that reports the limitation of additional infor-

mation in narrowing the audit expectation gap (Litjens *et al.*, 2015). Two possible reasons are suspected to be the cause of such ineffectiveness of additional information in reducing the gap. First, the reader fails to understand the additional information provided, and second, the additional information cannot close the gap due to the high expectation from the users.

Further study is essential to analyze these issues as IAASB (2012) suggests that an audit report is the auditor's primary means of communicating with the stakeholders while demanding more appropriate information. Hence, an audit report remains one essential tool for closing the audit expectation gap without putting aside other approaches. However, the limited ability of the audit report to reduce the gap implies that the audit report alone may not be sufficient to resolve the issue. Hence, a combination of two or more approaches may be more likely to close the gap. Moreover, further study may need to consider another method that has never been explored in the public sector, such as the possibility of expanding the auditor's responsibilities to meet financial statement users' needs.

This study has some limitations that should be acknowledged. First, due to time constraints, the experiment is incapable of obtaining a bigger sample. The limited number of respondents involved in the experiments makes the result incapable of generalizing to a broader scope or a different setting. Involving a bigger sample for the following study may provide a different view and enhance the result. Second, the experiment is limited in comparing the perceptions of auditors, government officers, and students. There are other financial statement users whose perceptions are essentially as important to consider, such as parliament members and non-governmental organizations. Finally, the questionnaire used in the experiment was

adapted from the previous studies, which were designed to investigate the audit expectation gap in the private sector. Therefore, this study assumes that the adjusted questionnaire can be applied to investigate the audit expectation gap in the context of the public sector. Designing a questionnaire specifically for a study in the public sector may improve the validity of the result.

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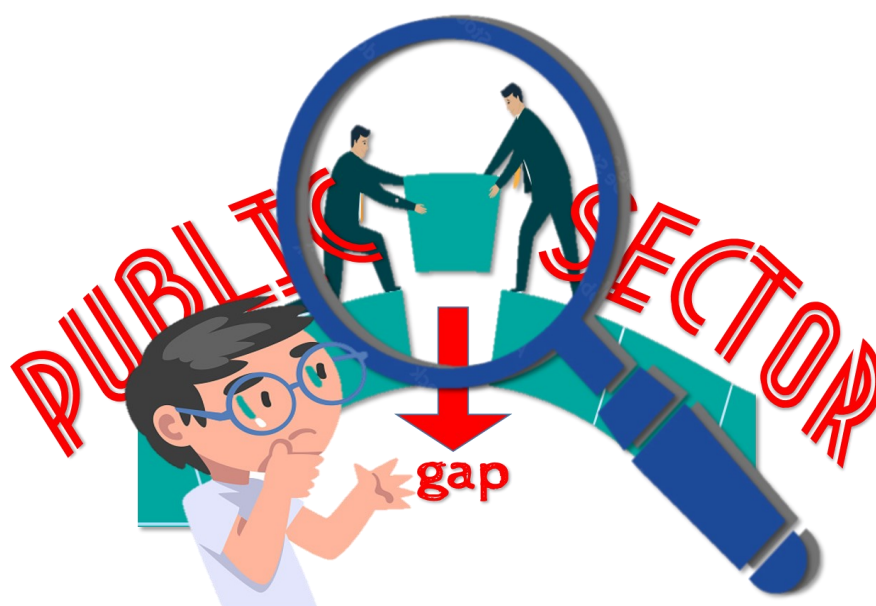
APPENDICES

Appendix 1. Post Hoc Test Result for Unqualified Opinion Variable

Post Hoc Test					
Items	Respondent		Mean Difference	Std. Error	Sig.
Absolute assurance	Auditor	Government Officer	0.076	0.240	0.946
		Student	-0.152	0.244	0.809
	Student	Government Officer	0.228	0.262	0.661
Accurate and fair view	Auditor	Government Officer	-0.033	0.134	0.967
		Student	-0.017	0.136	0.992
	Student	Government Officer	-0.017	0.146	0.993
Free from fraud	Auditor	Government Officer	-0.784	0.237	0.004
		Student	-1.404	0.241	0.000
	Student	Government Officer	0.619	0.259	0.048
Accounting practice compliance	Auditor	Government Officer	-0.213	0.166	0.407
		Student	0.193	0.169	0.487
	Student	Government Officer	-0.406	0.181	0.069
Free from error	Auditor	Government Officer	0.023	0.242	0.995
		Student	-0.838	0.247	0.003
	Student	Government Officer	0.860	0.265	0.004

Appendix 2. Statistical Test for H2c

ANCOVA						
Item	Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Absolute assurance	Corrected Model	3.489	5	0.698	0.676	0.642
	Respondent	0.396	2	0.198	0.192	0.826
	Audit report	0.479	1	0.479	0.464	0.497
	Respondent x Audit report	2.780	2	1.390	1.346	0.262
	Error	227.236	220	1.033		
True and fair view	Corrected Model	3.074	5	0.615	1.682	0.140
	Respondent	1.268	2	0.634	1.735	0.179
	Audit report	1.000	1	1.000	2.736	0.100
	Respondent x Audit report	1.027	2	0.514	1.405	0.247
	Error	80.417	220	0.366		
Free from fraud	Corrected Model	67.763	5	13.553	11.424	0.000
	Respondent	55.960	2	27.980	23.586	0.000
	Audit report	2.060	1	2.060	1.736	0.189
	Respondent x Audit report	10.155	2	5.077	4.280	0.015
	Error	260.984	220	1.186		
Accounting practice compliance	Corrected Model	14.225	5	2.845	5.520	0.000
	Respondent	10.694	2	5.347	10.374	0.000
	Audit report	0.808	1	0.808	1.567	0.212
	Respondent x Audit report	3.400	2	1.700	3.298	0.039
	Error	113.386	220	0.515		
Free from error	Corrected Model	26.778	5	5.356	4.839	0.000
	Respondent	14.467	2	7.233	6.536	0.002
	Audit report	0.004	1	0.004	0.003	0.954
	Respondent x Audit report	12.240	2	6.120	5.530	0.005
	Error	243.474	220	1.107		



Ergonomic Interventions in the Implementation of Risk-Based Audit to Overcome Dysfunctional Auditor Behavior

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ABSTRACT

It is undeniable that auditors are expected to develop a strong audit plan to produce value-added audit reports. Given the preceding, current practice in auditing shows that many auditors use Risk-Based Audit (RBA) to determine an appropriate audit scope. RBA could effectively guide auditors to define audit scope based on the assessed risk. However, RBA does not consider human factors in performing audits. Consequently, most auditors encounter time budget pressure in meeting tight audit deadlines. Such an issue could adversely affect auditors' productivity and health. On the other hand, ergonomics is a discipline that focuses on human capabilities in completing tasks. The study also guides employees to adapt to the job while improving their well-being and increasing the quality of work results. Therefore, this study aims to intervene the principles of RBA with ergonomics. RBA consists of three stages: risk assessment, response, and reporting. The authors have concluded that ergonomics could intervene in RBA in the risk response step once the risk level is determined in the risk assessment phase by conducting a literature review study. Therefore, the auditors should balance the time budget allocation based on the assessed audit risk (low, moderate, or high). As the entity's risk is high, the audit team should be given an extended time allocation and vice versa. The findings suggest that auditors should develop an appropriate time budget scheme for specific audit procedures based on the assessed risks resulting from RBA implementation.

KEYWORDS:

Risk-based audit; time budget pressure; ergonomics

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INTRODUCTION

It is widely recognized that auditors are gatekeepers in ensuring integrity, accountability, fairness, and transparency of financial statements presented by companies. Auditors also should report value-added information to the intended users of financial statements. Thus, robust audit planning is crucial in producing qualified audit reports. Nowadays, many private and public-sector auditors utilize Risk-Based Audit (RBA) principles in performing audits (Sastra, Yuhertiana & Budiwitjaksono, 2018; Tuanakotta, 2013). The RBA guides auditors to focus on recorded and unrecorded risks, improving the audits' financial statement assurance and reporting process (Nyarombe, Musau, Kawai & Kipyegon, 2015). By implementing RBA principles, auditors could detect risky areas in organizations. RBA, furthermore, guides the auditors to assign audit procedures and audit scope based on the assessed risk (Tuanakotta, 2013).

Nevertheless, Sastra *et al.* (2018) argued that even though RBA had been effective in detecting risky areas in an organization, which could affect the fairness of financial statements, the RBA principles might not consider auditors' behavior. In other words, RBA mainly focuses on technical factors but likely fails to examine human factors in audits. Failure to consider human ability in conducting a job could adversely affect the job quality and results (Wiratama, Ng & Lukman, 2019). In this case, the authors would focus on the time budget pressure (Gundry & Liyanarachchi, 2007; Nadirsyah, Indriani & Usman, 2011). Gundry and Liyanarachchi (2007) also Nadirsyah *et al.* (2011) insist that time budget pressure is a notorious issue that most auditors encounter. As a result, auditors could face unrealistic time budget allocation despite the audit workload. That being the case, such pressure could cause auditors to act and behave dysfunctionally

when fulfilling their responsibilities.

In literature, an auditor's dysfunctional behavior is reduced audit quality practices or RAQP (Gundry & Liyanarachchi, 2007). Some forms of RAQP include incomplete audit paperwork and a narrow-tiered review process of audit reports. Moreover, under the pressure of a tight schedule, auditors could also perform unprofessionally by accepting the auditee's weak explanations of possible errors or reducing the audit procedures and samples determined by the standards.

On the other hand, ergonomics is a discipline that focuses on human capabilities to finish tasks without compromising their health (Setyawan, 2011). Ergonomics also guides how employees adapt to a job promoting their productivity and wellbeing (Setyawan, 2011). Previous studies report that ergonomics has been practiced in various areas, such as health (Setyawan, 2011) and education (Mustika & Sutajaya, 2016). Moreover, some scholars have researched the ergonomics in the field of computer science (Desta, Kustono & Patmanthara, 2016, as well as Mardhia & Bariyah, 2020); manufacture (Pradini, Lucitasari & Putro, 2019), and the service sector (Aisha, 2014).

The previous studies also show that ergonomics could intervene in work-related procedures and work-related tools utilized to complete tasks (Susihono & Adiatmika, 2017). Illustrating ergonomics intervenes by rearranging an office workspace and office chair design to prevent employees from back pain (Purnama, Dewi & Yuniartha, 2015). Additionally, ergonomics has been utilized to intervene in work-related procedures by rearranging the system of nurses' working hours, preventing the nurse from experiencing any occupational health problems (Frederick, Habes & Schloemer, 1984). In this study, however, the authors would focus

on how ergonomics could intervene in the methodology of RBA to help auditors conduct audits.

Arguably, previous research in audits focuses on how time budget pressure affects the performance of auditors, resulting in dysfunctional behavior, thereby compromising the quality of audit results (Gundry & Liyanarachchi, 2007; Juliyanty, Eko, Rahman & Subekti, 2019; Nadirsyah *et al.*, 2011; Silaban, 2012; Shbail, Salleh & Nor, 2018; Smith, Emerson & Boster, 2018). However, in this study, the authors propose a solution to address the time budget pressure encountered by auditors. The proposed solution is ergonomics intervention on RBA methodology to overcome time budget pressure and preserve qualified audit reports.

This study aims to distinguish this study from the previous research and add literature on ergonomics intervention in auditing. Arguably, the results of this study could also complement literature in auditing on factors affecting the audit quality and auditors' behavior. Accordingly, this study could guide auditors to develop audit processes and determine audit procedures based on risk areas, time allocation, and human factors.

RESEARCH METHOD

Given the preceding, this study is a literature review structured as follows. First, the authors elaborate on previous studies on RBA's principles, time budget pressure in conducting audits, and how stress triggers dysfunctional auditor behavior. Furthermore, the authors surveyed public sector auditors to attest to whether auditors eventually experience anxiety despite RBA being implemented. After years of application, it is essential to reassess if there should be improvements in RBA implementation. The authors then utilized the design from the

Industrial Fatigue Research Committee (IFRC) to measure and evaluate employees' levels of fatigue (Latar, n.d.; Saito, 1999). Lastly, the authors present how ergonomics could intervene in RBA principles and elaborate on some examples to implement the redesign scheme of ergonomics-based RBA in an audit cycle.

RESULT AND DISCUSSION

Auditors need to balance the amount of time allocation and audit procedures in conducting audits (Gundry & Liyanarachchi, 2007). On the one hand, auditors have limited audit resources. On the other hand, audit workload is more complex since there is a growing demand for accountability in private and public organizations (Prem, 2020). Moreover, audit results should add value to a company since audit consumes valuable resources (Zacchea, 2003). Zacchea (2003) also states that value-added provided by audit results entails that the outcome could influence the decisions of intended users of the reports.

Sastra *et al.* (2018) and Zacchea (2003) suggest that it is necessary first to identify risks to conduct an added-value audit process. The risks could be possible wrongdoing, error, or adverse outcomes companies wish to avoid. Risk identification allows auditors to prevent damage and improve a company's performance, thereby enhancing audit reports' quality. Auditors could identify clients' risks in the planning phase of an audit.

Given the above, auditors must design a rigorous audit plan (Prem, 2020). A proper audit plan is essential because the auditors' constrained resources and today's unpredictable events, such as the coronavirus pandemic, could adversely affect companies' performance. For that reason, auditors should evaluate their approaches and meth-

odologies to investigate risks and control issues in an entity. One of the primary tools to examine a company's risk areas is a risk-based audit or RBA (Tuanakotta, 2013).

Discussion on Previous Studies

Risk-based audit

The planning stage is prominent, including audits (Prem, 2020). Nowadays, most internal and external auditors promote RBA as a tool to guide them in arranging an audit plan (Dejnaronk, Little, Mujtaba & McClelland, 2015; Sastra *et al.*, 2018). In addition, there are some prior studies on RBA implementation. For instance, Castanheira, Lúcia, and Russell (2010) examine factors associated with RBA adoption by companies in Portugal. Their findings indicate that 82 percent of entities utilized RBA in audit planning. Similarly, Dejnaronk *et al.* (2015) argue that RBA influences the effectiveness of internal audits in Thailand. Nyarombe *et al.* (2015) also state that the RBA approach has been implemented in internal control systems in government departments in Kenya. Sastra *et al.* (2018) further explained that the Audit Board of the Republic of Indonesia utilized RBA in the planning stage to identify areas of any high risks in local governments' financial statements.

Moreover, Bechara and Kapoor (2012) emphasize that risk-based audit uses a fundamental concept in audit, identifying what could go wrong and examining to determine its probability. Therefore, an effective RBA could overcome audit constraints by identifying organizations' risks and enabling auditors to conduct a more targeted and efficient audit. Moreover, Zacchea (2003) suggests that RBA focuses on the most-risk areas and guides scarce audit resources to only the most productive audit purposes. Therefore, auditors could find and reveal most likely errors or fraud in an entity. Similarly, Tuanakotta (2013) stated that a prominent

characteristic of audit based on the International Audit Standard (ISA) is RBA. Briefly, RBA consists of three stages: risk assessment, risk response, and reporting (Tuanakotta, 2013), as shown in Figure 1 (the complete RBA workflow or methodology is in Appendix 1).

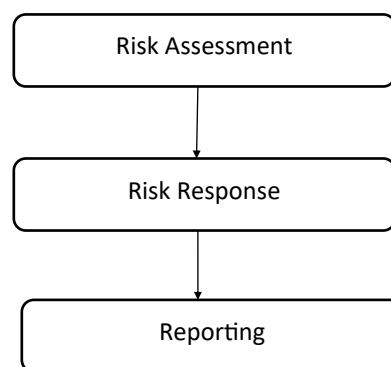


Figure 1. Workflow of RBA
Source: Tuanakotta (2013)

According to Tuanakotta (2013), risk assessment is:

"A process to identify and assess risks of material misstatement, whether due to fraud or error, at the financial statement and assertion levels, through understanding the entity and its environment, including the entity's internal control providing a basis for designing and implementing responses to the assessed risks of material misstatement."

In conducting risk assessment, auditors should identify the inherent risk of the entity by collecting information about the organization's goals, culture, key personnel, and structure. Next, the auditors could analyze the risks at the company and financial statement levels. The auditors could then determine whether the risks significantly influence the presentation of the financial statement. Accordingly, the auditors could specify the risk status by assessing how likely the risks could occur and how much the monetary impact incurred.

Subsequently, auditors should be aware of the internal controls provided to address

some risks identified. At this stage, the auditors should evaluate the internal controls to see whether it is relevant to the audit and whether the rules have been adequately implemented. Lastly, the auditors should summarize the risk assessment's results by combining both inherent and control risks altogether as the risk of material misstatement. The risk of material misstatement is a residual risk after management strives to apply robust internal control in a company. Table 1 shows an example of the risk assessment process.

Table 1. Documentation of Risk Assessment

	Inherent Risk	Control Risk	Risk of Material Misstatement
Financial Statement Level	Moderate	Low	Low
Account Level	Low	High	Moderate

Source: Tuanakotta (2013)

Table 1 shows the first scheme when an entity's inherent risk is moderate at the financial statement level. The auditee, however, has developed a robust internal control to mitigate any inherent risks from transpiring. Therefore, the risk of material misstatement or residual risk is low. The second scheme shows that the assessed inherent risk at a particular account is low. Nevertheless, the company does not commit to an appropriate internal control; thus, the control risk for the account is high. Consequently, residual risk is moderate.

The second stage of RBA is risk response. At this stage, the auditors should implement appropriate responses to the risk of material misstatement at the financial statement and account levels. First, the auditors should list all of the identified risks found in the risk assessment stage. The auditors, next, should develop an overall response to the pervasive risks, for instance, fraud risk that could severely influence the financial statement. Subsequently, the auditors should identify specific audit procedures needed for material

accounts in the financial statement. In this case, the auditors should utilize their professional judgment to determine the audit scope and choose procedures to adequately address the potential risks and reduce them to an acceptable low level. The following table shows how auditors could set specific audit procedures based on the assessed risks.

Lastly, auditors could apply RBA principles in the stage of reporting. At this stage, the auditor could evaluate audit evidence to determine the reasonable assurance given to the audited financial statement and prepare the audit results. Therefore, RBA assists auditors in determining the audit scope by assessing heightened risk and focusing on those areas (Castanheira *et al.*, 2010; Tuana-kotta, 2013).

Nevertheless, the implementation of RBA encounters some challenges (Sastra *et al.*, 2018). The scholars argue that RBA focuses on defining appropriate audit scope, yet, it does not necessarily consider auditors' behavior. Table 2 shows that as the entity's risk increases, the audit procedures become more complex. For that reason, auditors should be given adequate time allocation to perform every audit procedure. Otherwise, they could behave disreputably in audits since they might feel tired and burned out (Wiratama *et al.*, 2019). The scholars also believe that work overload has a positive and significant effect on reduced audit quality. In other words, there is a greater likelihood of dysfunctional behavior among auditors as the level of time budget pressure increases (Shbail *et al.*, 2018; Smith *et al.*, 2018).

Time budget pressure

One particular variable affecting today's audit environment and auditors' dysfunctional attitude is time budget pressure (Gundry & Liyanarachchi, 2007; Julianty *et al.*, 2019). Nirmala and Cahyonowati (2013) explain

Table 2. Audit Procedures to Respond to the Assessed Risks

Risk Level	Planned Audit Response
Low	Substantive procedures-basic The procedures consist of a simple test of details and analytical procedures.
Moderate	Substantive procedures-basic The procedures are developed to respond to the risks in general. Substantive procedures-extended The procedures are set to respond to the specific risks such as fraud; An adequate proportion of test of details could be used to set the risks to an acceptable low level.
High	Substantive procedures-basic The procedures are developed to respond to the risks in general. Substantive procedures-extended The procedures are set to respond to specific risks such as fraud. Test of control The test is performed to reduce the number of samples in the test of details.

Source: Tuanakotta (2013)

that time budget pressure is when auditors are expected to use audit resources efficiently because of the regulation's strict time budget allocation. In other words, time budget pressure is when auditors should maximize the time allocated to conduct and finish an audit cycle (Dezzort, 2002, as cited in Nadirsyah *et al.*, 2011).

Moreover, Gundry and Liyanarachchi (2007) argue that time budget pressure occurs because audit institutions must maximize efficiency by reducing costs to remain competitive. However, often auditors encounter unrealistic time budget allocation related to an audit program. Nadirsyah *et al.* (2011) stated that limited time to complete adequate audit procedures could decrease audit quality. In short, time budget pressure has become a real problem for auditors, given that the problem could cause dysfunctional auditor behavior, thereby adversely affecting audit quality (Maulidawati, Islahuddin & Abdullah, 2017; Monoarfa & Dama, 2018; Nadirsyah *et al.*, 2011).

Dysfunctional auditor behavior

As the current level of exhaustion is higher than optimal, there is an increased likelihood that auditors would engage in dysfunctional behavior (Smith *et al.*, 2018). Dysfunctional auditor behavior is an unethical attitude of auditors in performing audit programs (Juliyanty *et al.*, 2019; Silaban, 2012). Furthermore, dysfunctional auditor behavior can influence auditors' willingness to compromise audit quality (Gundry & Liyanarachchi, 2007; Silaban, 2012). While auditors could not perform audit procedures properly, they may not directly cause an inappropriate audit result. However, they increase the likelihood of audit failure (Gundry & Liyanarachchi, 2007). Thus, dysfunctional auditor behavior is also known as reduced audit quality practices or RAQP (Gundry & Liyanarachchi, 2007).

Ideally, auditors should balance audit procedures' nature, amount, and timing with the time allocated for an audit (Gundry & Liyanarachchi, 2007). Nevertheless, auditors could engage in deviant behavior leading to failure to exercise due care in the audit pro-

cess and undermining the integrity of their work. Smith *et al.* (2018) insist that auditors could decrease the quality and extent of evidence gathered. Furthermore, dysfunctional auditor behavior could lead them to compromise the quality of audit results, given that the time allotted may not be enough to complete the audit assignments appropriately (Juliyanty *et al.*, 2019).

One form of dysfunctional auditor behavior identified in the audit environment is premature sign-off (Shbail *et al.*, 2018). Scholars insist that auditors should professionally conduct an audit and provide reasonable assurance about an entity's financial condition based on the proper evaluation of audit evidence. In order to gain enough competent audit evidence, auditors should arrange audit procedures as a response to risk assessment through the implementation of RBA. However, premature sign-off is when auditors deliberately compromise audit procedures and audit evidence they should perform as stated in the audit program due to time budget pressure.

Moreover, Juliyanty *et al.* (2019), Silaban (2012), and Smith *et al.* (2018) revealed other forms of dysfunctional auditor behavior, such as superficial evaluation of audit evidence and failure to investigate questionable items or red flags further. Furthermore, auditors could accept the auditee's weak explanation of possible errors, change audit procedures without the appropriate senior auditor's approval, reduce the workload determined by audit standards, and overreliance on clients' work outcomes.

Gundry and Liyanarachchi (2007) also point out that some users of financial statements may not be able to assess the quality of audit outcome due to the confidential nature of the audit. Consequently, auditors could indirectly hide the state of affairs if they have compromised their work from the intended users

of financial statements. In comparison, some cases came to light through litigation. One of the most notorious catastrophes in the audit was the Enron case in 2001 (Juliyanty *et al.*, 2019).

Ernst & Young (EY) Indonesia was fined \$1 million by the United States Public Company Accounting Oversight Board in 2017. It was a disciplinary sanction due to an audit failure conducted by EY Indonesia. Despite performing audits according to audit standards, they failed to gather competent and enough audit evidence related to the lease of more than 4 million cellular towers (Malik, 2017; Wiratama *et al.*, 2019). In all its complexity, the auditors imprudently established audit opinion by compromising the adequacy of audit evidence.

Ergonomics intervention on various fields

In 1984, Frederick *et al.* introduced ergonomics as "a discipline which attempts employees to adapt a job to promote workers' health, safety, and comfort and productivity." The scholars elaborate on the word ergonomics, which comes from Greek. The word ergo means work, and nomos implies law. It combines human physiological, anatomical, and psychological capabilities and limitations related to their work burden, environment, and equipment used to complete the job. Additionally, Setyawan (2011) stated that ergonomics was employed to achieve health and productivity.

Some scholars have researched to promote the balance of productivity and workers' well-being through ergonomics. The previous studies also show that ergonomics could intervene in work-related procedures and work-related tools utilized to complete tasks (Susihono & Adiatmika, 2017). For example, in health, Frederick *et al.* (1984) proposed how nurses could improve their working en-

vironment and occupational health and prevent hazards in the workplace. In this case, ergonomics intervention rearranged nurses' working hours and their work shifts. Setyawan (2011) also analyzed some approaches used to implement ergonomics in the workplace in the industrial sector. For example, the ergonomics principles could help health workers increase their productivity through a proper scheduling system based on workers' specialization.

Furthermore, Mustika and Sutajaya (2016) argued that teachers' understanding of ergonomics principles could increase their professionalism in education. In addition, teachers could selectively choose facilities in the class to increase engagement between students and teachers. In a digital-related environment, Desta *et al.* (2016) and Purnama *et al.* (2015) then analyzed that ergonomics could guide practitioners in computers to develop comfortable working space and design works seats to avoid any injuries and health complaints such as headaches and back pains. Mardhia and Bariyah (2020) also reiterated the implementation of cognitive ergonomics in the software and website, promoting Intelligent User Interface (IUI).

Pradini *et al.* (2019) studied the implementation of ergonomics within the manufacturing industry. The scholars researched a manufacturing company that produced fishing boats. The study results revealed that the design of the work system is updated based on ergonomics principles, such as adding break time for the employees, which would increase the company's productivity. Additionally, Aisha (2014) studied the implementation of ergonomics in the service industry. The author claims that ergonomics could intervene to create a better working environment in a bank. The intervention could redesign the practical work and rest time for employees and set employees' personal computers and their desk positions.

Given the preceding, ergonomics is a multidisciplinary knowledge and broad scope to be implemented in various professions and academic careers such as manufacturing, health, and nursing (Susihono & Adiatmika, 2017). Arguably, ergonomics could be applied in an audit environment as well. This element differentiates this study from the previous studies in audit literature. The authors shall suggest how ergonomics could complement RBA in guiding auditors to conduct a more effective audit and gain decent work outcomes.

The Analysis of Research Finding

Survey

The authors conducted a survey to gain perspectives from auditors regarding RBA implementation. Although they have implemented the RBA methodology, the survey demonstrates whether auditors still experience stress and fatigue in performing an audit. Moreover, the survey generates opinions on auditors' exhaustion due to limited time allocation to meet the audit timeline. Respondents to this survey are public sector auditors who have officially conducted RBA audits since 2007 (Sastra *et al.*, 2018).

Furthermore, the survey is conducted through a questionnaire consisting of 33 questions. The questions are divided into three sections. The first section is designed to gain general information on respondents' gender, age, working tenure, job position, and educational level. The second section consists of RBA-related items. Lastly, the third section questions the measurement of fatigue experienced by the auditors. While RBA-related questions were obtained from Tuanakotta (2013), the authors gained questions to measure auditors' stress and tiredness from the IFRC (Latar, n.d.; Saito, 1999). The detailed questions set in the questionnaire are explained in Table 3.

The IFRC has developed subjective measurements to evaluate an employee's level of fatigue (Latar, n.d.). There are 30 indications of exhaustion that are likely to be experienced by employees during a heavy workload. The 30 variables are then divided into three categories of fatigue: decreased ability to perform activities, reduced motivation, and decreased physical capacity. The measurement utilized the Likert scale, as described in Table 4.

Scores 1 to 4 in Table 4 represent different levels of tiredness experienced by employees. Thus, after respondents answered the 30 variables to measure their fatigue level, the authors could calculate the score and group the variables into the three categories (decreased ability to perform activities, reduced motivation, and decreased physical capacity). From the IFRC design, scoring has the highest and the lowest score for every respondent. The lowest score is 30, and the highest score is 120. Latar (n.d.) notes that the score range could be categorized into four classifications of the necessities to conduct corrective actions addressing health issues experienced by workers, as explained in Table 5.

Table 3. Variables in the Questionnaire

Variables	Type of Question
Risk-Based Audit	
When is RBA implemented through an audit process?	close-ended question open-ended question
Who assesses the auditee's risk areas?	close-ended question open-ended question
Do auditors have enough resources to conduct an audit?	close-ended question open-ended question
Measurement of auditors' tiredness	
Decreased ability to perform activities	close-ended question
Reduced motivation	close-ended question
Decreased physical capacity	close-ended question

Source: Latar (n.d); Saito (1999); Tuanakotta (2013)

Table 4. Likert Scale

Score	Level of Tiredness
1	Respondents never felt symptoms of fatigue
2	Respondents sometimes felt symptoms of fatigue
3	Respondents often felt symptoms of fatigue
4	Respondents very often felt symptoms of fatigue

Source: Latar (n.d)

The survey result

The questionnaire was distributed to 323 auditors from May to June 2021. General information about the respondents is elaborated in Appendix 2. The questionnaires are distributed to a near balance proposition based on the respondents' gender. Namely, female auditors contributed 46%, while male auditors filled 54% of the survey. Furthermore, the majority of the respondents are the ones who are between 31 to 40 years old, with a working tenure of 11 to 15 years, and hold a job position as the team leader in their organization. Arguably, most respondents could present a relevant perspective on the implementation of RBA in audits, as most of them are experienced auditors who have assessed auditees' risk areas. Moreover, respondents with undergraduate and post-graduate backgrounds share similar proportions in filling the survey, 53%, and 47%, respectively. Lastly, all respondents have experience conducting financial statement audits, with most of them having performed audits over 15 times.

Table 5. Classification of Employee's Fatigue Level

Score	Individual Total Score	Level of Tiredness	Corrective Action
1	30-52	Low	Corrective action is not necessary to be applied
2	53-75	Moderate	Corrective action might be needed in the future
3	76-98	High	Corrective action is needed soon
4	99-120	Very high	Immediate corrective action is important

Source: Latar (n.d)

Figure 2 shows that nearly all respondents agree that they have implemented RBA, including risk assessment, risk response stage,

and reporting phase. The result corresponds to Sastra *et al.* (2018) study stating that the auditors have performed audits based on RBA principles.

Setiawan (2015) believes that the maximum working hour per day is eight hours. The scholar argues that excessive working hours, in the long run, would adversely affect employees' well-being. Unfortunately, the survey results disclose that the respondents struggle to balance the workload and time allocated to conduct audits even after many years of RBA implementation. Figure 3 indicates that half of the respondents believe that they have to work overtime during the planning stage of audits. However, most respondents have to work more than eight hours a day during the field audit and reporting stage, 92% and 97%, respectively.

The authors also provided an open-ended question on why auditors should work overtime during an audit process. Most of them responded that the issue arises since the time allocated to conduct an audit is limited and the number of personnel is insufficient. Consequently, they have a strict deadline to finish the audit reports. The facts point to the challenges that auditors encounter in terms of time budget pressure, and they may be dealing with stress. As mentioned before, Maulidawati *et al.* (2017) and Nadirsyah *et al.* (2011) contend that such a problem could lead them to dysfunctional behavior in reducing audit quality. Additionally, the au-

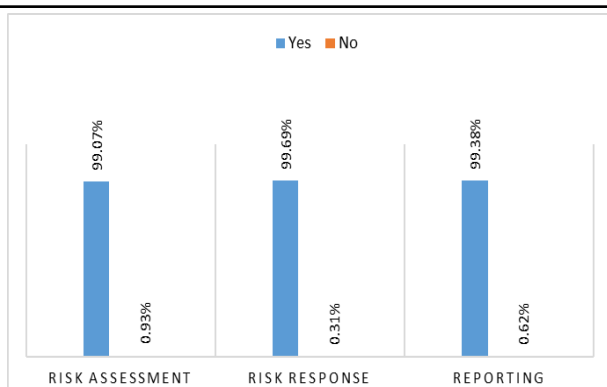


Figure 2. Survey of RBA Implementation

thors examine the level of fatigue experienced by auditors, as explained in Table 5. The IFRC design categorizes respondents' fatigue levels into four groups: low, moderate, high, and very high. Each category represents whether a corrective action to help employees overcome their stress issues is urgently required. The results are shown in Figure 4. Figure 4 shows that 40% of respondents moderately experience fatigue and tiredness when conducting audits. It shows that corrective action may be needed in the future. Nevertheless, a considerable proportion of respondents (30%) indicate that they experience a severe level of exhaustion while performing audits. Therefore, they might need assistance to overcome health issues as soon as possible. Accordingly, only 7% of the respondents point out that immediate aid is essential given that stress may affect their wellbeing.

The above data show that most respondents experience severe tiredness due to heavy workload when performing an audit. Most of

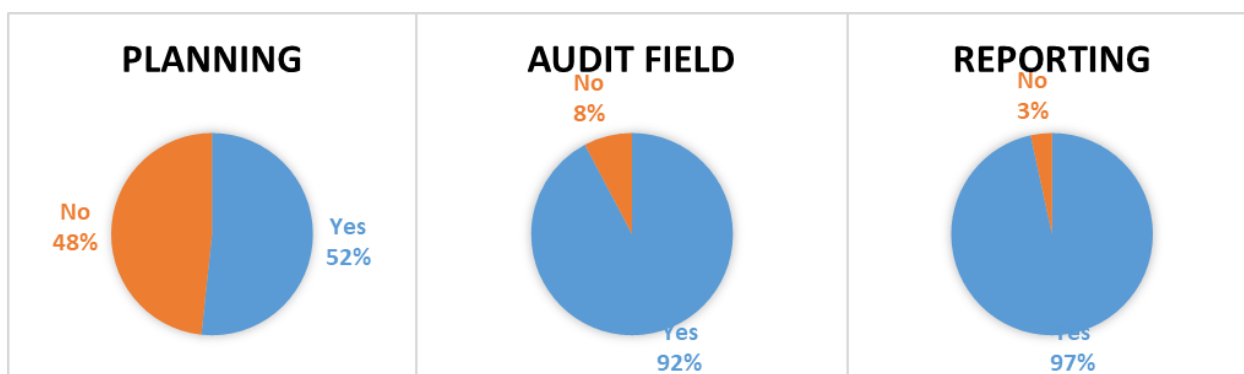


Figure 3. Working Overtime in the Stage of Planning, Audit Field, and Reporting

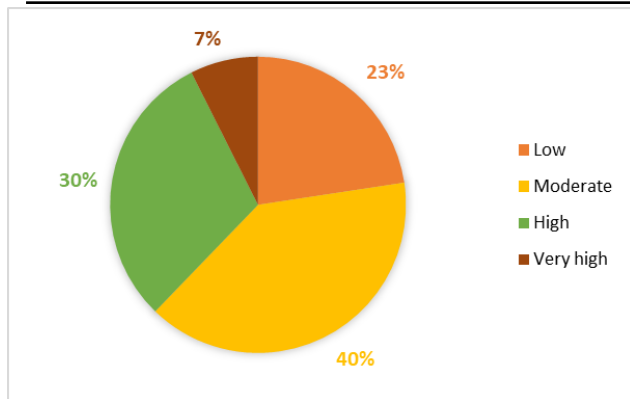


Figure 4. The IFRC Survey Result

the respondents also contend that the audit scope does not balance the time allocation in conducting the tasks, even after the implementation of RBA. As a result, the auditors likely do not have enough time to perform at their utmost and meet the deadline at the same time. This finding confirms a study conducted by Smith *et al.* (2018), who argue that burnout fully mediates relations between job stressors and job outcomes. The situation could lead to the dysfunctional behavior of auditors (Juliyanty *et al.*, 2019; Maulidawati *et al.*, 2017; Nadirosyah *et al.*, 2011; Silaban, 2012). Eventually, Gundry and Liyanarachchi (2007) explain that this type of behavior is known in audit literature as Reduced Audit Quality Practices (RAQP).

Reduced audit quality practices (RAQP)

Wiratama *et al.* (2019) reiterate that job overload has a positive and significant effect on RAQP. The scholars explain that RAQP is dysfunctional behavior since auditors intentionally do not perform standardized audit procedures. As mentioned before, there are some types of dysfunctional auditor behavior or RAQP. However, in this paper, the authors focus on two kinds of RAQP. The two forms of RAQP are inadequate documentation of audit working papers, including irrelevant and incompetent audit evidence, and poor review of audit reports, as shown in the Review Report.

In line with the survey conducted towards public sector auditors, the writers utilized the Review Report established to evaluate the auditors' performance and quality of audit reports. The review report evaluates quality assurance conducted by the auditors, ensuring if the auditors have planned, performed, and reported audits following audit standards. In the reports, two aspects of the quality assurance assessed are documentation of audit working papers and review of audit reports.

Firstly, sufficient documentation in performing every audit procedure is prominent. The working paper could help auditors monitor their progress and guide them to formulate reasonable audit opinions (Agoglia, Hatfield & Brazel, 2009). The scholars also argue that adequate documentation would affect the audit team's judgment and influence reviewers' ability to assess and react to the quality of work. Auditors, additionally, conduct procedures and gather evidence in every phase throughout an audit process. Florea and Florea (2011) state that the evidence includes written and electronic documentation, allowing auditors to conclude the audit process with reasoning. Accordingly, audit evidence would help auditors establish a starting point in expressing reasonable assurance of the audited financial statement. Thus, sufficient and appropriate audit evidence could reduce audit risk to an acceptable low level (Anonymous, 2006).

Secondly, a tiered review in an audit is essential in maintaining the quality of the audit. As mentioned before, Agoglia *et al.* (2009) reiterate that a proper working paper would lead reviewers to assess the audit quality. In addition, supervisors could examine the result of each audit procedure through audit documentation. It is prominent for senior auditors to review and assess junior auditors' work and outcome, preventing audit failure. The reviewed reports of

quality assurance, established from 2015 to 2017, elaborate that decent working papers do not support several audit reports. For instance, the analytical procedures in the audit of financial statements are not appropriately documented.

Moreover, the reports revealed that auditors had not recorded the result of each audit procedure mandated in the audit program. Even though the tiered review has been implemented, some inconsistencies in audit findings were still found (BPK RI, 2015; BPK RI, 2016; BPK RI, 2017). Therefore, auditors are likely to engage in RAQP, although RBA has been applied during the audit process.

In conclusion, the survey results elaborated that even though RBA guides auditors to assess auditee's risk and determine audit scope, the scheme may not preclude auditors from encountering time budget pressure in performing audits. The RBA does not solely consider human capabilities in performing complex audit procedures. Furthermore, the RBA methodology does not set time allocation given to auditors to perform audits based on the assessed audit risk. Consequently, the auditors encounter a challenge, as they have to perform complex audit procedures in a tight schedule. The pressure could trigger auditors to behave unethically and create a RAQP. The RAQP has been proven to occur through the Review Report established to evaluate the auditors' performance and quality of audit reports. This situation supports the research finding of Gundry and Liyanarachchi (2007). They insist that the unbalance of audit burden and the allocation of audit resources could lead to situations when auditors could not perform as expected.

Ergonomics intervention on RBA

As elaborated before, auditors should be given appropriate resources if the audit scope

becomes more extensive and complex (Maulidawati *et al.*, 2017). The balance between time budget allocation and audit scope would affect the employees' health and productivity. Thus, in this study, the purpose of redesigning RBA is to complement the principles of RBA with the fundamental of ergonomics that heavily relies on human capability in conducting practical tasks.

Ergonomics could intervene in RBA methodology in the Risk Response Stage. For example, if the assessed risk of an auditee is categorized as high risk, the audit team should have a more extended audit period than the audit team for a low-risk entity. In another scheme, if the time allocation cannot be modified due to a tight schedule in providing government audit reports in the public sector, the number of auditors assigned in the audit could balance the entity's risk. For instance, the number of auditors in an audit team assigned to a high-risk auditee should be more than those auditing a low-risk entity. The complete proposed design of ergonomics intervention on RBA implementation is in Appendix 2. The summary of Appendix 2 is shown in Figure 5.

There are three stages of RBA: risk assessment, risk response, and reporting. In the risk assessment stage, the auditors determine whether the entity's risk is high, moderate, or low. Subsequently, they could professionally judge an appropriate audit scope and determine procedures to address the potential risks. On the other hand, auditors' workload could be heavier when the risk is higher since the number of audit procedures and samples increases. Nevertheless, arguably, the RBA has not considered the resources allocated to perform the audit procedures and balance the audit scope defined by the auditors. Therefore, ergonomics could intervene in the RBA concept at the stage of risk response, as shown in Figure 5.

Figure 5 also elaborates that if the audit risk is high, the audit team should be given a more extended audit period and consist of more auditors than the audit conducted in a low-risk entity and vice versa. Setiawan (2015) states that the optimal working hours for an employee are eight hours a day. There should be twice broken time and one-hour lunchtime during the eight hours. The scholar also believes that exaggerated working hours could adversely affect employees' performance and health. In addition, the issue could trigger discomfort and dissatisfaction among workers resulting in reduced performance quality. Therefore, the authors shall suggest an example of how ergonomics could allocate resources in audits based on different assessed risks.

Table 7 then elaborates an example of a working paper based on the accounting cycles. The cycle consists of several accounts.

After identifying the accounting cycles, the auditors could assess inherent risk and control risk, thus, determining the risk of material misstatement. The auditors could then respond appropriately to address the possible risks, as elaborated in Table 8.

Condition 1:

Condition 1 is an example of assessed risks in the cash receipt cycle. The auditors may conclude that the inherent risk of cash receipts is moderate since cash is a very liquid type of asset; it could be easily stolen without adequate documentation and other complement controls. Unfortunately, the control risk is high since no relevant control addresses the possible fraud. Therefore, the assessed risk of material misstatement is also high. Responding to the high risk of material misstatement, auditors should increase the number of audit samples in the test of details and rely more on a substantive test, such as recalculating bank

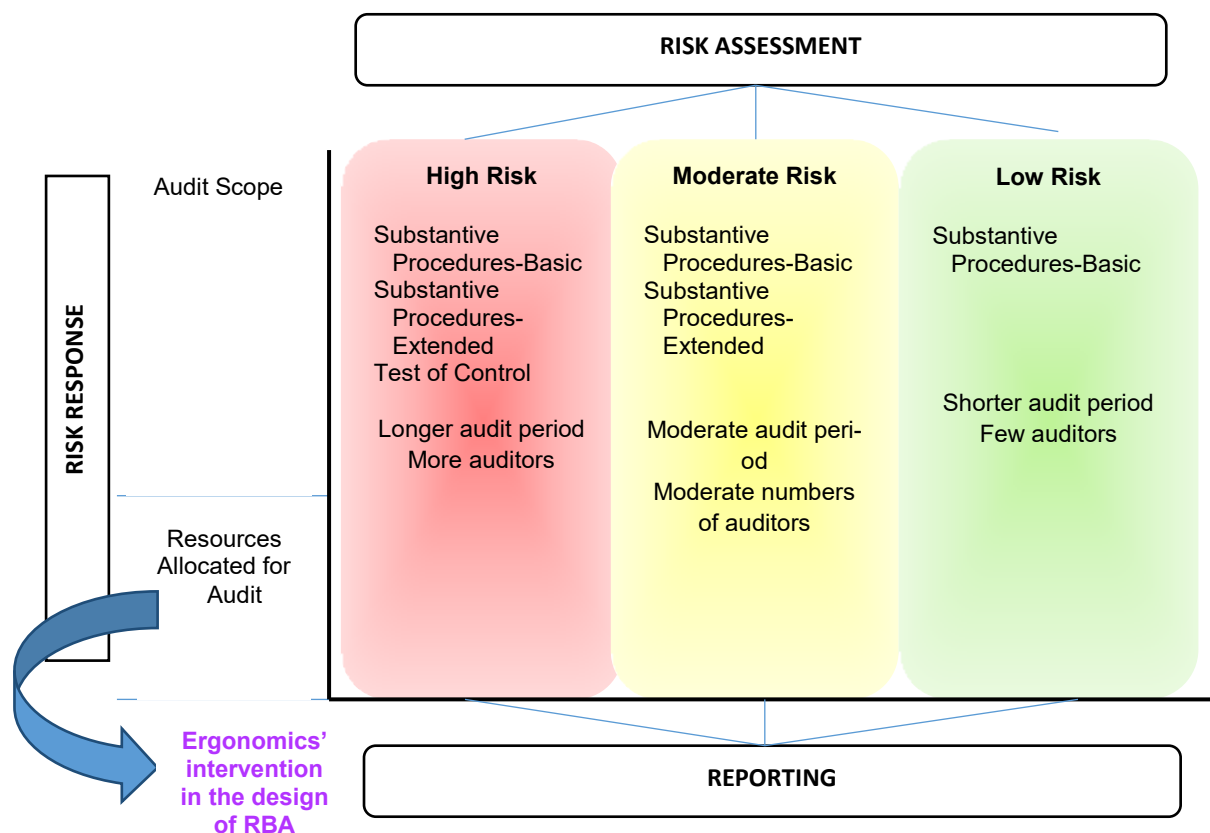


Figure 5. Ergonomics Intervention on RBA Implementation
Source: Maulidawati et al. (2017); Susihono & Adiatmika (2017); Tuanakotta (2013)

statements and cash receipt journals. Consequently, the audit scope for this cycle is broad, requiring extended time budget allocation, tight supervisory control, and supported by highly experienced team members.

Considering the determined audit scope, time allocation for both the manager and supervisor to supervise the audit team should be adequate. In this case, the manager and supervisor may need 16 and 24 hours to observe the team's progress, which equals 2 and 3 days. These conversions are based on Setiawan (2015), who states that the optimal working hours per day is 8 hours. Arguably, the manager and supervisor should frequent-

ly supervise the audit process in the planning stage, during the field audit, and during the reporting stage to ensure that the audit is performed based on the standard and evidence gathered are enough and competent to conclude an audit opinion.

The team leader and team members should be given an extended audit period of 80 to 400 hours of the audit period, which equals 10 to 50 days. Ample time budget allocation is essential since the team leader and members are responsible for testing many audit samples with various audit procedures during the financial statement period to suppress the audit risk to an acceptable low level.

Table 7. Accounting Cycles in Financial Statement Audit

No.	Cycle	Related Account	Types of Report
1	Budgeting	Accounts in Statement of Budget Realisation (Revenue and Expenditures)	Budget Report
2	Cash Conversion Cycle:		
	Cash Receipt	Cash, Revenue, Account Payable	Budget Report Financial Report
	Cash Payment	Cash, Expenses, Expenditures, Current Assets, Fixed Assets	Budget Report Financial Report
3	Financing	Cash, Investment, Financing	Budget Report Financial Report
4	Fixed Assets	Cash, Fixed Assets, Depreciation Expense	Budget Report Financial Report

Source: Tuanakotta (2013)

Table 8. Example to Allocate Time in Audit

Accounting Cycle	Inherent Risk	Control Risk	Risk of Material Misstatement	Risk Response	Resource Allocation for Audit	Time Budget Allocation* (hours)	Ergonomics intervention* (days)
Cash Conversion Cycle							
<u>Condition 1:</u> Cash Receipt	Moderate	High	High	Substantive Procedures-Extended; Test of Control	Extended time budget allocation; Tight supervisory control; Highly experienced team members.	M = 16 S = 24 TL = 80 TM = 400	M = 2 S = 3 TL = 10 TM = 50
<u>Condition 2:</u> Cash Payment	Moderate	Moderate	Moderate	Substantive Procedures	Moderate time budget allocation; Adequate supervision; Adequate number of team.	M = 8 S = 16 TL = 56 TM = 280	M = 1 S = 2 TL = 7 TM = 35

*M: Manager; S: Supervisor; TL: Team Leader; TM: Team Member.

Condition 2:

The auditors could determine that the assessed inherent and control risks are moderate for the cash payment cycle. The assessed risks could be because the staff could do the payment procedures for menial items, such as stationary, without any appropriate approval from direct supervisors. The amount of money could be insignificant for a single transaction; however, the total expense for one year could be material. Therefore, the risk of material misstatement is also moderate. In this case, the auditors could set adequate substantive procedures with a qualified number of audit samples.

Compared to Condition 1, where the risk of material misstatement is high, the audit scope in Condition 2 could be narrower. Consequently, the resources allocated to audit the cash payment cycle are less than the time budget allocated for the cash receipt cycle in Condition 1. Therefore, based on the auditors' professional judgment, the manager and supervisor could be given 8 and 16 hours, equal to 1 and 2 days of supervision. While the time allocated for the audit team could be 56 to 280 hours equals 7 to 35 working days. The time allocation could be because the manager and supervisor's frequency of supervision is shorter than the time allocation in Condition 1. Accordingly, the audit procedures conducted by auditors in Condition 2 are not as complex as those performed in Condition 1.

Limitation and Contribution

The limitation of this study is the limited data that has been analyzed. Future research with data from more respondents and different audit organizations could give a broader perspective on how ergonomics could positively complement RBA's principles. This study focuses on how ergonomics could intervene in RBA, theoretically addressing the time budget pressure as a literature review.

Future research on a case study project to assess how ergonomics intervention on RBA could benefit the audit team and produce a qualified audit report. The t-test could compare before and after ergonomics intervention on RBA between two audit teams. Future research could also focus on formulating appropriate time budget allocation for auditors based on the assessed risk and complexity of audit procedures they have to conduct to address time budget pressure.

Nevertheless, some contributions of this study are results being used as a guideline for auditors in private and public sectors to develop appropriate time budget allocation for specific audit procedures and details job descriptions based on the entity's risks. Second, this study also complements current literature on the implementation of ergonomics in auditing, factors affecting the audit quality, and auditors' behavior.

CONCLUSION

Most auditors have to present value-added audit results within time budget constraints. With this in mind, an audit is a demanding task for most auditors since they have to deliver value-added audit results. Accordingly, many private and public-sector auditors utilized RBA in the audit planning stage to determine the entity's risks and focus the audit on those risky areas. RBA consists of three steps: risk assessment, risk response, and reporting (Tuanakotta, 2013). In short, the author explains that, firstly, auditors should identify areas where there is a high risk of material misstatement and may require more substantive audit procedures. Secondly, auditors should determine how to reduce the procedures and audit samples applied to the areas identified as low risk. Finally, auditors could evaluate audit evidence to determine the reasonable assurance given to the audited financial statement. Therefore, RBA assists audi-

tors in determining the audit scope by assessing heightened risk and focusing on those areas (Castanheira et al., 2010; Tuana-kotta, 2013).

Nevertheless, Sastra et al. (2018) state that RBA focuses on defining appropriate audit scope, yet, it does not necessarily consider auditors' behavior. Maulidawati et al. (2017) and Nadirsyah et al. (2011) argue that time budget pressure is one problem affecting auditors' dysfunctional behavior and compromising the audit quality. Time budget issues become a real problem for most auditors. For instance, even though public sector auditors have conducted audits based on RBA principles since 2007, auditors still encounter limited audit periods. Consequently, they should work overtime to meet a strict audit deadline. The consequences of working late for auditors could adversely affect their productivity and their health.

Given the preceding, it is essential to complement RBA implementation with the principles of ergonomics. Ergonomics is "a discipline that attempts employees to adapt a job to promote workers' health, safety, and comfort and productivity." Additionally, ergonomics is applicable to intervene in the work-related methodology and work-related tools. Because of this, ergonomics has been applied to various employments such as health workers, teachers, computer practitioners, manufacturers, and bankers. Arguably, ergonomics could also guide auditors in performing more effective audits.

The authors propose that ergonomics could be applied in the risk response stage of RBA. After auditors assess the inherent and business risks, they could determine the risk level, whether high, moderate, or low. Following that, auditors should evaluate the appropriate audit procedures and audit scope. Auditors should professionally decide if they might be equipped with sufficient time allo-

cation based on the workload. Auditors' time budget allocation should balance the workload to gain maximum results. In other words, auditors should have an extended time budget if the audit scope is complex to respond to the high assessed entity's risk. Conversely, if the assessed risk is low, the auditors could maintain still audit quality despite little time budget allocation.

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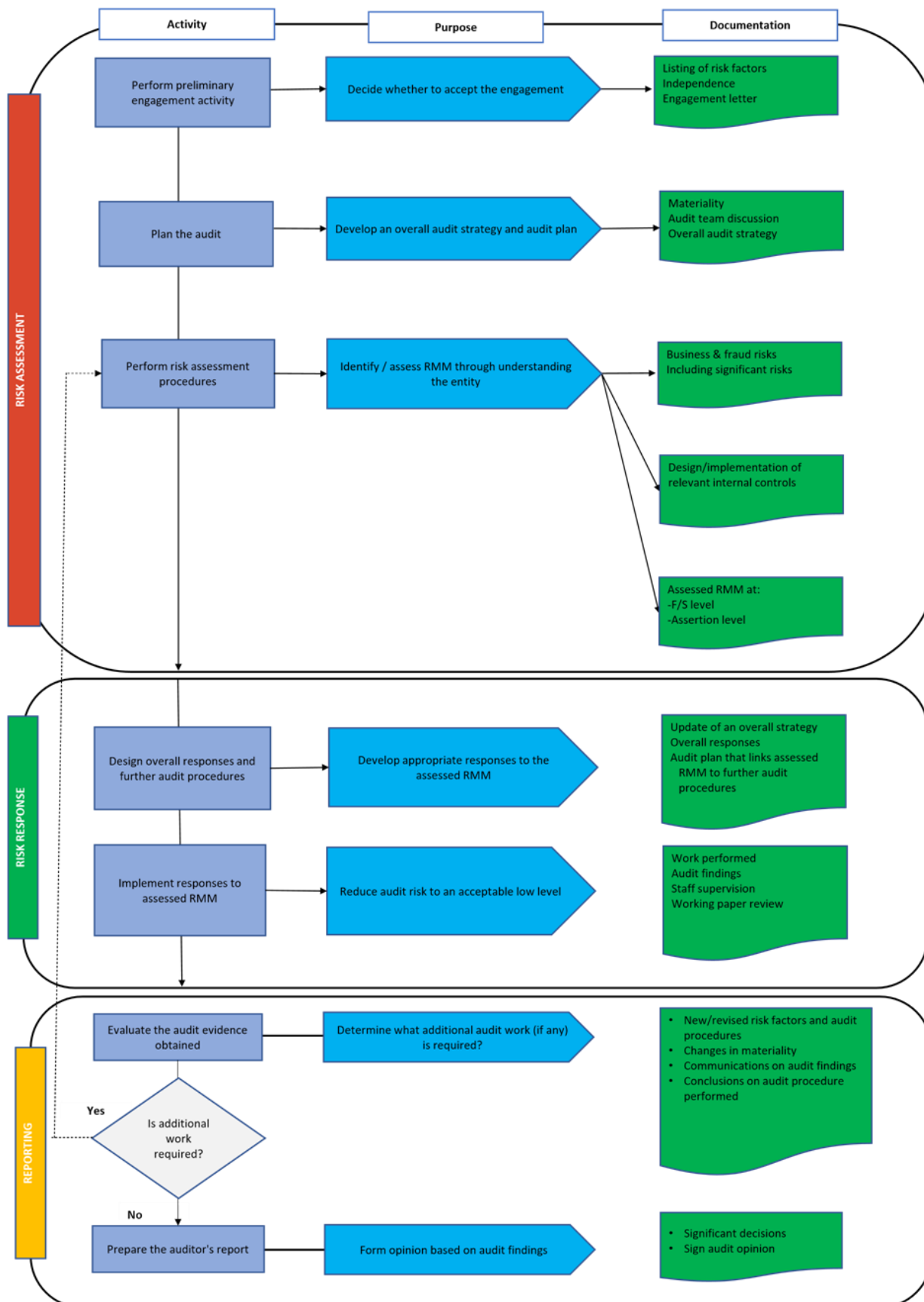
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APPENDICES

Appendix 1. The Workflow of Risk-Based Audit (RBA)

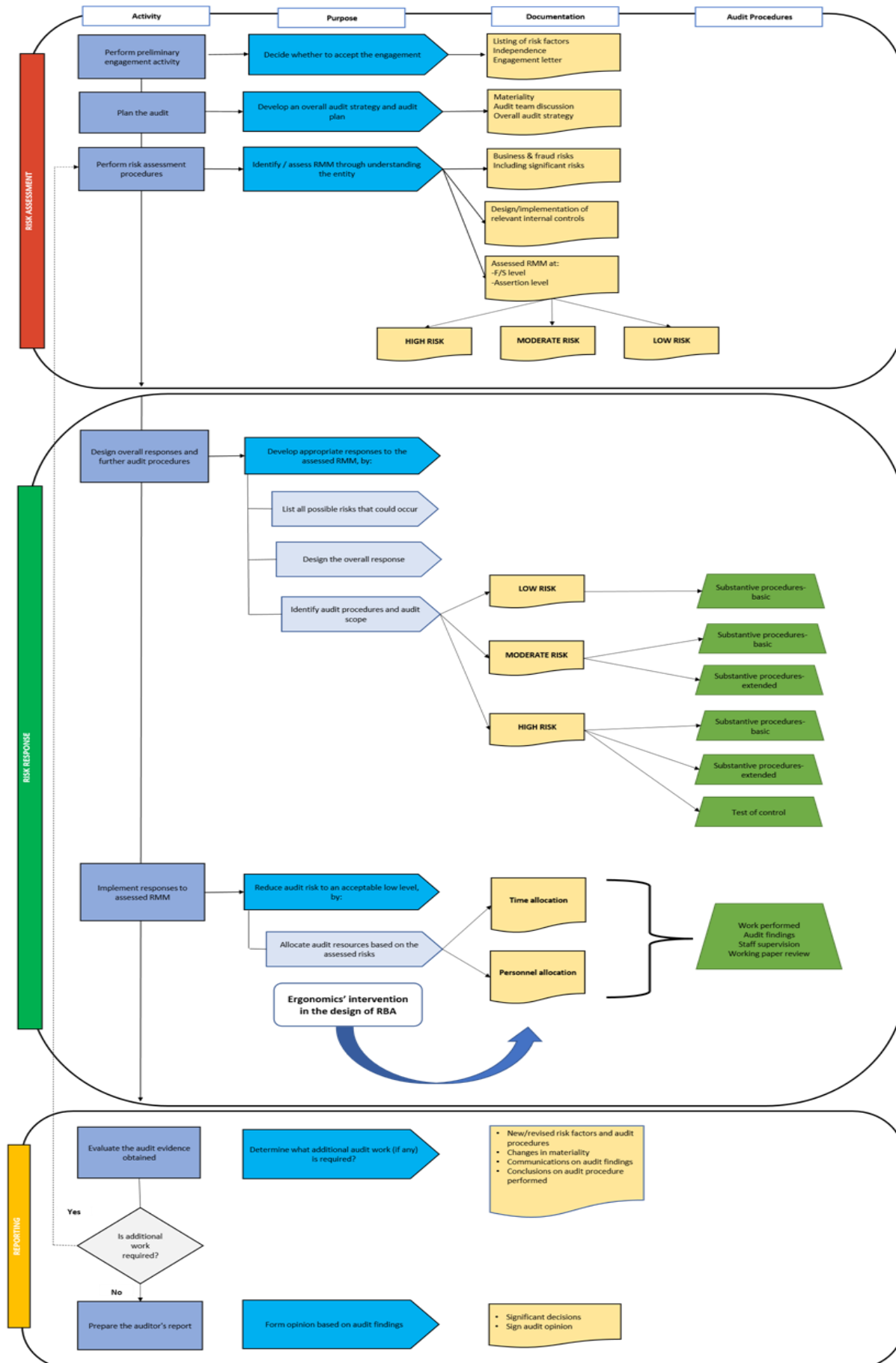


Source: Tuanakotta (2013)

Appendix 2. General Information of Respondents

Variables		Total Respondents	Percentage
Gender	Female	148	46%
	Male	175	54%
Age	20-30 years old	27	8%
	31-40 years old	167	52%
	41-50 years old	107	33%
	> 50 years old	22	7%
Job Position	Team Member	83	26%
	Team Leader	163	50%
	Controller	49	15%
	Non-Auditor with Audit Experience	28	9%
Level of Education	Undergraduate	171	53%
	Postgraduate	151	47%
	PhD	1	0,3%
Working Tenure	0-5 years	29	9%
	6-10 years	39	12%
	11-15 years	157	49%
	16-20 years	51	16%
	> 20 years	47	15%
Audit Experience (in financial statement audit)	1-5 times	44	14%
	6-10 times	73	23%
	11-15 times	82	25%
	> 15 times	124	38%

Appendix 3. Ergonomics Intervention on RBA Implementation



Source: Frederick et al. (1984); Setyawan (2011); Tuanakotta (2013)

Assessing Public Sector Environmental Accountability Through Performance Audit: The Case of Maldives

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ABSTRACT

Environmental accountability has gained much-needed attention due to the growing concern about climate change and its impact. Given that environmental management has been a function of government, especially in developing countries like the Maldives, the country's economy is dependent on its environment and natural resources, and the numerous efforts by the government toward environmental protection, promoting environmental accountability becomes crucial. At the heart of promoting environmental accountability lies the important role of public sector environmental performance audits. Through a qualitative research method of content analyses and unstructured interviews, this study aims to discuss the importance of environmental performance auditing in creating public sector accountability by alluding to the importance of environmental accountability and SAI Maldives' role in creating public sector environmental accountability.

KEYWORDS:

Public sector environmental accountability; environmental performance auditing; SDGs

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INTRODUCTION

There is a growing global concern regarding countries' environmental issues (Lampert, Metaal, Liu, & Gambarin, 2019). Consequently, there is an increasing need for firms and entities within both the private and public sectors to remain accountable for the environmental, economic, and social impacts of their activities. It can be noted that there are various developing reporting requirements for private sector entities to disclose their environmental behavior and activities. However, reporting requirements beyond the scope of financial performance for public sector entities are relatively scarce (Montesinos & Brusca, 2019).

Corresponding to these findings is the implementation of sustainability reporting among public sector entities in the Maldives. There is no legislation requiring disclosures in annual reports that go beyond the financial statement disclosure requirements. Hence entities within the public sector are not required to report or disclose their performance concerning the environmental impacts of their activities or sustainability reporting.

Despite the lack of requirements in the fields of environmental or sustainable reporting in the public sector, the major responsibility entrusted to governments across the world in the significant fight against climate change and environmental preservation efforts is signified by the various multilateral environmental agreements such as the United Nations Framework Convention on Climate Change (UNFCCC) (1992), the Kyoto Protocol (1997), and the Paris Agreement (2015) among others. Furthermore, there is a substantial obligation on governments to work towards sustainable development in line with the United Nations (UN) Sustainable Development Goals (SDGs) adopted by all UN member states in 2015, which sets out 17

goals and 169 targets across the areas of environment, economy and social aspects. With the gap in sustainability reporting requirements for government entities, there is a need for government agencies to be held accountable in the area of environmental issues, including sustainable development. This is primarily in conjunction with the significant responsibility vested within public entities to ensure beneficial socio-environmental impacts on a global scale. Consequently, there is a need for environmental performance auditing.

Environmental auditing, according to the International Organization of Supreme Audit Institutions Working Group on Environmental Auditing (INTOSAI WGEA) 9th Survey on Environmental Auditing, is defined as a financial, compliance and performance audit (as well as prior audit in some countries) that evaluates and gives opinions on environment-related matters. According to the same survey, performance-based environmental auditing was the most common method, with 93% of the SAIs that took part in the survey having a legislative mandate to audit environmental issues in performance audits (INTOSAI WGEA, 2019). As guidance for conducting environmental audits, INTOSAI has issued International Standards for SAIs (ISSAI) 5100-5199, containing Guidelines on Environmental Audit.

Although environmental audits can be carried out in financial, compliance, and performance audits, performance-based environmental audits are better suited for public sector requirements (Rose, 2001). As a government is entrusted with the responsibility for managing natural resources through various policies, a performance audit can assess the process more thoroughly, going beyond the scope of a financial or compliance audit.

In order to improve the use of audit mandates and audit instruments in the field of

environmental protection policies, the INTO-SAI WGEA was established in the 14th Congress of the INTOSAI (INCOSAI) meeting held in 1992. The INTOSAI WGEA assists Supreme Audit Institutions (SAIs) in conducting environmental audits, promotes knowledge sharing among SAIs in environmental auditing, and produces guidance material on the subject (INTOSAI WGEA, 2019).

As stated by the Intergovernmental Panel on Climate Change (IPCC), Small Island Developing States (SIDS) like the Maldives are among those that will be impacted first and most severely as a result of climate change (Ministry of Environment and Energy, 2015). Hence the Maldives is an island nation highly vulnerable to global warming and climate change, despite contributing the least and being the least predisposed to adapt and respond to climate change. While the Maldives relies on the environment and its natural resources for a good portion of its Gross Domestic Product (GDP) (World Bank, 2021), the country is affected by many environmental concerns, from solid waste management to water and sanitation to renewable energy generation.

The Government of Maldives is at the forefront of the global climate change arena as a party to the UNFCCC and one of the first countries to ratify the Kyoto Protocol and the Paris Agreement. Although the country emits a negligible amount of greenhouse gases globally, the country presented its first Biennial Update Report of Maldives to the UNFCCC in 2020. The Maldives, as a member of the UN, is also working alongside other nations to achieve the UN SDGs (also referred to as Agenda 2030). These actions indicate that the Government of Maldives has made international commitments toward mitigating climate change and working toward sustainable development.

The main environmental legislation in the Maldives is the Environmental Protection and Preservation Act which governs environmental issues in the country. Along with the Act, the government aims to align its main environmental goals and policies according to the Strategic Action Plan (SAP) (2019-2023) launched by the incumbent government. Of the five sectors outlined in the Government's SAP as government focus areas, major environmental strategies and targets are contained within Sector One - Blue Economic and Sector Four - *Jazeera Dhirulhun* (Island Life). There are further supporting policies and regulations which govern specific environmental issues, which are highlighted within the results of this study.

Governmental agencies may set targets for achieving environmental goals and be a party to various international conventions and protocols. Nevertheless, effective monitoring and review of the actual work being done to achieve the targets and meet the requirements of protocols are required to ensure accountability and transparency. Correspondingly, this gives rise to a need for environmental performance auditing in SAI Maldives to ascertain the extent to which the public sector of the Maldives is effective in meeting its environmental targets.

In order to strengthen accountability in the areas of environmental concern in the Maldives through environmental auditing, the Auditor General's Office of the Maldives became a member of the INTOSAI WGEA in 2021. Furthermore, a specialized audit unit for environmental auditing was established within the performance audit department in the same year to build capacity and ensure dedicated resources for environmental auditing within the SAI. As a result of the change, environmental performance audits focusing on renewable energy, protected areas, and waste management have been included in the Annual Work Plan of SAI Maldives for

the year 2022. Despite not having a dedicated environmental auditing unit previously, SAI Maldives has carried out performance audits that fall within the category of environmental audits defined by the INTOSAI WGEA. This includes the performance audit on the preparedness for implementing the SDGs, the audit of the Maldives Environmental Management Project, and the audit on the Effectiveness and Sustainability of the Response to Coastal Erosion.

This study emphasizes the growing significance of environmental audit from a public finance perspective and public sector environmental governance across different SAIs. Furthermore, it attempts to identify and link the importance of the environment to the Maldivian economy and highlight the duty of SAIs in creating environmental accountability in the public sector through environmental performance auditing. Moreover, it aims to assert the importance of environmental auditing in the successful implementation and monitoring of SDGs. The study also hopes to identify the current areas of concern in environmental issues in the Maldives and thus identify key areas for potential environmental audits for SAI Maldives.

LITERATURE REVIEW

Role of Public Sector in Environmental Management and Sustainable Development

There is various literature that discusses the responsibility of the public sector in environmental management and sustainable development. The influential Report of the World Commission on Environment and Development: Our Common Future defines sustainable development as development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland, 1987). Seifi

and Crowther (2020) state that, although the concept of Corporate Social Responsibility (CSR) is more often associated with profit-seeking entities. That CSR would apply to all entities, including those within the public sector, is generally understood. This demonstrates that the public sector is not excluded from the broader responsibility towards society, including the environment and sustainable development efforts.

Ball et al. (2014, as cited in Roberto, Maglio, & Rey, 2020) states that public sector entities should be actively involved in sustainable development. One of its responsibilities is to establish and implement public policies that benefit society generally. Public sector entities have a more prevalent responsibility in performance sustainability reporting over private sector organizations, as the actions of the former are more linked to sustainable development than the market. Those statements support the argument that the public sector plays an essential role in sustainable development.

Methods of Accountability and Reporting Techniques in the Public Sector

The private sector is required to disclose its non-financial performance through different methods such as Integrated Reporting by the Value Reporting Foundation and the proposal for Corporate Sustainability Reporting Directive (CSRD). The European Union issued CSRD on 21 April 2021, which would amend the existing Non-Financial Reporting Directive to introduce a more detailed and inclusive reporting requirement (European Commission, 2021).

The private sector is obliged to be increasingly transparent and accountable for its socio-environmental actions through such reporting requirements. According to Montesinos and Brusca (2019), the public sector's non-financial disclosures and sustainability

reporting are still nascent, as seen by several studies, except for some countries. The Global Reporting Initiative (GRI), created in 1997, has issued different guidelines for sustainable reporting fully applicable to the public sector and issued its G1 Guide for Public Agencies in 2005 to specifically analyze certain aspects of the sector (Montesinos & Brusca, 2019). However, a study conducted by GRI to analyze the extent of implementation of reports in the public sector concluded that sustainable information is still in its infancy in the public sector (only 1.7% of reports published in GRI in 2009 are public entities (Montesinos & Brusca, 2019).

The International Integrated Reporting Council (IIRC), together with the Chartered Institute of Public Finance and Accountancy (CIPFA), published a guide for the application of integrated reporting in the public sector (Montesinos & Brusca, 2019). Although such guides have been published, Iacuzzi, Garlatti, Paolo, and Alessandro (2020) discusses the limitations of Integrated Reporting (IR) and the complexities of implementing it. The authors state that while the holistic approach may be helpful for senior management with a deep understanding and knowledge of the organization, few employees, let alone stakeholders, can conceptualize, let alone operationalize integrated thinking using its rather vague guidelines and definitions. It further identifies that the IR framework is missing indicators on how to account for stakeholders' inputs, outputs, and outcomes in a value co-creation process, which is fundamental, particularly for public sector organizations (Iacuzzi, *et al.*, 2020).

Another emerging method of non-financial reporting is *sustainability reporting*. Roberto, Maglio, and Rey (2020) asserts that sustainability reporting techniques emerged due to the need to progress the sustainable development agenda in the past two decades. They further mention that, although the pri-

vate sector has adopted sustainability reporting, progress within the public sector appears relatively stunted and that Sustainability Reporting is still an emerging field (Roberto, Maglio, & Rey, 2020). However, the authors also state that with the public sector playing a key role in working towards the SDGs, it is vital to align the organization's strategy and organizational report with the SDGs, informing the stakeholders of the current level of commitment to these objectives (Monteiro, Ribeiro, & Lemos, 2020). The fact that there are no existing international standards on sustainability (Seifi & Crowther, 2020) makes implementing and monitoring targets related to sustainability increasingly ambiguous.

Role of SAIs and Environmental Audit in Ensuring Accountability

Widespread calls for accountability are based on the demand that those governing be answerable and responsible for failing to deliver on their aims or output accountability (Kramarz & Park, 2016). However, as broader demands to be more responsible and answerable for how decisions are made are gaining momentum, bringing input accountability to attention and conducting ex-ante audits is important. Sułkowski and Dobrowolski (2021), in their study on the role of SAIs in energy accountability in EU countries, concluded that SAIs should change current audit strategies from conducting ex-post audits to ex-ante audits as this will lead to preventing irregularities. This will increase accountability by preventing audits from being a policing function which negates its leverage for spurring action. Yusoff, Mohamed, and Hadi (2016) argue that implementing audits on an ongoing basis rather than the current ex-post approach will allow a comprehensive assessment to identify weaknesses in the early stages. When dealing with development issues that generally prioritize economic interest rather than pre-

serving the environment, conducting environmental audits on an ongoing basis is considered important (Yusoff, Mohamed, & Hadi, 2016). The study also indicates that changes to the audit approach by performing the audit in a proactive, holistic manner by taking into account the entire chain of environmental activities undertaken by the public sector are vital for the use of environmental audit as a preventative mechanism.

The impact of audit on accountability is also dependent on accountability and policymaking, as in order to make positive changes, the recommendations and findings need to be acted upon (Montero & Le Blanc, 2019). Accountability can be a meaningful tool when incorporated into the first tier of environmental governance, where agenda and goal setting occur (Kramarz & Park, 2016). Hence, to Guillan (2013, as cited in Montero & Le Blanc, 2019), the relationships and linkages with stakeholders and the effectiveness of communication channels with relevant institutions and the public are crucial.

A modernization dilemma is created due to economic, environmental, and social development separation. The need for specialization has led to the problem of disintegration, which requires addressing problems and finding solutions for each system (Yusoff, Mohamed, & Hadi, 2016). Therefore, an integrated approach connecting environmental indicators with economic and social indicators is important to enabling auditors to provide practical and objective audit recommendations (Yusoff, Mohamed, & Hadi, 2016).

The practices of non-financial and sustainability reporting are still in the developing stage, as seen from the various studies conducted. This highlights the importance of a method for ensuring environmental accountability in the public sector. Montero and Le Blanc (2019) articulate that SAIs perform a central function within government account-

ability systems. They are generally aimed at promoting transparency, effectiveness, and accountability of the public sector and improving the performance of government institutions. Initially focused on compliance and financial auditing, SAIs' mandates have been expanded to assess the economy, efficiency, and effectiveness of public spending and government performance. The authors also identify how SAIs could play a key role in building accountability for the SDGs, including monitoring the implementation of SDGs and making recommendations for improving implementation (Montero & Le Blanc, 2019).

According to the World Commission on Environment and Development (WCED) (1987), environmental accountability, especially in the public sector, has been emphasized and identified to be vital if the goal of sustainable development needs to be achieved (Yusoff, Mohamed, & Hadi, 2016). As stated by Toepfer (2004, as cited in Yusoff, Mohamed, & Hadi, 2016), a mechanism is needed to ensure accountability in public is in place, and an environmental audit could be used. As maintained by Nazarova et al. (2021), the study conducted by the authors showed that environmental audits could make a positive contribution to the sustainable development of a green economy. It further states that today, only one world-famous tool provides independent analysis and recommendations for various process optimizations – audit (Nazarova et al., 2021).

Sulkowski and Dobrowolski (2021) researched the role SAIs in energy accountability in the European Union. They state that as the energy sector belongs to the strategic activity of the state, the national SAI is responsible for controlling the accountability of the whole sector and that the role of SAIs in sustainability transition will also be a part of the accountability process in the energy sector.

They further mention that regular energy consumption audits are necessary to identify waste of energy, help identify best practices for energy consumption, and that such audits can aid in achieving energy accountability and sustainability (Sułkowski & Dobrowolski, 2021).

Choudhary (2015) defines an *environmental audit* as a systemic, documented, periodic and objective evaluation of how well environmental regulatory requirements and commitments are met. An environmental audit is one tool that an organization can use in its environmental management system to help determine its environmental performance. In an environmental performance audit context, the environment is the fourth E in addition to the traditional 3-Es of

Economy, Efficiency, and Effectiveness. A further two Es are added as Ethics and Equity. Choudhary further states that SAIs can promote sound financial management and public accountability, essential elements in sustainable development (Choudhary, 2015).

Exploring the developments in environmental auditing within SAIs, Leeuwen (2004b) stated that at the end of the 1980s, SAIs became aware of their responsibility towards the environment and environment policy. The research found that a growing number of SAIs became active in environmental auditing and that after a quantitative growth, a shift from regularity to performance audits was noticed. Now environmental audit is a substantial and

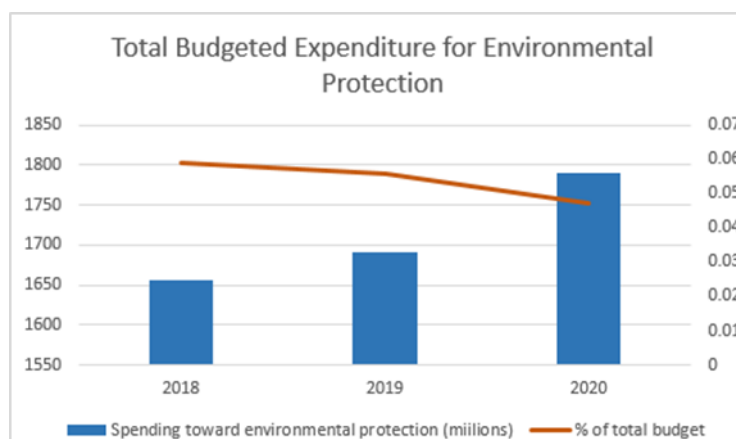


Figure 1. Total Budgeted Expenditure for Environmental Protection
Source: Ministry of Finance (2021)

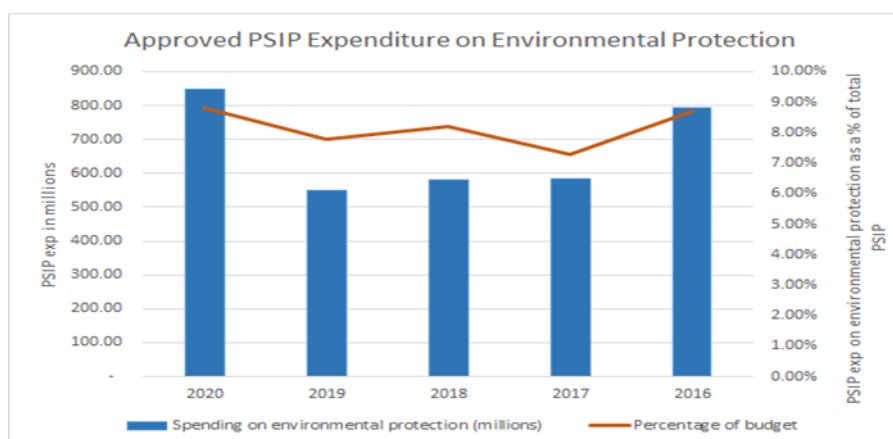


Figure 2. Approved PSIP Expenditure on Environmental Protection
Source: Ministry of Finance (2021)

regular part of the audit work of more than half of the SAIs (Leeuwen, 2004a).

RESEARCH METHOD

This study uses a qualitative method based on content analysis of primary documents such as environmental reports, national strategic action plans, legislation, international conventions, and other publicly available information, data, and statistics. The authors carried out unstructured interviews to increase the validity of the findings. The authors interview former and current Performance Audit Directors at SAI Maldives to get their perspective and experience on how environmental performance audit is fundamental in creating public sector accountability.

RESULT AND DISCUSSION

The Significance of the Environment to the Maldivian Economy

The pristine beaches, crystal waters, underwater coral reefs, and diverse marine wildlife sets this small island nation apart from other countries and is the biggest contributor to the national economy. The Maldives is a developing country relying heavily on its natural resources to promote its tourism industry, accounting for a quarter of its GDP (World Bank, 2021). Although the tourism industry currently accounts for the main source of income for the country, the fisheries sector has always been essential to the Maldivian economy. Until the 1970s, when tourism was established in the Maldives, the primary source of foreign currency was fish exports. This sector is essential, indicated by the fact that it is linked to the livelihoods of many Maldivians (Ministry of Finance, 2021). While we rely on our natural resources for our livelihood, our environment is one of the most peaceful environments in

the world. The geophysical characteristics of the Maldives make it highly vulnerable to natural hazards and climate changes.

The significance of the environment for the Maldivian economy is further evident from the proportion of the national expenditure toward environmental protection. A large proportion of expenditure from the Public Sector Investment Program (PSIP) is also being allocated to environmental projects, as seen in Figures 1 and 2. On 1st October 2016 Government of the Maldives introduced the Green Tax levied on tourists. The Green Tax goes to the Green Fund to handle climate finance in various sectors such as renewable energy, energy efficiency, water and waste management, also coastal protection.

The Role of SAIs and the Call for Environmental Accountability in the Public Sector

The public sector faces drastic and ongoing changes shaped by macroeconomic, social, and environmental trends (Barber, Levy, & Mendonca, 2007). The public sector is pressured to revisit the concept of environmental sustainability due to the share of the public sector in the global economic activities and, especially in the case of Maldives, due to the significant role the environment plays in contributing to the country's economy.

In order to take steps to mitigate the adverse impact on the environment through economic activities, the Maldives has signed various conventions and protocols, including the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement, among others. Furthermore, Maldives was the first country to sign the Kyoto Protocol (Ministry of Home Affairs, Housing, and Environment, 2001). The Maldives gives significant importance to taking part in the international agenda and is a member of several international organiza-

tions, standing at the forefront of voicing concerns about climate change and sea-level rise.

While the Maldives has always been a strong voice for bringing increased attention to climate change globally, the country has walked the talk by ratifying various legislations and addressing environmental issues in National Action Plans. In 1993 the Environmental Protection and Preservation Act (Act Number 4/1993) was ratified by the Government of the Maldives, prioritizing environmental conservation and the right to stop projects that contradict sustainability to Ministries implementing the law.

The Environmental Impact Assessment Regulation 2012 was established to incorporate the key role of building awareness and environmental health into planning and implementing development projects. Furthermore, the Climate Emergency Act (Act Number 9/2021) was ratified on 18 May 2021. This Act introduces guidelines for concerns and issues akin to climate change, such as reporting, and stipulates actions to address climate emergencies. The Act further aims to ensure the sustainability of natural resources by overcoming negative impacts and allocating funds for renewable energy sources (The President's Office, Republic of Maldives, 2021). The SAP 2019-2023 unveiled in 2019 by the current Administration outlines various strategies to address areas of environmental concern. The priority areas in the SAP guide the overall development direction of the Maldives to achieve economic development sustainably.

As a member of the UN, Maldives is also involved in meeting the United Nations Sustainable Development Goals under the 2030 Agenda for Sustainable Development adopted in 2015. The SDGs include 17 ambitious goals with 169 targets and 232 indicators across environmental, economic, and social aspects. The main strategies of the administration for achieving these SDGs are outlined within the

SAP. In the Maldives, the SDGs' overall implementation and monitoring were carried out by the SDG Division of the Ministry of Environment until the responsibility was transferred to the Ministry of National Planning and Infrastructure in 2019 (Auditor General's Office, 2019).

The various international conventions signed by the Maldives, various regulations and legislation addressing environmental concerns, and an SAP developed in line with the UN SDGs provide evidence of Maldives' commitment to sustainable development and environmental protection. However, there must be an oversight of these legislations and action plans formulated to ensure proper monitoring, review, and accountability in following through with the desired objectives. Environmental performance audits by SAI Maldives can ensure accountability through regular audits conducted on the various environmental projects being carried out by the public sector and identifying areas that require further resource allocation to meet the allocated environmental targets. Furthermore, the environmental goals included within the SDGs signify the need for SAIs to dedicate resources to conducting environmental performance audits targeted at specific SDGs in order to maintain accountability in the process of achieving these goals.

Correspondingly, recent trends in environmental auditing have sought a way to relate environmental audits to SDGs. The steps taken by SAIs around the world to assess progress toward 21st-century challenges are foundations for building a more resilient, SDG-aligned economy and society (Association of Chartered Certified Accountants, 2020). However, working with environmental themes presents its challenges, and the characteristics of the 2030 Agenda augment these challenges. The challenges faced by SAIs in carrying out environmental audits include the cross-cutting nature of

environmental issues, the existence of multiple stakeholders, government organizations, and areas involved in environmental issues, difficulties in evaluating natural resources in monetary terms, environmental issues being often caused by market failures, limited information and scarcity of effective indicators for environmental policies and programs. These challenges and the characteristics of the 2030 Agenda have strong similarities. Considering these similarities, SAI Maldives can contribute to SDG implementation by integrating the SDG perspective while conducting environmental audits. These types of audits will take a broader and comprehensive view by considering the relationships between environmental policies subject to audit and other policies, programs, and agencies it may affect rather than the traditional approach of examining individual environmental policies, programs, and agencies in silos (INTOSAI WGEA, 2017).

Developing countries such as the Maldives also rely heavily on foreign aid in grants and loans. International development funding agencies have incorporated SDGs into their initiatives and strategies. This has led to public sector reforms becoming more efficient and competitive. Throughout 2014 - 2017, the Maldives received USD 327 million for climate finance in grants, loans, and co-financing. As a country that relies on donor funds to provide for well over 50% of the total funds allocated to environmental projects, accountability in the expenditure of these donor funds is vital to ensure effective and efficient usage of both donor and state allocated funds toward environmental projects. However, the objectives of environmental projects and their efficiency are beyond the scope of financial and compliance audits. Therefore there is a growing need for SAIs to include the audits of environmental projects being carried out to maintain public sector accountability in the effective use of funds in

climate change mitigation and adaptation projects.

Given that environmental management has been a public sector function in the Maldives. Given that it is deemed so by the government by dedicating strategies at the national level strategic plan to combat environmental issues, it is evident that environmental accountability will play a significant role. Since the SAIs worldwide are taking a more comprehensive approach to serving their function of promoting greater accountability, SAI Maldives has to take a step toward promoting environmental accountability in the country.

The arguments gathered in this study make a strong case for the need for a robust review of environmental performance. The environmental audit is the most tested and reliable institutional mechanism to perform the previous reviews. The interconnection of social, environmental, and economic issues and the need for deeper stakeholder engagement require a shift in focus for SAIs. SAIs have to consider and overcome urgent environmental and social issues and challenges.

Experiences of SAI Maldives in Environmental Performance Auditing

The Auditor General's Office of the Maldives is mandated to conduct performance audits of the ministries, government offices, state-owned enterprises, government trusts, or trusts under the government's care according to Section 4 of the Audit Act (Act Number 4/2007). As environmental audits can be carried out as performance audits, it can be understood that environmental performance audits fall within this mandate. Following the establishment of the performance audit department at SAI Maldives in 2015, 23 performance audit reports have been published to 2021. While most of the audit topics chosen focus on the themes of various processes,

institutional arrangements, and projects, the topic of environment-related performance audits has only gained prevalence in recent years.

The first performance audit focused on an environmental topic was the performance audit report of the Maldives Environmental Management Project, and the audit report was published in 2017. The audit aimed to identify the extent to which the Solid Waste Management Program's objectives were achieved, whether the capacity building of personnel in the environment was carried out effectively and whether the project and project finances were managed effectively.

The Maldives Environmental Management Project (MEMP) was funded by the World Bank and initiated in 2008, and the project value was USD 17,231,619. The audit identified significant observations through the audit fieldwork, including repeated delays in project completion and weaknesses in the project monitoring system. Albeit not falling within the criterion of environmental audits, SAI Maldives carried out a performance audit on the preparedness for implementation of the sustainable development goals.

The audit report was published in 2019. The audit aimed to answer the extent to which the 2030 Agenda had been adapted into the national context, the securing of resources needed to implement the 2030 Agenda, and the mechanisms in place for the reporting and review of the progress towards implementation of the goals. The audit findings concluded that while there were ongoing efforts to adapt the SDGs into a national context and assign responsibility for SDGs implementation to goal leads, an effective follow-up and reporting mechanism was lacking. This signifies how performance auditing can contribute to the effective implementation and monitoring of the SDGs. Furthermore, by taking up environmental perfor-

mance audits on the SDGs related to environmental targets, SAI Maldives can monitor the public sector's progress towards achieving those SDGs.

A performance audit conducted in 2019 on the provision of electricity in the Greater Male Region focused on the performance of the efforts made by the government to provide continuous electricity to the public. It analyzed the financial situation of the state-owned electric utility service provider. Furthermore, this audit explored the policies utilized and actions taken by the government in promoting the use of renewable energy as well. The audit found that while the government had taken various measures to encourage the use of renewable energy, the effectiveness of the incentives offered was insufficient as only a few parties had utilized the incentives offered.

SAI Maldives published the most recent environmental audit report which was the Effectiveness and Sustainability of the Response to Coastal Erosion performance audit report. The audit published in 2020 focused on a pressing environmental issue facing the islands of Maldives. The audit aimed to identify the causes of coastal erosion in the Maldives, the actions taken to mitigate coastal erosion, and assess the results of the actions taken. The audit observed that, among other things, sufficient data was not maintained with regards to coastal erosion, that there was a lack of proper monitoring and that the projects for mitigating coastal erosion were not carried out considering the islands that were most severely impacted by the problem. Following the practice of SAI Maldives in gradually increasing the frequency of environmental performance audits that are being conducted, included in this study are different areas related to environmental auditing through which SAI Maldives can add value and create environmental accountability in the public sector.

Potential Areas for Future Environmental Performance Audits in the Maldives

The Millenium Ecosystem Assessment (2005) defines an environmental driver as any manufactured or natural factor which directly or indirectly leads to a change in an ecosystem. While climate change is a direct driver of environmental change, economic development and population growth are indirect drivers. Unplanned, uncontrolled urbanization and industrialization, unsustainable use of resources, also habitat destruction leads to the degradation of the environment (Ministry of Environment and Energy, 2016a). Due to the environmental drivers mentioned above, Maldives has faced many environmental issues over the years. These issues include beach erosion, land reclamation, waste disposal, inadequate data, population growth, distribution, and lifestyle (Ministry of Planning, Human Resources, and Environment, 1996). While these factors are still prevalent in the Maldivian context, the main mitigation sectors in the Maldives include energy, transport, and waste. The energy demands of the Maldives are met through the import of resources for energy security. The reliance on fossil fuels to meet the energy demands is the dominant source of Green House Gas (GHG) emissions in the country.

Solar energy is the most commonly used renewable energy in the Maldives. Several policies have been initiated toward achieving low carbon transformation of the energy sector. The recent one is the Framework for Maldives' ambitious plan to achieve net-zero carbon emissions by 2030 included in the Climate Emergency Act. The Maldives Energy Policy and Strategy 2016 was introduced to provide reliable and sustainable electricity by reducing the reliance on fossil fuels and exploiting renewable technologies. Maldives Scaling Up Renewable Energy Investment

Plan 2013-2017 was prepared as a requirement of the Scaling Up Renewable Energy Program in Low-Income Countries to become a carbon-neutral country.

The plan's components include renewable energy for the greater Male' region consisting of the Male' region's solar PV, waste-to-energy program, and region's renewable power system integration study. The other intervention is renewable energy for outer islands. This component was targeted to finance total renewable energy in about ten small electricity-consuming islands, upgrade power system in about 15 islands to be ready for large-scale renewable energy deployment, and increase the share of renewable electricity up to 30% of total electricity generation in about 30 islands. The third component of the plan is technical assistance and capacity building.

In addition to the above strategies, a project affiliated with Global Environment Facility (GEF), United Nations Environment Programme, was launched in 2015 to mainstream energy efficiency measures into policies, guidelines, standards, and building practices in the Maldives and to achieve a substantial reduction of GHG emissions (Ministry of Environment, Climate Change, and Technology, 2015). The Government of the Maldives has also exempted import duty on renewable equipment since 2010 to promote renewable energy. In partnership with Asian Development Bank, Climate Investment Funds, and European Investment Bank, Maldives started The Preparing Outer Islands for Sustainable Energy Development Project to transform existing energy grids in about 160 islands into a hybrid renewable energy system (Ministry of Environment, Climate Change, and Technology, 2016). Furthermore, funded by the Climate Change Fund and the World Bank, Accelerating Private Investments in Renewable Energy (ASPIRE) Project was initiated to facilitate

private investments in renewable energy and to increase the share of renewable energy in electricity generation (Ministry of Environment, Climate Change, and Technology, 2013). Fahi Ali Project, funded by the Chinese Government, was also launched in 2015 to distribute LED lights to the public at zero cost.

Audits focusing on whether the intended outcomes from the policies, actions, and projects are generated would be value-adding. Environmental performance audits in this area focusing on comparing and evaluating the adequacy of systems and procedures and the economy, effectiveness, and efficiency of the activities performed can be broad objectives of the audit of energy and sustainable energy projects.

The transport sector is the second-largest source of GHG emissions, and it is very challenging to mitigate the environmental impacts of this sector. Due to rapid urbanization, underdeveloped public transport system, and population growth. As a result, this sector is one of the contributors to environmental degradation. In the absence of mitigation in transport, emissions are projected to increase by nearly 181% by 2030 (Ministry of Environment and Energy, 2016a).

Several initiatives have been taken to mitigate the environmental impact due to transportation. Measures to improve road conditions, facilitate public transport, and reduce road congestion have been introduced. Although the mitigation efforts in this sector are encouraging, these efforts are very limited in scope and impact, and tracking the effectiveness of these measures remains a challenge. As the measures are subject to the broader acceptability of stakeholders, this also poses a major challenge. SAI Maldives can mitigate the challenges faced in this sector by evaluating the management of environmental impacts by auditing the economy, efficiency,

and effectiveness of policies, efforts, and measures to mitigate the impact of transport on the environment.

Waste management is recognized as a pressing environmental concern in the Maldives. Rapid population growth, changing consumption patterns, the rapid growth of the tourism sector, and barriers to transportation are the main drivers of significantly rising waste management problems. In the Maldives, there is no practice of segregating waste at the household level. The Environmental Preservation and Protection Act (Act Number 4/93) is the legislative and policy instrument to mitigate the effects of waste. There are sections in the Act addressing waste management. Waste Management Regulation was enacted in 2013 to implement national policies concerning waste management. The National Waste Management Policy was formulated in 2008 and further developed in 2015 to manage waste effectively in the country and establish waste management centers in all inhabited islands.

A multi-donor funded The Greater Male' Environmental Improvement and Waste Management Project was initiated in 2018 with a target to be completed by 2023 to establish a sustainable solid waste management system for the capital region and inhabited outer islands. The project's primary output is to establish a Regional Waste Management Facility with a waste-to-energy treatment plant in Thilafushi. Deficiencies in waste management systems are a national concern. SAI Maldives may help improve the quality of waste management by addressing these insufficiencies compared to international best practices in waste management and providing recommendations to the relevant stakeholders.

The marine environment forms the dominating ecosystem of the Maldives. The coastal and marine ecosystems, especially the coral reefs, are globally significant. They form the seventh-largest reef system globally and are

rich in biodiversity (Ministry of Environment and Energy, 2016b). The biodiversity sector of the Maldives contributes to 89% of Maldives GDP, 98% of exports, 62% of foreign exchange, 49% of public revenue, and 71% of the nation's employment (Ministry of Environment and Energy, 2016b). This indicates that the economy and livelihoods of people are highly dependent on the country's biological resources. Due to the environmental drivers discussed above, the biodiversity of the Maldives has been subjected to extreme pressure.

There are many responses by the government to the threats to the biodiversity of Maldives. The Environmental Preservation and Protection Act (Act Number 4/1993) has provisions for the protection and conservation of biodiversity under which protected areas are classified. The conventions and plans adopted in the Maldives also support biodiversity conservation. Some of the important biodiversity-related international agreements to which Maldives is a signatory are the Convention on Biological Diversity (CBD), Cartagena Protocol on Biosafety, Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), International Plant Protection Convention, and Indian Ocean Tuna Commission (IOTC). In addition to this, under the

Fisheries Act (Act Number 14/2019), marine species are declared protected. The Regulation on Migratory Birds (2014/R-169) prohibits any activity that could harm seasonal migratory birds. The first National Biodiversity Strategic Action Plan (NBSAP) was prepared in 2002 to be used as guidance for other national policies, regulations, and work plans to implement the Convention on Biological Diversity (CBD) (Ministry of Environment and Energy, 2016b). A 10-year NBSAP was again developed in 2015 for 2016-2025 to address broad categories of concern. This NBSAP integrates national obligations of other relevant international conventions such as CITES, United Nations Convention to Combat Desertification (UNCCD), and UNFCCC. It will also contribute to the achievement of goals of biodiversity conventions to which the Maldives is yet to become a party (Ministry of Environment and Energy, 2016b).

The Atoll Ecosystem Conservation Project was initiated in 2004 with the support of the United Development Programme (UNDP) and the Global Environment Facility (GEF). These led to the declaration of Baa Atoll as a UNESCO Biosphere Reserve on 28 June 2012 (Ministry of Environment and Energy, 2016b). Choosing and determining audit topics for biodiversity can be challenging due to

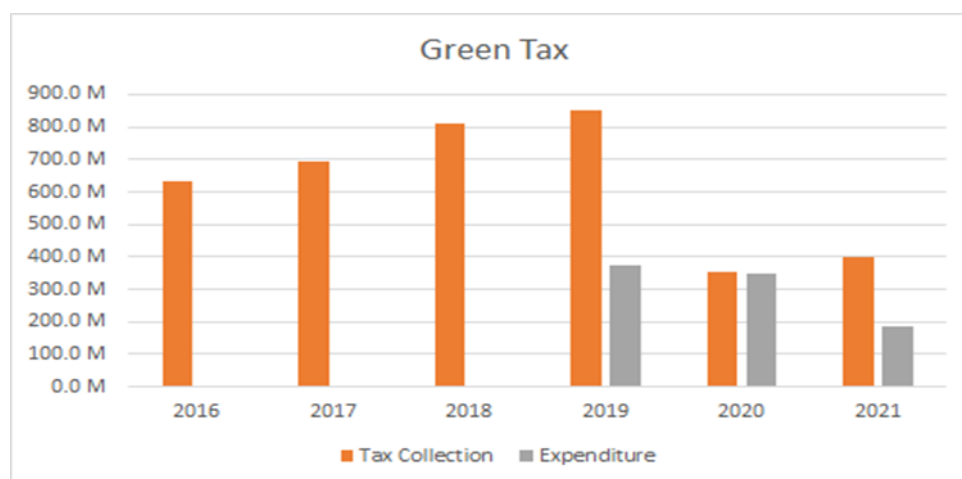


Figure 3. Green Tax Collection and Expenditure

Source: Maldives Monetary Authority (2021) and Ministry of Finance (2021)

the complexity of biodiversity issues. However, by taking a step-by-step approach by identifying the nation's biodiversity and threats to it and understanding the government's responses to the threats and the implementing agencies, the complexities of carrying out the audits can be overcome. Audits on biodiversity can evaluate the performance of government programs, national strategies, and plans to deal with threats to biodiversity and ensure conservation (INTOSAI WGEA, 2007).

Environment Impact Assessment (EIA) Regulation came into force in 2007 to enhance environmental sustainability and facilitate environmentally sound development. New regulation for EIA came into effect in 2012, superseding the 2007 regulation. This regulation was brought in to provide step-by-step guidance to government agencies, proponents, consultants, and the general public on obtaining approval in the form of an Environment Decision Statement for a Development Proposal. The Environmental Protection Agency (EPA) is mandated to form guidelines and standards of the EIA.

Environmental performance audits on management of EIAs, focusing on issues in implementation and monitoring of EIAs is an important area. EIA is another outcome of a public environmental assessment process that can correlate but does not equate to an audit. EIA is carried out before a new project is developed, whereas environmental auditing considers the actual impact of the proposed actions to carry out the project. Nonetheless, where an EIA results in conditions being set in development approval, it is important to conduct regular audits to monitor to see what impact occurs, ensure conditions of approval are complied with, and ensure that anticipated impacts are maintained within the levels predicted (Rose, 2001).

In addition to the measures discussed, the Government of Maldives introduced Green Tax in 2015. A trust fund in the name of Green Fund was established to utilize the revenue obtained from Green Tax collections. The Green Tax collections are only utilized for environmental protection projects.

A performance audit to assess the economy, efficiency, and effectiveness of the Green Fund would provide insight into the impact and value-for-money achieved through the taxes collected. Performance audits with the objectives to determine whether Green Fund is structured to achieve its objectives, application, disbursement, and monitoring processes are effective and efficient in ensuring funded projects are consistent with the objectives of Green Fund are critical in this regard.

While choosing areas for environmental audits, auditors should be aware of the potential challenges in gathering data for evidence. The first biennial update report to the United Nations Framework Convention on Climate Change in February 2020 highlighted that Maldives lacks a comprehensive national measurement, reporting, and verification (MRV) system. Five key areas; legal, institutional, procedural, availability, and management of data for MRV systems and indicators for mitigation actions were identified. Despite the challenges faced in building a system for tracking and managing the MRV system, Maldives is currently working with relevant institutions and stakeholders to design the MRV system, as reported by the Ministry of Environment, Climate Change and Technology (2020).

CONCLUSION

Numerous factors have contributed to change in attitude toward the environment, the most important being the multitude of international treaties and policies developing environ-

mental awareness (Ljubisavljević, Ljubisavljević, & Jovanovic, 2017). While environmental degradation has come center stage, the crux is how it is the least developed and developing populations like the Maldives who are suffering the consequences. Thirty-four years of broaching the subject of climate change by the Maldives at the 42nd General Assembly of the United Nations, we have a long way to see the sustainable world we had envisioned and hoped for. Climate change has accelerated to a point where irreversible damage is commonplace. As a nation on the brink of survival due to climate change, the government must take responsibility. As governments set out to address environmental degradation, the complexities and scale of the tasks are realized.

SAIs should examine how effective their governments have been in addressing the challenges shaped by macroeconomic, social, and environmental trends. With the importance placed on environmental issues on the national level by signing numerous treaties, establishing laws, regulations, plans, and policies in place to address the environmental issues, huge sums spent on environmental protection, SAI Maldives matters in ensuring environmental accountability.

Answering the research question, authors claim that an environmental performance audit is fundamental to creating public sector environmental accountability consistent with available literature and practice discussed in the study. From the discussions presented in this study, it can be concluded that there is a growing significance of environmental accountability and the important role SAIs play in contributing to this accountability. The discussions of this study also alluded to how environmental auditing has sought a way to relate environmental audits to SDGs to maintain accountability toward SDGs. Lastly, this study has identified the current areas of environmental concern

in the Maldives, thus identifying some key areas for potential environmental audits for SAI Maldives.

SAI Maldives is on the right path to contributing to environmental accountability in the Maldives. We can take lessons from other SAIs and build capacity with the help of WGEA to take environmental auditing in the Maldives to new horizons. As environmental problems are often transboundary, cooperation between SAIs is desirable (Leeuwen, 2004a) as this can help develop the competence of SAIs by knowledge sharing. However, contributing to environmental accountability through environmental performance auditing in the Maldives will be hindered by the challenges inherent in the accountability.

Auditing sustainable development policy and environmental issues are obstructed by a lack of quantified and specific performance commitments against which policy implementation can be measured and a lack of baseline data to relate meaningful performance commitments to (Rose, 2001). SAI Maldives will also face challenges in terms of the cross-cutting nature of environmental issues, multiple stakeholders, government organizations and areas involved in environmental issues, difficulties in evaluating natural resources in monetary terms, and environmental issues often being caused by market failures. Despite the challenges in conducting environmental audits brought about by a lack of experience and exposure, SAI Maldives' contribution to environmental performance auditing is fundamental to creating public sector environmental accountability.

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The Effect of Financial Audit Guidelines and Fraud Detection Awareness on Quality Audit Results During the COVID-19 Pandemic

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ABSTRACT

Many elements of society have experience disadvantages as a result of an array of problems in financial reporting. Given the preceding situation, a financial statement audit conducted by the auditor as an independent party is expected to achieve reliable audit quality. However, under the current situation of the pandemic, the auditor faced numerous challenges that have never been encountered before in carrying out audits. An Auditor must be more creative in conducting audits and comply with audit standards. The possibility of fraud risk in financial audits is also greater during the pandemic. This study aims to explain the role of financial audit guidelines and fraud detection awareness in providing quality audit results during the COVID-19 pandemic. This research was conducted upon auditors of BPK Representative of East Java province who were involved in financial audits. There were 91 respondents involved in this study. The research method applied multiple regression data analysis with the Partial Least Squares (PLS) approach through the help of the SmartPLS 3.0 program. The study would produce financial audit guidance variables and fraud detection awareness that will significantly positively affect quality audit results.

KEYWORDS:

Pandemic; audit; fraud; financial statements, COVID-19

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INTRODUCTION

The COVID-19 pandemic has presented unexpected and extreme challenges for organizations of all sizes and sectors worldwide. It has rapidly changed how entities operate and individuals live and work (BPK RI, 2020a). During the pandemic, the Audit Board of the Republic of Indonesia (BPK RI) carries out financial audits by implementing strict health protocols and maximizing alternative audit procedures, including using information technology in audit activities.

Summarized from BPK's Summary of Semester Audit Results I Year 2021 (Ikhtisar Hasil Pemeriksaan Semester, IHPS I Tahun 2021), the results of BPK's audit upon 541 LKPD (Laporan Keuangan Pemerintah Daerah/ Local Government Financial Statement) in 2020 revealed 6,295 non-compliance issues. These problems include 4,048 problems comprising non-compliance issues that may lead to losses, potential losses, and lack of revenue (financial impact), amounting to Rp2,07 trillion, and administrative irregularities (no financial impact) not less than 2,247 problems. Non-compliance issues include the financial impact of non-compliance issues which can result in a loss amounting to 2,645 problems, totaling Rp1.19 trillion, potential loss accounting for 549 issues, totaling Rp260,36 billion, and the lack of acceptance account for 854 issues, totaling Rp623,87 billion (BPK RI, 2021). With the many audit findings, increased effort is required from the auditors to provide an overview and assessment of the audited entity's financial condition. The audit of financial statements performed by the auditor as an independent party is expected to achieve reliable audit quality. In public sector audits, the Government Accountability Office (GAO) emphasizes the main point of a quality audit and adherence to standards during auditing (Lowensohn, Johnson, & Elder, 2005).

Throughout the pandemic, there were several challenges in conducting audits that auditors had never faced before. Auditors must be more creative in conducting audits and comply with auditing standards. Some problems that arise during the audit during the pandemic are physical observation, access to the entity's accounting systems and records, confirmation of accounts, and subsequent events (AICPA, 2020). Auditors must adjust how they obtain appropriate audit evidence to form an audit opinion. Subsequently, auditors revise the identification and assessment of specific risks of material misstatement and perform alternative audit procedures. Auditors must also adapt to environmental changes, such as quality control policies and procedures (IAASB, 2020). The COVID-19 crisis also means that there may be situations where there is a greater risk of fraud. The auditors may consider the need for additional procedures to address these risks (FRC, 2020).

Publications by IAPI provide a minimum guideline and several significant areas in the design and implementation of audit procedures to obtain sufficient and appropriate audit evidence in response to disruptions caused by the COVID-19 pandemic. The IAPI Publication Overview explains how essential things are to support audit performance and quality during the Covid-19 pandemic, including obtaining sufficient and appropriate audit evidence, events after the reporting date, business continuity, reporting and communication, and professional skepticism (IAPI, 2020).

There is an emphasis on auditors to comply with the required standard during the pandemic. Research by Carcello, Vanstraelen, and Willenborg (2009) explains that with the implementation of audit standards, there is a decrease in errors made by auditors, so it has a beneficial effect on the output side. Suyanto (2009) explains that several fraud risk fac-

tors in financial statements can be identified by developing a standard framework or audit guideline. Therefore, it can be concluded that audit standards have another role in the audit process, particularly in mitigating the risk of fraud if appropriately applied. Research conducted by Harahap, Suciati, Puspitasari, and Rachmianti (2017), Ningsih and Nadirsyah (2017), also Kadhafi (2013) suggested that the implementation of audit standards had a significant effect on audit quality resulting from a structured audit process. Those become a concern because audit standards are guidelines for auditors to comply with to produce good audit quality. The implementation of audit standards in this study takes the form of financial audit guidelines prepared by BPK. The auditor must consider various financial audit principles and other important matters during the audit. Audit guidelines are expected to provide quality audit results, particularly under the current pandemic conditions.

A study reveals that the role of auditors that is most often questioned and the possibility of audit firms being prosecuted touches upon failures related to fraud detection (Bollen, Mertens, Meuwissen, van Raak, & Schelleman, 2005). However, in a financial audit, the auditor's goal is to obtain reasonable assurance that the financial statements are free of serious misstatement, whether due to fraud or error. Limitations such as time, staff, costs, and factors beyond the auditor's or client's control, such as the auditor's inability to do a physical examination due to a difficult-to-reach location, would undoubtedly be of particular importance to the auditor in a financial audit. Even if the audit is designed and carried out following industry norms, there is always the possibility that some significant errors in the financial statements will go undetected (IAPI, 2013). This also shows that the public has unfulfilled expectations regarding the role of auditors in fraud cases (Hassink, Meuwissen, & Bollen,

2010). For example, fraud cases are still prevalent as it involves state administrators or regional heads in regional governments whose financial statements received an unqualified audit opinion. On the other hand, we understand that such an opinion could not guarantee the absence of fraud in the entity. The auditors need to give more attention to meeting expectations and narrow the gap, which can be reflected in the form of awareness to detect fraud when conducting financial audits.

During the pandemic, auditors may need to adjust audit procedures as necessary to help detect potential fraud risks (AICPA, 2020). Furthermore, the auditors must also demonstrate a serious concern for the possibility of fraud and errors such as fraudulent financial reporting while maintaining an attitude of professional skepticism in carrying out audit procedures (IAASB, 2020). Furthermore, the auditors must have a sense of responsibility in identifying the risk of fraud by designing an adequate audit and disclosing actions indicating fraud that occurred in the audit report (BPK RI, 2017). The risk of misstatement, non-compliance, fraud, and impropriety will undoubtedly be an inherent part of audit activities. Therefore, fraud detection awareness of the auditors is expected to play a role during the audit process to produce a quality audit report.

Based on the previous explanation, this study uses financial audit guidelines and fraud detection awareness as variables to determine the quality of audit results, in particular during the COVID-19 pandemic. This research is quite important as it uses variables that are still rarely studied. In addition, it is expected to provide new empirical evidence for the development of auditing science.

LITERATURE REVIEW

Albrecht, Albrecht, Albrecht, and Zimbelman (2009) define fraud as a variety of ways a person can use to gain an advantage over others through improper actions. The Association of Certified Fraud Examiners (ACFE) classifies fraud into three levels: the Fraud Tree. The fraud tree comprises asset misappropriation, which is the misuse or theft of assets or assets used for personal gain. Such misuse is related to cash, inventory, and other assets. Second, financial statement fraud is a deliberate misstatement of a company's financial condition that is achieved through misstatements in financial statements to deceive users of financial statements. This includes net worth overstatements and net worth understatements. Third, corruption is an action that is usually committed by one or more people who are mutually beneficial. This includes conflicts of interest, bribery, illegal gratuities, and economic extortion (ACFE, 2017). Financial audits are not specifically designed to find specific types of fraud. However, of course, the auditor will respond to indications of fraud that can be identified during the audit process.

In public sector audits, the GAO emphasizes that the main point of a quality audit is to standards during an auditing (Lowensohn et al., 2005). Until now, there is no clear definition of adherence to what and how good audit quality is until now. It is not easy to objectively describe and measure audit quality with several indicators. This is because audit quality is a complex and challenging concept to understand, so there are often errors in determining its nature and quality (Efendy, 2010).

In the context of state financial audits in Indonesia, BPK establishes and implements a quality control system that forms audit performance elements to ensure the quality of

state financial audits. Audit performance is a critical element in order to increase stakeholder trust. Quality control over audit performance includes audit planning, implementation, supervision, and review of audit results reporting, monitoring follow-up audit results, and audit evaluation (BPK RI, 2009).

In the current global era, the development needs and demands for the presentation of quality audit reports are increasing. Hence the need for audit standards becomes increasingly important. The International Standard on Auditing (ISA), which is applied at the international level, also emphasizes the importance of auditors having an inherent responsibility in detecting fraud. It is expected that the audit report can provide adequate information on the condition of the auditee. This responsibility carries high urgency as auditors can face a litigation process (Zulhaimi, Apandi, & Sofia, 2016).

In Indonesia, the audit of the management and accountability of Indonesian state finances is carried out to create a clean government free from corruption, collusion, and nepotism. The audit needs to be carried out based on the State Finance Auditing Standard (Standar Pemeriksaan Keuangan Negara, SPKN) to ensure the quality of the audit of state finances. SPKN is a benchmark for conducting state financial management and accountability audits (BPK RI, 2017). During an emergency, whether it is an emergency due to the COVID-19 pandemic or other emergencies with similar characteristics, BPK refers to auditors developing different audit strategies by compiling guidelines for financial audits during an emergency so that audits are carried out by adhering to standards (BPK RI, 2020b).

Indeed, the auditor must practice Fraud detection Awareness. In the context of auditor fraud awareness, the auditor must quickly realize the possibility of fraud by relying on

fraud signals. Auditors need to understand essential signals to identify fraud (Suprajadi, 2009). Discussing the importance of auditor awareness of the existence of fraud is not only at that point, but we must understand thoroughly how the auditor responds after a fraud occurs, whether to respond to detect and report fraud or not dutifully. The auditor's responsibilities regarding considerations of non-compliance, fraud, and impropriety are regulated in the SPKN. The auditor must have a sense of responsibility in identifying the risk of fraud by designing an adequate audit and disclosing actions indicating fraud that occurred in the audit report (BPK RI, 2017). Conceptually, fraud detection awareness is a form of auditor awareness regarding the existence of fraud, which then responds by detecting and reporting it. Based on such understanding, it can be inferred that fraud detection awareness is a feature that auditors must have when conducting an audit task. The following question that should be addressed is how to apply these provisions. Deis and Giroux (1992) describe that finding a violation depends on the technical ability of the auditor, while reporting a violation depends on the auditor's independence.

Many believe the COVID-19 outbreak has not yet become a financial crisis. On the other hand, the effects of the COVID-19 pandemic will be the most formidable challenge for auditors and their clients since the 2007–2008 global financial crisis. Theoretically, it is concluded that the COVID-19 pandemic can primarily affect audit fees, business continuity assessments, human resources, audit procedures, and auditor salaries, which is suspected to affect the quality of the audit process (Albitar, Gerged, Kikhia, & Hussainey, 2020). Akrimi and Borders (2021) also support those findings, which show a high degree of conformity to the impact of COVID-19 on the five aspects. As a result, the pandemic has considerably im-

pacted the quality of audits. Research conducted by Saleem (2021) in Jordan explains the uncertainty arising from the pandemic. There are challenges in providing an independent view of the company's financial position. This can increase the likelihood of forming an incorrect opinion about the audit. In addition, auditors face difficulties obtaining appropriate audit evidence from their clients due to movement restrictions, affecting audit quality. However, Hay, Shires, and Van Dyk (2021) research stated that initially, the COVID-19 pandemic in New Zealand was expected to impact audit results, such as audit opinions, significantly, but the findings concluded that the effects had been much smaller. Nevertheless, it is still hoped that audit reforms will take place, one of which is placing more responsibility on auditors to detect fraud by establishing changes to audit standards.

The Effect of Financial Audit Guidelines on Quality Audit Results

The research conducted by Albitar et al. (2020) explains that the effects of the COVID-19 pandemic will be the most formidable challenge for auditors and their clients. Theoretically, it is concluded that the COVID-19 pandemic can primarily affect audit procedures, which is suspected to affect the quality of the audit process. Research findings by Akrimi and Borders (2021) confirm this, which show a high degree of conformity to the impact of COVID-19 on various aspects of audit quality, one of which is audit procedures. As a result, this pandemic has considerably impacted audit quality.

During the pandemic, there are several challenges in auditing that auditors have never faced. Auditors must be more creative in conducting audits and comply with auditing standards (AICPA, 2020). The audit guidelines issued by IAPI explain the many significant factors that support audit performance

and quality during the pandemic, including obtaining sufficient and appropriate audit evidence, events after the reporting date, business continuity, reporting and communication, and professional skepticism (IAPI, 2020).

Furthermore, throughout the pandemic, many auditors rely on technology to ensure a wholesome audit quality by ensuring that financial reports to audited money are free from fraud. The results also show that information technology affects audit quality (Setiawan, Tridig, Gunawan, & Sari, 2020). Under such conditions, the possibility of error in awarding an opinion upon the audit will increase. Auditors face difficulties obtaining appropriate audit evidence from their clients because of restrictions on movement, which will affect audit quality (Saleem, 2021). Given the preceding, the auditor should consider not to grant any disclaimer or a qualifying audit opinion due to the scope limitation. Auditors must always obtain sufficient and appropriate audit evidence, even during difficult times (FRC, 2020).

Based on the research results of Harahap et al. (2017), it is concluded that the implementation of audit standards will significantly affect audit quality resulting from a structured audit process. Ningsih and Nadirsyah (2017) also Kadhafi (2013), in their research, also conclude that the application of sound audit standards will determine the quality of audit results. Auditors will overcome difficulties in making decisions during the audit process if the standard guides them. Implementing audits based on auditing standards will increase the credibility of the information to be reported through objective collection and testing.

In facing various challenges when conducting audits during the pandemic, BPK refers to auditors developing different audit strategies by compiling financial audit guidelines

so that audits are carried out according to the standard, notably SPKN. The audit guidelines contain the audit's main principles such as professional skepticism, obtaining sufficient and appropriate evidence, identifying and assessing risks of material misstatement, communication with the entity's management and related parties after events, documentation, quality control, and legal aspects of the audit and other matters that must be applied in audit (BPK RI, 2020a). This critical information will support the decision-making process carried out by an auditor when performing audit duties. Audit guidelines play an essential role as they provide a reference in all elements of the audit implementation. Auditors are expected to master the applicable audit guidelines because they contain various guidelines that will help them obtain relevantly and needed data also information carefully and precisely. The more critical information obtained, the more straightforward an auditor's judgment in awarding an opinion suitable for the auditee's financial statements.

H1: Financial Audit Guidelines have a significant effect on audit quality results.

The Effect of Fraud Detection Awareness on Quality Audit Results

With the COVID-19 pandemic currently happening, there is a possibility that the risk of fraud in financial audits will appear greater (FRC, 2020). Auditors may need to make changes to audit procedures to help detect potential fraud risks that may occur (AICPA, 2020), including the presentation of fraudulent financial reporting. For the possibility of various frauds and errors, the auditor must hold a high degree of awareness while maintaining an attitude of professional skepticism in audit procedures (IAASB, 2020).

Othman, Aris, Mardziah, Zainan, and Amin (2015) concluded that auditors or accountants with high awareness would be responsi-

ble for detecting and reporting fraud. There are also increased methods or procedures for detecting fraud at assignment time. The same situation is explained in research by Siregar and Tenoyo (2015), which explained that the level of fraud awareness of the auditors is sufficient to detect fraud that may occur. The response given as a form of auditor responsibility is carried out by implementing additional procedures following standards and assessing internal control activities during the audit process. Moreover, the research by Zulhaimi et al. (2016) explains that currently, auditors are required to maintain audit quality by applying audit standards and having fraud detection responsibilities so that audit reports can provide adequate information. Awareness of such responsibility has become a matter of high urgency because the auditor may face the litigation process if the auditor cannot maintain the audit quality.

During the pandemic, there needs to be an emphasis that auditors must continue to comply with the guidelines or standards that have been required to produce quality audits and always pay attention to other important elements such as public expectations related to fraud cases. Therefore, fraud detection awareness is a part that the auditor should also focus on to support the entire audit process. The auditor must always be aware of any potential fraud and be willing to carry out the mandated responsibility in identifying fraud risk by designing an adequate audit to detect indications of fraud, then disclosing it in the audit report. Based on this elaboration, it is concluded that the fraud detection awareness of the auditor will play a significant role and support the audit process to produce a quality audit.

H2: Fraud detection awareness has a significant effect on audit quality results.

RESEARCH METHOD

This research was conducted using primary data obtained through a survey using a list of statements and/or questions (questionnaires) to all employees of the BPK Representative of East Java Province, including structural officers, functional auditors, and employees with other positions involved in financial audits. The questionnaire was measured using a 5-level Likert Scale.

The first part relates to the variables of financial audit guidelines which are measured based on the audit guidelines established by BPK, with components consisting of the principles of state financial audit that must be emphasized; professional judgment in implementing audit methods; development of alternative audit strategies and procedures; and utilization of the audit information system (BPK RI, 2020a, 2020b). The second part relates to the fraud detection awareness variable, which refers to the audit expectation gap (Porter, 1993; Hassink, Bollen, Meuwissen, & de Vries, 2009; Hassink et al., 2010). It also relates to the General Standard of SPKN related to considerations of non-compliance, fraud, and impropriety that describe the level of auditor perception of fraud detection awareness (BPK RI, 2017). The third part relates to the audit quality variable, which is measured based on the Quality Control System related to the audit performance set by BPK. The instrument describes the auditors' level of audit quality perception at the audit planning stage, implementation, and reporting (BPK RI, 2009).

This study uses multiple regression data analysis with the PLS approach. The study developed the model based on the relevant theory and analyzed it using the SmartPLS 3.0 program. PLS analysis comprises two sub-models: the measurement model, the outer model, and the structural model, or

the so-called inner model (Ghozali & Latan, 2015). The outer model test measures how valid and reliable all indicators reflect the measured construct. The indicators are evaluated for convergent validity through the loading factor and the average variance extracted (AVE) values (Hair, Hult, Ringle, & Sarstedt, 2017). The first criterion is that the loading factor value is set at least 0.60 because the research is still in the development stage of the measurement scale. The AVE value must be more than 0.50 (Ghozali & Latan, 2015).

Furthermore, the author evaluates the validity by looking at the results of the cross-loading indicator on the latent variable. It must be more significant than the other latent variables (Widarjono, 2015). Validity evaluation also uses the Heteroite-Monoroit Ratio (HTMT), with the criteria that if the HTMT value is less than 0.90, then a construct is considered to have good discriminant validity (Henseler, Ringle, & Sarstedt, 2015).

Construct reliability evaluation helps determine the accuracy, consistency, and accuracy of the research instrument measuring the construct. Reliability was evaluated by looking at the value of Cronbach's alpha, with criteria of more than 0.70. In addition, construct reliability was evaluated with composite reliability criteria with a value of more than 0.70 (Ghozali & Latan, 2015).

The next step is the evaluation of the structural equation model/inner model that explains the influence between variables or tests the research hypothesis. The test is done by looking at the t-statistical value and the path coefficient value. Whether the hypothesis is accepted or not, will be based on the comparison between the t-statistical and t-table values at a significance level of 0.05, which is 1.96. The hypothesis is accepted if the t-statistic value is more significant than

1.96. Subsequently, the test results are interpreted by looking at the path coefficient value. If the path coefficient value is positive, it indicates a positive effect or vice versa. Evaluation of the value of the coefficient of determination is done after that. The coefficient of determination helps measure how much variation in the endogenous latent variable is explained by the exogenous latent variable. The coefficient of determination is evaluated by looking at the R-square (R^2) value. The R^2 values of 0.75, 0.5, and 0.25 indicate that the model is robust, moderate, and weak (Chin, 1998 in Ghozali & Latan, 2015).

RESULT AND DISCUSSION

The total number of respondents who participated in this study is 170 individuals. There were only 91 questionnaires (54%) completed, and the remaining 79 questionnaires were not filled out. Most respondents were employees with mid-level auditor positions accounting for 41 respondents (45.1%). Data related to respondents are presented in Table 1.

Table 1. Respondent Data

Position	Number of Respondent	Percentage
Junior Auditor	12	13.2%
Mid-level Auditor	41	45.1%
Senior Auditor	33	36.3%
Non Auditor	5	5.5%

The data analysis procedure in this study applies the PLS approach with the help of the SmartPLS 3.0 program. The first step is testing the outer model, including convergent and discriminant validity for evaluating the validity and composite reliability also Cronbach alpha for reliability evaluation. Convergent validity was evaluated through the loading factor value and the AVE value. Based on the results of data processing as specified in Appendix 1, it is known that

there are 5 statement items issued as they do not meet the requirements for the loading factor value, which must be above 0.60. The five statement items are X1.9, X1.11, Z1.3, Z1.5, and Y1.2. Convergent validity evaluation is carried out on the AVE value with the criteria that the AVE value must be above 0.50. The data processing results in Table 2 show that all research variables have AVE values above 0.50, so the convergent validity evaluation has met the criteria accordingly.

Table 2. AVE Value Test Results

Variable	AVE
Audit Guidelines	0.509
Fraud Detection Awareness	0.535
Audit Quality	0.560

The following evaluation of the outer model is the evaluation of discriminant validity. Based on the data in Appendix 2, the cross-loading value of the related latent variable is higher than the other latent variables. Following this, the validity evaluation uses the HTMT. Based on Table 3, it is known that all values of the variable HTMT are below 0.90. Hence it can be concluded that the evaluation of discriminant validity has met the criteria.

Table 3. HTMT Value

Variable	Audit Guidelines	Audit Quality
Audit Quality	0.815	-
Fraud Detection Awareness	0.874	0.840

The next test is the evaluation of the reliability of the construct. Reliability was evaluated by looking at the Cronbach's and composite reliability values. The data processing results show that all of Cronbach's Alpha and composite reliability values have been above 0.70. Thus it can be concluded that the construct has met the reliability requirements, according to the summary of Table 4.

The structural equation model (inner model) evaluation explains the effect of the exoge-

nous latent variable, which is measured using the coefficient of determination value/ R^2 . Based on the results of the data analysis, the R^2 is 0.606. This value indicates if the model built is in the category of strong enough. The R^2 value of 0.606 means that 60.6% of the variation in audit quality can be explained by the constructed model that has been built from the variables of financial audit guidelines and fraud detection awareness.

Table 4. Reliability Test Results

Variable	Cronbach's Alpha	Composite Reliability
Audit Guidelines	0.910	0.924
Fraud Detection Awareness	0.785	0.858
Audit Quality	0.868	0.899

Hypothesis Testing

Based on the results of the significance test presented in Table 5, the test of the influence of the financial audit guidance variable on audit quality has a significance value of 0.000, which means it is smaller than 0.05. Likewise, the t-statistic value is 4.185, which means it is more significant than 1.960 and has a favorable path coefficient value of 0.433. Hence it can be concluded that the first hypothesis is accepted. Thereby, the financial audit guidelines significantly positively affect quality audit results.

Table 5. Hypothesis Testing

Hypothesis	Path Coefficient	t-statistic	P-value
H1	0.433	4.185	0.000
H2	0.398	4.013	0.000

The better the financial audit guidelines reflected by the auditors' understanding and implementation, the better the quality of the audit produced. This aligns with establishing financial audit guidelines in dealing with various challenges during a pandemic so

that audits are carried out according to standards. In this regard, implementing good audit standards will determine the quality of the audit results (Harahap et al., 2017; Ningsih & Nadirsyah, 2017; Kadhafi, 2013). During the pandemic, auditors realize limitations due to changes in various regulations or policies. Such a situation imposes a challenge for auditors to maintain the quality of the audit results in the limitations of the current proficiency level. Investigative guidelines play a key role in keeping the audit process.

The auditor understands the role of financial audit guidelines that are established as a guide during the audit process during a pandemic, where many things must change and compel auditors to pay close attention to auditing principles. These auditing principles encompass professional skepticism, obtaining sufficient and appropriate evidence, identifying also assessing risks of error, material misstatements, communications with the entity's management, subsequent events, audit documentation, audit quality control, and legal aspects of the audit. All of these elements must be understood and implemented correctly in order to produce a quality audit.

BPK and auditors must develop audit strategies and alternative procedures to maintain the quality of audit results. One of the measures that can be undertaken is synergy with the Government Internal Supervisory Apparatus, commonly known as APIP (Aparat Pengawasan Intern Pemerintah/ Government Internal Supervisory Apparatus). The form of synergy can be through the audit results that APIP has carried out or direct or indirect assistance such as audit assistance. Then concerning alternative procedures, the auditor will undoubtedly encounter conditions where the auditor cannot perform audit procedures as normal conditions. This condition is generally encountered

when the auditor must conduct an interview or obtain evidence of a physical check.

The utilization of audit information systems during the pandemic is also unavoidable. However, technology issues in auditing will continue to grow. For this reason, audit institutions must continue to improve and innovate in the field of information technology to support the implementation of audits to produce quality audits. In times of great uncertainty, auditors who carry out audits must use professional judgment appropriately so that the audits carry a good quality. The use of professional judgment has been applied in the initial stage, as in the time of determining the sampling, until it is used in the final stage, notably in taking opinions.

Based on the significance test results in Table 5, the test of the effect of the fraud detection awareness variable on audit quality has a significance value of 0.000, which means it is smaller than 0.05. Likewise, the t-statistic value is 4.013, which means it is more significant than 1.960 and has a favorable path coefficient value of 0.398. Therefore, it can be concluded that the second hypothesis is accepted, confirming that fraud detection awareness has a significant positive effect on quality audit results.

The auditor must have high fraud detection awareness to perform the audit task. Fraud detection awareness is crucial in audit quality, particularly in financial audits. By having a high level of fraud detection awareness, the auditor's task will be more helpful in performing audit duties, one of which is making useful findings for stakeholders. During a pandemic, auditors' fraud detection awareness becomes crucial because auditors are faced with different audit challenges, one of which is the increased risk of fraud. According to the ACFE and Grant Thornton survey related to fraud during the pandemic conducted in March and April 2021, as many as

51 percent of respondents felt that their organization discovered a great deal of fraud during the pandemic. Another 71% said the fraud level was also becoming bigger (ACFE & Thornton, 2021). The increase in the risk of fraud is also quite reasonable due to the limitations in conducting the audit. The fraud risk in several sectors, such as the procurement sector, is also increasing. Given that many budgets are managed due to budget refocusing.

Existing rules or standards governing the auditor's responsibility to detect fraud are fundamental in building awareness of fraud detection. The SPKN prepared by BPK has contained standards that regulate the considerations of non-compliance, fraud, and impropriety. Indeed, financial audits are not specifically designed to detect fraud, but auditors are responsible for identifying possible fraud.

Education/training and experience are fundamental for an auditor. These two things are related to each other in how auditors have fraud detection awareness. Auditors must start with education and training in order to gain sufficient competence and have the ability to understand the existing knowledge and problems. However, that is not enough. Auditors must apply their competence by being directly involved in the audit task so that auditors can understand real problems in the field and therefore have audit experience. With this combination of competence and experience, the auditor will have fraud detection awareness.

The next step that auditors must undertake is to pay attention to fraud detection awareness, which is related to the auditor himself. The most relevant concept to address this condition is BPK's fundamental values. Auditors must instill BPK's fundamental values of independence, integrity, and professionalism to have a strong fraud detection awareness.

An auditor who is not independent will bring a significant risk of not disclosing and reporting a problem. Furthermore, if auditors have their agenda and deviate from carrying out an actual audit or fail to report it, the auditors have an issue of integrity within themselves. Likewise, auditors must maintain professionalism in performing audit tasks, such as being willing to detect, avoiding being lazy, being cautious and meticulous in work, etc. These three fundamental values are interrelated with each other. For example, if auditors are not independent, their integrity will also be disrupted. Therefore, auditors must instill this fundamental value from the beginning of work and always highlight the importance of maintaining and implementing such principles.

The auditor's perception of how the auditor's role is related to fraud detection in financial audits should also be a concern. A proper understanding of this is expected to maintain an auditor's fraud detection awareness. We must be aware of the limitations that auditors have in auditing financial statements related to time, cost, and resources. Likewise, the primary purpose of a financial audit is an opinion or assessing fairness. However, this does not imply that the auditor can rule out the need to detect indications of fraud and only focus on fairness assessments for these various reasons.

CONCLUSION

The study results conclude that variables such as financial audit guidelines and fraud detection awareness positively affect quality audit results significantly. The audit guidelines contain the main principles and other matters that must be applied to implement financial audits. Overall, the auditors can master the applicable audit guidelines. In addition, the audit guidelines that have been prepared can also be relied upon so that the

audit will continue to be carried out according to standards to produce good audit quality, especially under the current pandemic where audit methods have changed substantially. Continuous evaluation of the guidelines is still required by monitoring the effectiveness of their implementation.

During the pandemic, auditors' level of fraud detection awareness becomes crucial since auditors face various audit challenges, one of which is the increased risk of fraud. The increase in the risk of fraud is quite reasonable due to the limitations in conducting the audit. Therefore, auditors must maintain and increase fraud detection awareness by heightening their capacity to produce quality audits consistently.

Further research can expand the scope or increase the number of respondents from other work units so that the results can be generalized to BPK. Moreover, it can take objects in the private sector to produce comparative data between the public and private sectors. However, such can be done with adjustments to some elements such as regulations and research instruments. It is also necessary to consider external factors, notably the auditee. External factors of concern are regarding the readiness of both infrastructure and human resources associated with the auditee.

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APPENDICES

Appendix 1. Loading Factor Indicator Value

Indicators	Audit Guidelines	Fraud Detection Awareness	Audit Quality	Result
X1.01	0.616			Valid
X1.02	0.730			Valid
X1.03	0.664			Valid
X1.04	0.806			Valid
X1.05	0.672			Valid
X1.06	0.698			Valid
X1.07	0.736			Valid
X1.08	0.747			Valid
X1.09	0.474			Invalid
X1.10	0.807			Valid
X1.11	0.539			Invalid
X1.12	0.632			Valid
X1.13	0.694			Valid
X1.14	0.680			Valid
X2.1		0.745		Valid
X2.2		0.760		Valid
X2.3		-0.046		Invalid
X2.4		0.757		Valid
X2.5		0.585		Invalid
X2.6		0.671		Valid
X2.7		0.715		Valid
Y1.1			0.795	Valid
Y1.2			0.542	Invalid
Y1.3			0.764	Valid
Y1.4			0.599	Valid
Y1.5			0.746	Valid
Y1.6			0.742	Valid
Y1.7			0.773	Valid
Y1.8			0.775	Valid

Appendix 2. Cross Loading Value

Indicators	Audit Guidelines	Fraud Detection Awareness	Audit Quality
X1.01	0.614	0.49	0.449
X1.02	0.739	0.551	0.492
X1.03	0.676	0.415	0.430
X1.04	0.816	0.626	0.636
X1.05	0.679	0.53	0.465
X1.06	0.702	0.532	0.553
X1.07	0.734	0.548	0.543
X1.08	0.732	0.646	0.548
X1.10	0.807	0.613	0.553
X1.12	0.630	0.467	0.484
X1.13	0.696	0.535	0.525
X1.14	0.667	0.446	0.526
X2.1	0.645	0.759	0.609
X2.2	0.588	0.765	0.616
X2.4	0.607	0.752	0.494
X2.6	0.419	0.659	0.337
X2.7	0.46	0.716	0.518
Y1.1	0.632	0.563	0.783
Y1.3	0.525	0.562	0.762
Y1.4	0.424	0.388	0.606
Y1.5	0.464	0.453	0.741
Y1.6	0.553	0.529	0.742
Y1.7	0.614	0.597	0.791
Y1.8	0.591	0.656	0.796

The Effect of Skepticism, Time Pressure, and Remote Audit During the COVID-19 Pandemic on Audit Quality: A Study of Auditors' Perception

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ABSTRACT

This study aimed to determine the impact of professional skepticism, audit time pressure, and remote audit during the COVID-19 pandemic on audit quality and the effect of remote audits on the relationship between professional skepticism and audit quality. The study was conducted through a questionnaire survey to The Audit Board of The Republic of Indonesia (BPK RI) auditors and analyzed using Smart PLS quantitative analysis methods. The results showed that professional skepticism, audit time pressure, and remote audit affected audit quality. Meanwhile, the remote audit does not moderate the relationship between professional skepticism and audit quality, classified as predictor moderation.

KEYWORDS:

Audit quality; remote audit; skepticism; time pressure; COVID-19

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INTRODUCTION

Audit quality is vital in the whole audit process to improve the reliability and quality of information. Therefore, information resulted from the audit can benefit the stakeholders. They view the audited information as reliable information, which means that the audit is expected to increase the information quality in decision making (Arens, Elder, & Beasley, 2014). Johnstone, Gramling, and Rittenberg (2016) mention that ensuring audits conducted in a quality manner is essential to meet user expectations about the role of auditors. In government, quality audit results will benefit better, accountable, transparent, economical, efficient, and effective management of state finances (BPK RI, 2017).

Quality audit means an audit carried out following the code of ethics and professional standards and applicable regulations (Institut Akuntan Publik Indonesia, 2018) that allow auditors to find and report violations (DeAngelo, 1981). Audit quality means an audit done as per examining principles to assure that the audited financial statements are as per the guidelines and that there are no material errors (Johnstone et al., 2016).

The COVID-19 pandemic affects audit quality. Research by Albitar, Gerged, Kikhia, and Hussainey (2021) also Akrimi (2020) revealed that the pandemic significantly affected audit quality, i.e., on aspects of audit fees, audit procedures, assessment of going concerned, low degree of reliability, and sufficiency of audit-evidence, limited audit human resources, also reductions in audit staff salaries. Pasupati and Husain (2020) stated that the pandemic made the audit challenging to be carried out by the auditors, resulting in audit delays.

Audit delay, a delay in the completion and submission of audit reports, decreases audit quality. It affects stakeholder decision-

making because a longer audit delay is associated with lower information value (Lee, Whitworth, & Hermanson, 2015). The effect of the COVID-19 pandemic on the quality of audits is caused by various policies implemented by the government, including social distancing, work from home, and lockdown. These make it difficult for the auditor to verify the findings obtained during the audit because the auditor only relies on the explanation given by the client regarding the findings obtained by the auditor (Suwandi, 2021).

In collecting and evaluating evidence, auditors must have an attitude of professional skepticism, which is a demeanor that incorporates a questioning mind and caution over conditions that show the chance of misstatement because of error or fraud, as well as an essential evaluation of the audit evidence (Porter, Simon, & Hatherly, 2008; Boyle & Carpenter, 2015). The research resulted by Kusumawati and Syamsuddin (2018) also Nugrahaeni, Samin, and Nopiyanti (2019) indicated that professional skepticism significantly impacted audit quality. Research by Popova (2013), Hussin, Iskandar, Saleh, and Jaffar (2017), also Beasley, Carcello, and Hermanson (2001) also show a positive effect of skepticism on audit quality, that is, in the form of success in detecting violations during the evaluation of evidence. However, some studies reveal the opposite results, where professional skepticism does not significantly affect audit quality. This was revealed by Nandari and Latrini (2015), Peytcheva (2014), also Asmara (2019), where skepticism did not significantly affect audit quality.

In conducting audits, auditors often encounter obstacles such as limited audit time, which creates time pressure. Time pressure means the audit time has been set to complete the audit on schedule (Amiruddin, 2019). The auditor has a time limit to per-

form the audit program (Umar, Sitorus, Surya, Shauki, & Diyanti, 2017). The effect of time pressure on audit quality has been suggested in previous studies by Svanberg and Öhman (2013), Gundry and Liyanarachchi (2007), also Coram et al. (2003, 2004). Research by Santoso and Achmad (2019) also Sari and Lestari (2018) reveals that time pressure affects audit quality. Time pressure has opposite consequences, which implies that the higher the time pressure, the lower the audit quality. Wijaya and Yulyona (2017) also Nugroho (2018) explain that budgetary and time pressure does not significantly affect audit quality, which means that auditors complete their work according to the specified time and continue to increase the quality of the audit. The research by Arisinta (2013) also Meidawati and Assidiqi (2019) specify that time pressure positively influences audit quality. In this case, auditors are motivated to complete their work using time as efficiently as possible to achieve a quality audit.

The impact of the COVID-19 pandemic has affected all sectors, including the audit sector. One of the obstacles brought by the COVID-19 pandemic in the auditing field is auditors' limited mobility and physical access to complete their audits. Due to the limited mobility, auditors resort to remote audits, which have become a common practice for auditors. Belzunegui-Eraso and Erro-Garcés (2020) mention that innovative organizations are working through teleworking in response to the pandemic threat.

Auditors must not lower their professional skepticism in remote audits during the COVID-19 pandemic. In research conducted by Levy (2020), it is stated that during a pandemic, the level of uncertainty becomes higher, thus leading to more complex and less reliable accounting estimates. In addition, the pandemic has significant consequences for the audit process, including new risks in terms of fraud (Diab, 2021). For this

reason, the auditor must do sufficient professional skepticism and remain vigilant of management bias in preparing his report estimates (Diab, 2021; Levy, 2020). However, according to Nastase and Ionescu (2011), auditors have several benefits through remote auditing, i.e., flexible work locations, better work-life balance, and reduced travel time. This can optimize the performance of auditors to produce quality audits.

Based on the audit quality phenomena above, the conditions during the COVID-19 pandemic, and the research gap of the previous studies, this study aims to explore the effect of professional skepticism, audit time pressure, and remote audit during the COVID-19 pandemic on audit quality. The study also aims to determine the effect of remote audits on the relationship between professional skepticism on audit quality.

LITERATURE REVIEW

Agency Theory

Agency theory discusses problems that arise from conflicts of interest between principals and agents (De Villiers & Hisao, 2018). Agency theory occurs when each party maximizes its interests so that managers act differently from the owners' interests. For this reason, the need for an audit arises, where the position of the auditor is to determine whether the financial statements prepared by the manager are appropriate and increase the credibility of the information in it (Messier, Glover, & Prawitt, 2006). Based on the agency theory, principals will require quality audits. Through a quality audit, the information received will have reliability and reveal errors and fraud that agents may carry out. DeAngelo (1981) states that finding and reporting violations are one form of audit quality.

Audit Quality

DeAngelo (1981), Pinello, Volkan, Franklin, Levatino, and Tiernan (2019), Tjun Tjun, Marpaung, and Setiawan (2012), also Hu (2015) define audit quality as an audit that allows the auditor to find violations or material misstatements and report these violations. In carrying out the audit, the auditors must comply with auditing standards, the audit code of ethics, and the methodology or guidelines determined by the audit authority (Lee, Su, Tsai, Lu, & Dong, 2016). In Kusumawati and Syamsuddin's (2018) research, audit quality is defined as a management instrument to assess or confirm activity through systematic and independent testing to determine whether the company's provisions have been implemented effectively and activities are carried out with quality in order to achieve company goals.

The Center for Audit Quality (2014) defines audit quality indicators (AQI) into four elements: (a) company leadership and tone at the top; (b) knowledge, experience, and workload of professional staff or auditors; (c) monitoring and quality control; (d) reliable, valuable and timely reports. Research conducted by Pinello et al. (2019) on the 28 AQIs framework supports that AQIs can improve transparency and audit quality. Knechel and Shefchik (2014) describe the audit quality framework, which consists of inputs (independence, knowledge, experience, and professional skepticism of auditors), processes (audit processes, materiality, risk assessment, and quality control), and outcomes (financial statement's restatements, litigation against auditors, accuracy of audit reports, quality of financial statements, and regulatory reviews).

Professional Skepticism

Porter et al. (2008) also Boyle and Carpenter

(2015) outline expert skepticism as an attitude that includes questioning thoughts and caution over conditions that suggest the opportunity of a misstatement due to mistakes or fraud and a vital evaluation of audit evidence. Tuanakotta (2011) states that professional skepticism will assist auditors in critically assessing the risks faced and taking these risks into account in various decisions. Professional skepticism should be applied by the auditor in planning and performing the audit by acknowledging that there may be erroneous financial statements (Kusumawati & Syamsuddin, 2018). A study conducted by Popova (2013) shows that auditors will be more sensitive to the presence of fraud with an attitude of skepticism when evaluating audit evidence. Hussin et al. (2017) reveal that skepticism occurs when there is doubt about the reliability of the information acquired so that further investigation will be carried out on the information. Chiang (2016) mentions that not having professional skepticism can lead to failure in recognizing problems or failure to act upon problems that have been found.

Audit Time Pressure

Bowrin and King (2010) define time pressure as a person's notion of their potential to perform a task within a designated time restrict, where a well-timed the entirety of duties is a crucial dimension of task overall performance. Time pressure is one variable that affects audit performance, which is constantly faced by auditors when conducting audits and issuing audit reports because of the pre-determined timeline (Lee, 2012). Time pressure is pressure on the audit time target that has been set to complete the audit on time (Amiruddin, 2019) therefore imposing a time limit for the auditor to perform the audit program according to the schedule (Umar et al., 2017).

BPK RI (2017) in SPKN mentions that the

Audit Report (Laporan Hasil Pemeriksaan, LHP) must be timely so that the information submitted is maximally useful. Research by Coram et al. (2003) also Kelly and Cook (1991) show that time pressure is a problem often encountered by auditors. Wijaya and Yulyona (2017) explain that time pressure occurs when the time limit for completing a task is determined and creates difficulties in completing work within such a time frame. Auditors often experience time pressure as they must conclude the audit results within the stipulated time frame (Hussin et al., 2017).

Remote Audit

The implementation of remote audits is the same as remote work. As defined by Mungkasa (2020), remote work is an activity that can be done outside the office physically, either partially or entirely, at a location far from the office, using telecommunications and information media as work tools. In ISO 19011:2018, it is stated that remote audit refers to the use of technology to collect information, interview auditees, etc. when face-to-face methods cannot be performed (International Organization for Standardization, 2018). Furthermore, it is mentioned that virtual audits are carried out when an organization performs work or provides services using an online environment that allows people, regardless of their physical location, to carry out the audit process. International Accreditation Forum (2015) defines remote audit (assessment) as the assessment administered by the Conformity Assessment Body (CAB) from locations that do not require physical presence. A remote audit is defined as the method through which the auditor combines information and verbal exchange era for the cause of accumulating, recording, sharing, and analyzing audit data, additionally engaging with the auditee independently of the auditor's bodily place (Teeter, Alles, & Vasarhelyi, 2010;

Castka, Searcy, & Fischer, 2020). The remote audit also enables the segregation of audit duties between head office and audit team individuals (Eni, 2016).

Framework and Hypothesis

Some previous studies revealed a positive correlation between auditors' professional skepticism and audit quality. Kusumawati and Syamsuddin (2018) also Nugrahaeni et al. (2019) state that professional skepticism directly affects audit quality, where an appropriate measure of audit quality lies in the auditor's conduct when conducting audits, one of which is professional skepticism. The research conducted by Popova (2013) and Beasley et al. (2001) show that an attitude of skepticism will increase sensitivity in detecting fraud during the evaluation of evidence. There is a significant positive link between professional skepticism and the auditor's assessment of the risk of material misstatement (Hussin et al., 2017). Finding and reporting violations is a form of audit quality (DeAngelo, 1981) and professional skepticism is important in conducting audits, thereby impacting audit quality (Boyle & Carpenter, 2015).

H1: Professional skepticism has a positive effect on audit quality

Kelly and Cook (1991) also Coram et al. (2003) reveal that time pressure is a matter often faced by auditors, which can make auditors experience a dysfunctional behavior to reduce audit quality (Gundry & Liyanarachchi, 2007). Further research by Coram et al. (2004) also Svanberg and Öhman (2013) show that time budget pressure affects reduced audit quality (RAQ), both in terms of accepting dubious evidence or by not testing or cutting the selected sample. Moreover, the research conducted by Deviani and Badera (2017), Santoso and Achmad (2019), also Sari and Lestari (2018) indicates that time pressure affects the quality of the audit. Time

pressure has a negative effect, which means that the higher the time budget pressure, the lower the audit quality. Bowrin and King (2010) explain that time budgets are associated with stress and auditor work-related behaviors that can reduce audit quality, increasing the likelihood that the audit will fail. H2: Time pressure has a negative effect on audit quality

One of the obstacles in auditing practices during the COVID-19 pandemic is auditors' limited mobility and physical access when performing their audit duties. Such obstacles would lead to the practice of remote audit, creating an option for auditors in carrying out their duties. Albitar et al. (2021) state that social distancing and the implementation of work from home (WFH) require audit companies to develop digital programs so that audits can be carried out through remote access (Eni, 2016; Bierstaker, Burnaby, & Thibodeau, 2001). Remote audit means collecting evidence electronically and interacting with the auditee from the auditor's physical location online (Teeter et al., 2010). This is a challenge for auditors regarding evidence reliability, quality, and suitability (Appelbaum, Budnik, & Vasarhelyi, 2020; IAPI, 2020).

However, the remote audit also benefits the auditor by providing flexible work locations, better work-life balance, and less time travel (Nastase & Ionescu, 2011). The audit company benefits from the cost-saving in the office room, which also leads to increased profit. Dwidienawati, Tjahjana, Pradipto, and Gandasari (2020) stated that WFH provides work satisfaction to the employees. WFH provides flexibility to employees, less time spent, a balance between work and life, also less stress. Those can increase the auditor's work performance, resulting in a quality audit (Butarbutar & Pesak, 2021).

H3: Remote audit has a positive effect on audit quality

Limited mobility and physical access due to the COVID-19 pandemic caused the audit to shift to a remote audit (Litzenberg & Ramirez, 2020). These limitations affect auditors' level of professional skepticism in carrying out quality audits. IAPI (2020) views the implications for implementing remote audits, one of which is that obtaining evidence electronically presents a challenge for auditors to increase skepticism in testing the reliability of evidence. This is due to vulnerabilities in the reliability, quality, and suitability of evidence during remote audits (Appelbaum et al., 2020; IAPI, 2020).

Levy (2020) mentioned that accounting forecasts could be inherently more complex and much less dependable due to the higher level of uncertainty during the pandemic. In addition, the COVID-19 pandemic has considerable implications for the entire audit process, along with the emergence of new fraud risks (Diab, 2021). For this reason, the auditor must conduct a sufficient professional skepticism and remain vigilant for indications of management error, whether intentionally or not (Diab, 2021; Levy, 2020), while professional skepticism affects audit quality (Kusumawati & Syamsuddin, 2018). These studies show that the need for professional skepticism to achieve audit quality will be higher with remote audits, so remote auditing strengthens the relationship of professional skepticism to audit quality.

H4: Remote audit strengthens the relationship of professional skepticism to audit quality

The research framework and hypotheses are shown in Figure 1.

RESEARCH METHOD

This study is quantitative research to test the hypothesis of the significance of the relationship between the independent variables (i.e.,

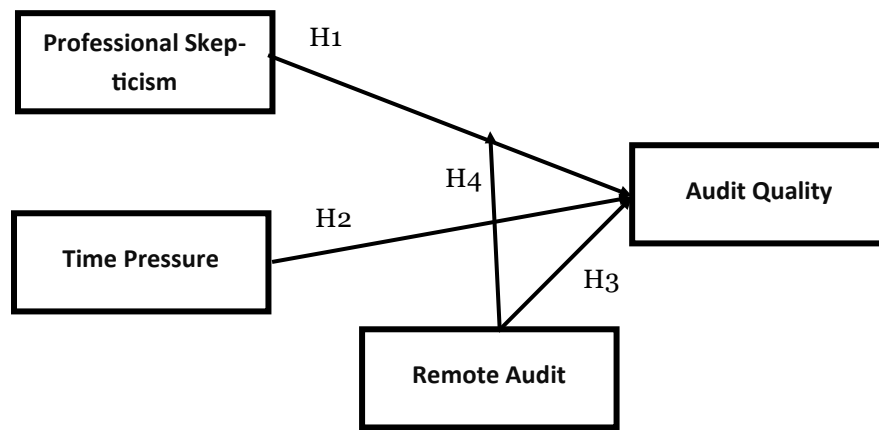


Figure 1. Research Framework

auditor professional skepticism, audit time pressure, and remote audit) and the dependent variable (i.e., audit quality) and the effect of moderating variables (i.e., remote audit) on variables that are independent of the dependent variable. A survey of 215 BPK auditors was conducted using a random sampling method to collect the data. The instrument used was a questionnaire with a five Likert Scale from 1 (strongly disagree) to 5 (strongly agree). Table 1 shows the operationalization of research variables.

This study analyzed the data using descriptive statistics to analyze data by describing the data that had been collected (Sugiyono, 2017) and Smart PLS (Partial Least Square) to test the hypothesis. PLS is useful for theory development when the model is complex and in the exploratory stage, relatively small sample size and processing of all types of data, including non-normal data distributions, explaining the relationship between variables and the use of latent construction measurements (Nitzl, 2016).

The tests carried out using Smart PLS are the Outer Model Test or Measurement Model, the Inner Model Test or Structural Model, and Hypothesis Test. The Outer Model Test or Measurement Model consists of convergent validity, discriminant validity, and composite reliability. Convergent validity is related to the principle that the measures of a

construct should be highly correlated (Ghozali, 2021). The convergent validity test can be seen from the loading factor value for each construct indicator. The rule of thumb used to assess convergent validity is that the loading factor value must be more than 0.7 for confirmatory research and the loading factor value ranges from 0.6 to 0.7 for exploratory research, and the Average Variance Extracted (AVE) value must be greater than 0.5 (Ghozali, 2021). However, at the research stage of the scale development stage, the loading factor value of 0.5 - 0.6 is still acceptable (Ghozali, 2021).

Discriminant validity relates to the principle that quantifiers of different constructs should not be highly correlated by looking at the value of cross-loading for each variable must be greater than 0.70 (Ghozali, 2021). Composite reliability is used to prove the instrument's accuracy, consistency, and accuracy in measuring constructs (Ghozali, 2021). Measure the reliability of a construct with reflective indicators. This can be done in two ways: with Cronbach's Alpha and Composite Reliability, with a value greater than 0.7 for confirmatory research and 0.6 - 0.7 for exploratory research. Furthermore, the Inner Model or Structural Model Test is carried out by looking at the R^2 value. R^2 values of 0.75, 0.50, and 0.25 show that the model is robust, moderate, and weak (Ghozali, 2021). Subsequently, hypothesis

Table 1. Operational Research Variables

Variable	Dimension	Indicator
Audit Quality (Y) (Knechel & Shefchik, 2014; Pinello et al., 2019; Lee et al., 2016; De Angelo, 1981)	Input	Auditor experience Audit education that the auditor has attended
	Process	Compliance with standards Compliance with audit program Adequacy of quality control (supervision)
	Outcomes	Misstatement detection Misstatement reporting
Professional Skepticism (X1) (Arens et al., 2014; Kusumawati & Syamsudin, 2018; Boyle & Carpenter, 2015)	Questioning Mind	Auditor doubts in auditing evidence Critical evaluation of audit evidence
	Suspension of Judgment	Evaluating evidence from objective (not subjective) sources Confirmation
Time Pressure (X2) (Hussin et al., 2017; Bowrin & King, 2010; Umar et al., 2017)	Processing time pressure	The auditor views the audit time budget as an obstacle to the implementation or completion of certain audit procedures Auditors find it difficult to complete work within a predetermined time limit
	Report limit time pressure	Strict and continuous audit assignment schedule
Remote Audit (X3) (Teeter et al., 2010; Appelbaum et al., 2020; Castka et al., 2020)	Audit interaction and communication patterns	Patterns of communication and interaction with auditees Patterns of communication and interaction within a team
	Implementation of remote audit	Documentation for document review Observation techniques in the implementation of remote audit

testing is conducted by evaluating the model to determine the significance of the influence between variables through the bootstrap approach. In the resampling bootstrap method, the significance value used is t-value 1.96 (significance level = 5%).

RESULT AND DISCUSSION

Descriptive Statistical Test

Questionnaires are distributed to 215 respondents, and the demographic distribution is presented in Appendix 1. Based on the respondents' experience as auditors, they have more than six years of experience, and only 7.40% of them have less than five years of experience. In addition, 116 respondents were dominated by senior auditors (54.00%). Thus, respondents relatively have sufficient experience to convey their perceptions regarding auditing problems during the COVID

-19 pandemic.

Descriptive statistics are used to analyze the data by describing the data that has been obtained from the respondents by calculating the average (mean), standard deviation, maximum, and minimum. The results of the descriptive statistical test are shown in Table 2.

Outer and Inner Model Testing

Complete data on loading factors can be seen in Appendix 2. The results of the Convergent Validity Test show that there are six indicators that have a loading factor of less than 0.5 so they must be excluded from the model because they are not significant (Ghozali, 2021). The indicators released are 3 indicators of time pressure variables (X2.1, X2.4, and X2.5), remote audit variables (X3.3 and X3.6), also audit quality (Y1.9). After the indicators are removed from the model, all indicators have a loading factor

Table 2. Descriptive Statistical Test Results

Variable	N	Minimum	Maximum	Interval	Mean	Std. Deviation	Result
Professional Skepticism	215	6	30	4.8	26.209	3.231	Very High
Time Pressure	215	9	30	4.2	19.507	4.093	Medium
Remote Audit	215	16	30	2.8	24.735	2.612	High
Audit Quality	215	27	45	3.6	38.493	3.666	High

value of more than 0.5. The value of Average Variance Extract (AVE) generated for each variable can be seen in Table 3.

Table 3. AVE Value Test Results

Variable	AVE
Professional Skepticism	0.732
Time Pressure	0.665
Remote Audit	0.698
Audit Quality	0.615
Moderation of Professional Skepticism	1.000

The results of the discriminant validity test were carried out using cross-loading and the Fornell-Larcker Criterion. The discriminant validity test using the Fornell-Larcker Criteria was carried out by comparing the square root of the AVE for each construct with the correlation between constructs in the model. Table 4 shows that the AVE root of each construct is higher than the AVE root of a construct or variable with other constructs. Thus, all constructs in the estimated model meet discriminant validity criteria. A construct reliability test was then conducted, measured by two criteria, namely Cronbach's alpha and composite reliability. The value of Cronbach's Alpha and composite reliability

results from processing using Smart PLS is presented in Table 5. Table 5 shows that the value of Cronbach's alpha and composite reliability for all variables is above 0.7. Thus it can be stated that all the variables used in the study are reliable.

Table 5. Reliability Test Results

Variable	Cronbach's Alpha	Composite Reliability
Professional Skepticism	0.925	0.942
Time Pressure	0.778	0.853
Remote Audit	0.856	0.902
Audit Quality	0.909	0.927
Professional Skepticism	1.000	1.000

The inner test (structural model) aims to show the strength of the estimate between latent variables or constructs by knowing the R-square (R^2) value (Ghozali, 2021). The results of the R^2 value test using Smart PLS is 0.464, or R^2 Adjusted is 0.452. This shows that 45.2% of Audit Quality is influenced by Professional Skepticism, Time Pressure, and Remote Audit, while other factors influence 54.8%.

Table 4. Fornell-Larcker Criterion

Variable	Professional Skepticism	Professional Skepticism	Time Pressure	Audit Quality	Remote Audit
Professional Skepticism	0.855				
Moderation of Professional Skepticism	0.056	1.000			
Time Pressure	-0.067	0.051	0.815		
Audit Quality	0.505	0.106	-0.241	0.784	
Remote Audit	0.362	0.237	0.007	0.556	0.835

Hypothesis Testing

Hypothesis testing using bootstrapping algorithm with the Smart PLS program with the significance of 5% is 1.96. The t-table is compared with the t-count or t-statistics. The results of hypothesis testing can be seen in Table 6. The original sample shows a value of 0.331 for Professional Skepticism on Audit Quality, which means that there is a positive influence between Professional Skepticism on Audit Quality. The effect of Professional Skepticism on Audit Quality is 33.1%, while other variables' influence is 66.9%. The t-statistic value shows a value of 3.065, so the t-statistic value is greater than the t-table ($3.065 > 1.96$), and the P-value is 0.002, smaller than 0.05. This shows that Professional Skepticism has a significant effect on Audit Quality. Thus, professional skepticism positively affects audit quality, and the H1 is accepted.

One form of audit quality is that the auditor can detect an error or fraud using the auditor's professional skepticism in the form of a critical attitude and questioning mind when evaluating audit evidence. In addition, with professional skepticism, an auditor suspends judgment until obtaining objective evidence and information and conducts testing and analysis before concluding. Thus, the resulting audit will provide an adequate confidence level, which has implications for good audit quality.

This study's results align with previous research conducted by Kusumawati and Syamsuddin (2018) also Nugrahaeni et al. (2019), which state that professional skepticism has a significant direct effect on audit quality. Research by Popova (2013), Hussin et al. (2017), and Beasley et al. (2001), reveal that there is a significant relationship between professional skepticism and the detection of fraud also material misstatement which is a form of audit quality. Otherwise, research by Nandari and Latrini (2015) reveals that skepticism does not significantly affect audit quality. Asmara (2019) states that due professional care through critical thinking about audit evidence has no significant effect on audit quality.

The original sample shows a value of -0.219 for Time Pressure on Audit Quality, which means time pressure negatively affects audit quality. The higher the time budget pressure, the lower the audit quality. The effect of time pressure on audit quality is 21.9%, while other variables influence 79.1%. The t-statistic value shows a value of 3.647, so the t-statistic value is greater than the t-table ($3.647 > 1.96$), and the P-value is 0.000 smaller than 0.05. This shows that Time Pressure has a significant effect on Audit Quality. Thus, H2, which states that time pressure has a negative effect on audit quality, is accepted.

In obtaining good audit quality, the auditor shall perform the audit procedures according to the audit program and based on standards

Table 6. Hypothesis Testing Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Professional Skepticism on Audit Quality	0.331	0.337	0.108	3.065	0.002
Time Pressure on Audit Quality	-0.219	-0.216	0.060	3.647	0.000
Remote Audit on Audit Quality	0.442	0.416	0.093	4.737	0.000
Moderation of Professional Skepticism on Audit Quality	-0.008	0.011	0.144	0.059	0.953

and guidelines. Thus the auditor can provide reasonable assurance on the results of the audit. Audit time pressure arises due to limited time for the auditor to perform the audit procedures that have been designed to affect the achievement of audit quality. Time pressure can lead the auditor to reduce audit quality. The results of this study are in line with previous research.

The study of Coram et al. (2004) shows that time budget pressure reduces audit quality both in terms of accepting dubious evidence and by not testing or cutting the selected sample. Research conducted by Santoso and Achmad (2019), Sari and Lestari (2018), also Deviani and Badera (2017) show that time budget pressure has a negative and significant effect on audit quality, which means that the higher the time budget pressure, the lower the audit quality. Otherwise, research by Wijaya and Yulyona (2017) also Nugroho (2018) state that time pressure has no significant effect on audit quality, so the auditor can complete the requested work within a certain period and continue to improve audit quality.

The original sample shows a value of 0.442 for Remote Audit on Audit Quality, which means remote audit positively affects audit quality. The effect of Remote Audit on Audit Quality is 44.2%, while other variables influence 55.8%. The t-statistic value shows a value of 4.737, so the t-statistic value is more significant than the t-table ($4.737 > 1.96$), and the P-value is 0.000 smaller than 0.05. This shows that Remote Audit has a significant effect on Audit Quality. Therefore, this study accepts and supports H3 stating that Remote Audit has a positive effect on audit quality.

During the Covid-19 pandemic, remote audits are performed by auditors at their respective homes or places of residence on a teleworking basis (Belzunegui-Eraso & Erro-Garcés, 2020). This benefits the auditor as it

saves time and energy; work can be performed optimally. Moreover, auditors can maintain a better work-life balance and reduce stress levels, thereby improving their auditor performance. The optimization and performance improvement affects the quality of the resulting audit.

Nastase and Ionescu (2011) state there are several benefits for auditors through remote auditing, i.e., a flexible work location, a better balance between work and life, and reduced travel time. Dwidienawati et al. (2020) state that WFH provides job satisfaction for employees by providing flexibility, less time spent, a good work-life balance in place, and does not cause stress. These things can improve the performance of auditors so that in carrying out their duties, they can produce quality audits (Butarbutar & Pesak, 2021). Other research shows concerns about the decline in audit quality due to remote audits because the remote audit is a challenge for auditors in terms of the reliability, quality, and suitability of evidence (Appelbaum et al., 2020; IAPI, 2020).

The original sample shows a value of -0.008 for the moderating effect of Professional Skepticism on Audit Quality, which means that there is a negative effect for moderating Professional Skepticism on Audit Quality with a small value. Moderation of Professional Skepticism on Audit Quality is 0.8%, while other variables influence 99.2%. The t-statistic value shows a value of 0.059, so the t-statistic value is smaller than the t-table ($0.059 < 1.96$), and the P-value is 0.953 greater than 0.05. This shows that Remote Audit does not moderate the effect of Professional Skepticism on Audit Quality. Therefore, H4 is rejected.

Before testing the hypothesis with remote audit as a moderator, the results showed that professional skepticism significantly affected audit quality. With remote audit as the mod-

erating variable, the results of hypothesis testing indicate that remote audit does not affect the relationship of professional skepticism to audit quality, so remote audit is classified as a moderating predictor, which only acts as an independent variable. The study results are not in line with Levy (2020) and IAPI (2020), which explain that remote audit poses a challenge regarding the reliability, quality, and suitability of evidence. Because accounting estimates will be inherently more complex and much less dependable, auditor skepticism needs to be improved to produce a quality audit.

The hypothesis is not accepted because of professional skepticism that has become fundamental for auditors in carrying out audits. Porter et al. (2008) also Boyle and Carpenter (2015) explain that professional skepticism is an attitude that includes a questioning mind and caution over conditions that indicate the possibility of misstatements due to errors or fraud, as well as a critical assessment of audit evidence.

In the remote audit, auditors experience obstacles, including restrictions on direct physical access to audit evidence and confirmation of key personnel, which cannot be carried out face-to-face. However, the remote audit does not change the attitude of professional skepticism of auditors in conducting audits. This is because professional skepticism is fundamental for auditors in conducting audits to produce quality audits. Auditors, even though they carry out remote audits during the COVID-19 pandemic or face-to-face audits during normal conditions without a pandemic, will always be skeptical of the information and audit evidence submitted by the auditee.

CONCLUSION

During the COVID-19 pandemic situation, professional skepticism positively affects audit quality significantly. The results of this research are consistent with other research conducted in normal situations. For this reason, it is recommended for BPK RI auditors to continuously develop an attitude of professional skepticism in conducting audits so that they can obtain good audit quality. BPK also needs to support increasing professional skepticism for its auditors, which can be done through training and education, also enforcement of regulations about professional skepticism. The existence of the COVID-19 pandemic also continues to show a significant negative influence on time pressure on audit quality. In this case, it is suggested that BPK RI auditors need to be able to manage time well in conducting audits to minimize time pressure that can reduce audit quality. BPK management also needs to rearrange the audit schedule and timeframe to match the workload and available resources, so that time pressure during audit implementation can be minimized. BPK can also consider using IT to assist its auditors in conducting audits, reducing time pressure.

Implementing audits during the COVID-19 pandemic shows that remote audits positively affect audit quality significantly. In other words, the more often remote audit is applied, the higher the audit quality will be. This indicates that remote audit is not an obstacle for the auditor but an advantage so that the auditor can optimize the remote audit they carry out. In this implementation, it is necessary to have good supervision to maintain the quality of the audit. This study also shows that remote audit does not moderate the relationship between professional skepticism on audit quality. The remote audit does not strengthen or weaken the effect of professional skepticism on audit quality. Therefore, the implementation of remote au-

dits can be considered by BPK because it does not reduce auditors' professional skepticism about achieving audit quality.

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APPENDICES

Appendix 1. Respondents Demographic

Information	Number	Percentage
Gender		
Man	145	67,4%
Woman	70	32,6%
Total	215	100,0%
Age		
20 – 25 Years	2	0,9%
26 – 35 Years	70	32,6%
36 – 45 Years	121	56,3%
> 45 Years	22	10,2%
Total	215	100,0%
Graduate		
Associate Degree	0	0,0%
Bachelor Degree	113	52,6%
Master Degree	99	46,0%
Doctoral degree	3	1,4%
Total	215	100,0%
Position		
Junior Auditor	68	31,6%
Senior Auditor	116	54,0%
Supervisor	27	12,6%
Head Auditor	1	0,5%
Non Auditor	3	1,4%
Total	215	100,0%
Work Experince		
≤ 5 years	16	7,4%
6 – 10 years	35	16,3%
11 – 15 years	123	57,2%
> 15 years	41	19,1%
Total	215	100,0%

Appendix 2. Loading Factor Indicator Value

Indicators	Skepticism (X1)	Time Pressure (X2)	Remote Audit (X3)	Audit Quality (Y)	X1*X3	Results
X1.1	0,881					Valid
X1.2	0,881					Valid
X1.3	0,910					Valid
X1.4	0,879					Valid
X1.5	0,720					Valid
X1.6	0,849					Valid
X2.1		0,316				Invalid
X2.2		0,585				Valid
X2.3		0,924				Valid
X2.4		0,365				Invalid
X2.5		0,274				Invalid
X2.6		0,837				Valid
X3.1			0,819			Valid
X3.2			0,717			Valid
X3.3			0,310			Invalid
X3.4			0,861			Valid
X3.5			0,891			Valid
X3.6			0,495			Invalid
Y1.1				0,631		Valid
Y1.2				0,807		Valid
Y1.3				0,826		Valid
Y1.4				0,847		Valid
Y1.5				0,779		Valid
Y1.6				0,793		Valid
Y1.7				0,718		Valid
Y1.8				0,820		Valid
Y1.9				0,496		Invalid
X1 * X3					0,884	Valid

The Role of Village Fund Allocation (ADD) in Improving Community Welfare Through Village Potential

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ABSTRACT

Corruption in village fund allocation involving village officials has become a grave concern for the government. This condition will undoubtedly reduce the community's welfare, given that village fund allocation is used to satisfy personal gains instead of fulfilling the primary needs of the community. Therefore, this study aims to examine and analyze the effect of village fund allocation on community welfare through village potential. The sample of this study comprises provincial governments using the purposive sampling method, which reports village financial data from 2017 to 2019. The panel data regression method was used in this study to test the hypothesis with the help of Eviews version 11. This study revealed that the allocation of village funds had a positive and significant effect on community welfare. However, village potential cannot strengthen the influence of village fund allocation on community welfare. This study also discovered that the level of community welfare was high due to the village revenue effectiveness. However, no significant difference was found under the category of village spending efficiency on community welfare. In other words, village fund allocation that is spent optimally by the village government for its various strategic programs will positively impact community welfare. This study aims to address the gap found in previous literature by formulating the measurement of the variable allocation of village funds and village potential, which is still limited by using secondary data.

KEYWORDS:

Village fund allocation; village potential; community welfare

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INTRODUCTION

Several cases of corruption involving village fund allocation (Alokasi Dana Desa, ADD) and committed by internal village apparatus have become a significant issue for the government. For example, corruption involving the village fund allocation committed by the Village Head from Bayongbong, Garut Regency. The Village Head was sentenced to six years in prison for being involved in the corruption of village fund allocation with a state loss of Rp400 million in 2017. The village head's *modus operandi* for committing the corruption began with falsifying the accountability report.

Following that is the misappropriation of the village fund allocation committed by the Village Head of Lobu Rampah in North Labuhanbatu. The Lobu Rampah Village Head was named a suspect by the police for allegedly committing corruption offenses involving village fund allocation amounting to Rp399 million in 2017. The offender's mode of operation is by conducting misappropriation of six types of activities that have been budgeted, including infrastructure projects with volumes that have already been specified in the budget plan. Air Kati Village Head in Bengkulu was also suspected of causing state losses of Rp300 million in 2017 through the misappropriation of village fund allocation. The Village Head's *modus operandi* began by derailing a Rp221 million construction project Telpot road, coupled with fraudulent drainage volume of Rp34 million and taxes that have not been deposited into the state treasury amounting to Rp60 million. The foregoing corruption cases revealed that the offenders directly involved in the act of corruption are the village heads as the village apparatus who manage the village budget. This phenomenon will undoubtedly reduce the level of community welfare in view of the fact that the village fund allocation was used to satisfy personal gains in-

stead of fulfilling the needs of the village community.

Subhan (2019) revealed the myriad of problems in the allocation of village funds, among others, the lack of ability of village fund allocation managers from both the village government and community institutions in terms of planning, implementing, and controlling substandard activities and the lack of optimal participation of village community self-help groups. Dwiningwarni and Amrulloh (2017) explained that village fund management for physical development did not include increasing community income. Hence village fund management should be directed at empowerment programs through BUMDes to increase community income. In contrast to studies by Subhan (2019) and Dwiningwarni and Amrulloh (2017), Antou, Rumate, and Maramis (2019) discovered that village funds could improve village development through infrastructure development and community empowerment programs carried out by village governments and communities, thereby improving the economy of each village and sub-district.

Todaro and Smith (2012) explain that community welfare is a condition that shows people's standard of living in achieving a better life. The measure of community welfare is often referred to as the human development index (HDI), which consists of three important dimensions, namely the dimensions of health, education, and economy. The health dimension indicator is life expectancy at birth (Angka Harapan Hidup, AHH). The education dimension indicator is the expected length of schooling (Harapan lama Sekolah, HLS) and the average length of schooling (Rata-rata Lama Sekolah, RLS), while the economic dimension indicator is the adjusted per capita expenditure. HDI is an important indicator to measure the achievement of the community's quality of life, which brings benefits such as the ability

to determine the level of development of a region or country, and as one of the allocators for determining the amount of the General Allocation Fund (BPS, 2017). In other words, the human development index is one indicator to assess the success of development to improve community welfare and educate the nation (Zahari *et al.*, 2018).

The success of development to improve community welfare cannot be separated from village development activities. Regulation of the Minister of Home Affairs Number 20 of 2018 specifies that a village is a legal community unit with territorial boundaries authorized to regulate and manage government affairs. The local community's interests are based on community initiatives, origin rights, and/or traditional rights that are recognized and respected in the government system of the Unitary State of the Republic of Indonesia. The village's authority to regulate and manage government affairs to enhance the local community's welfare and quality of life requires good village financial management. According to the Minister of Home Affairs Regulation Number 20 of 2018, village financial management is an entire activity that includes planning, implementation, administration, reporting, and village financial accountability. Each stage of village financial management has procedures that require the village government to understand and follow applicable regulations.

Village financial management is performed within one fiscal year. The fiscal year starts from January 1 to December 31. The implementation of village financial management principles, notably transparency, accountability, participation, budget order, and discipline, is required to achieve effective village financial management. The principle of transparency relates to the disclosure of information to the public regarding the village's financial condition. The principle of accountability relates to the obligation of the

village government to account for village finances to the community, whereas the participatory principle relates to the involvement of institutional elements and village communities in the administration of village governance. Finally, the principles of order and budget discipline refer to the village's financial management, which must be according to applicable regulations or guidelines. The village government needs to be rigorous in managing village finances to achieve these principles.

Wijaya (2018) explains that three important parts of budget discipline must be considered in village financial management, namely, (1) planned income, which is a rationally measured estimate that can be achieved for each source of income, while budgeted expenditure is the highest limit of expenditure, (2) expenditures, which the availability of sufficient revenues must support. Activities that are not yet available or experience insufficient budget credits in the Village Government Budget (Anggaran Pendapatan Belanja Desa, APBDesa)/Amendment to the APBDesa shall not be carried out, and (3) all village revenues and expenditures in the relevant fiscal year must be included in the APBDesa and executed through the Village Cash Account. The village treasury account accommodates all village revenues and pays all village needs in one account following the conventional bank.

The district/city government assigns the village fund allocation to the district/city Local Government Budget (Anggaran Pendapatan Belanja Daerah, APBD) every fiscal year to support the composition of village finances to improve the welfare of rural communities. Wijaya (2018) explains that the village fund allocation is part of the Fiscal Balance Fund (Dana Perimbangan) received by the district/city local government for a minimum of 10% after deducting the special allocation fund. Sujarweni (2015) described that the

village fund allocation derived from the district's central and regional fiscal balance fund for villages. This allocation is determined based on ministerial regulation through a Regent or mayor regulation. Furthermore, Wijaya (2018) explains that the village fund allocation for each village takes into account (1) the need for a fixed income for the village head and village officials, as well as (2) the number of villagers, the poverty rate of the village, the area of the village, and the level of geographical difficulty of the village.

Several previous studies have found that the village fund allocation can positively impact community welfare (Nasution, 2021; Sumarni, 2020; Fathony & Sophian, 2019; Sunu & Utama, 2019; and Nurohman, Qurniawati, & Hasyim, 2019). However, the findings of Hehamahua (2015) reveal that (1) the allocation of the village fund has not fully provided space for the community to develop its economy, (2) the management of village fund allocation requires strict regulations to limit human behavior in fulfilling personal interests, (3) there are still many villages that have not been able to do its preparation for the management of village fund allocation, both in terms of annual plan products, utilization, and accountability, and (4) direct assistance for village fund allocation is more focused on infrastructure development. Thus, improving rural communities' welfare has been less than optimal. Handayani and Badrudin (2019) discovered that the allocation of village funds had significantly impacted the Indonesian economy. Therefore, this is consistent with Hehamahua (2015). Some previous studies focused on primary data, while this study focused on secondary data. Given this fact, this study is deemed important to fill the gaps of the previous studies.

Optimal utilization of village potential is needed to support community welfare im-

provement through the village fund allocation. The utilization of village potential is related to the village's source of income managed by the village government to fulfill the village community's interests. Minister of Home Affairs Regulation Number 20 of 2018 specifies that village original revenue can derive from business yields, asset returns, self-help results, participation, cooperation, and other villages' original income. Hoesada (2019) explains that each village has its type and amount of original village revenue, including other forms of legitimate village revenue, such as income resulting from cooperation with third parties and company assistance located in the village. Furthermore, Hoesada (2019) added that the village's original revenue was income from the village authority based on the village's original rights and local-scale authority. The results of village efforts include the results of Village-Owned Enterprise (Badan Usaha Milik Desa, BUMDes) and "Bengkok land" (*Tanah Bengkok*).

Dewi, Saputra, and Prayudi (2017) explain that adequate village fund allocation to support village revenue sources is expected to galvanize the wheels of government at the village level, including responding to needs that can be addressed at the village level. Furthermore, Dewi *et al.* (2017) explain that the provision of efficient and effective sources of original village income thus far has never considered the real village potential. In general, calculations rely more on existing targets and realizations based on the practices so far. The village's original income as a potential source of the village are activities that the village government accomplishes for the administration of the village government to achieve community welfare. This preceding background shows that this study aims to examine and analyze the effect of village fund allocation on community welfare subdued by village potential. Thus, the two research questions

are (1) does the village fund allocation positively affect community welfare? (2) can the village potentially increase the influence of the village fund allocation on the community welfare?

LITERATURE REVIEW

Stewardship Theory

Stewardship theory is the opposite of agency theory. This theory highlights the importance of achieving common interests over personal interests (Davis, Schoorman, & Donaldson, 1997; Schillemans & Bjurstrom, 2020). Davis *et al.* (1997) explain that motivated agents act to manage the organization well and will place organizational goals above personal interests. In the context of village organizations, the village government acts to manage village organizations with integrity, responsibility, and trustworthiness. Sujarweni (2015) explains that the village government is an extension of the central government that has a strategic role in regulating communities in rural areas to accomplish government development. Given the preceding, the village head plays a pivotal role and has the responsibility within the village government to improve the welfare of the village community.

Village Fund Allocation and Community Welfare

Hehamahua (2015) explains that more than 60% of Indonesia's population lives in villages. If the village government utilizes the village fund allocation to improve people's living standards, one may argue that the gap between rural and urban areas can be reduced. Utilization of village fund allocation is not only for infrastructure development or as a source of income for village officials but must also include economic empowerment of rural communities. This implies that the vil-

lage government must focus on the characteristics of community empowerment as the primary source of community revenue in utilizing the allocation of village funds. For example, when the village in question has the main source of income from farming, the utilization of village fund allocation focuses on stimulating agricultural businesses. When the economic needs of the village community are met through increasing their income, the village community has the budget to meet the needs of education and health. In other words, the proper use of village fund allocation will be a stimulus for improving the welfare of rural communities.

Widianoro (2020) reveals that the village fund allocation process, which includes village financial management, has been executed correctly, transparently, and following the prevailing procedures. Hence the village government's goal to improve community welfare conforms with reality. This condition shows that the village community has felt the positive impact of village development. Magal, Kawung, and Maramis (2021) also Oki, Pangastuti, and Ua (2020) find that good management of village fund allocation will improve community welfare. Boni, Firihi, Aedy, and Suraya (2001) explained that village fund allocation could be used for short-term, long-term, and human resource welfare investments. It has been proven that the community's welfare has improved. However, Badrudin, Dewanti, and Siregar (2021) reveal that the village fund has not been able to benefit the community mainly because of the area in the sampled four provinces and the quality of human resources that affect the management of the village fund have not been effective.

Improving community welfare requires the support of the village's financial capacity. One source of village finance is the allocation of village funds. The allocation of village funds should fulfill the interests of the village

community if the village government appropriately manages it. Kusmana and Ismail (2018) explain that the allocation of village funds is utilized by villages to (1) finance village development, (2) empower the community, (3) strengthen public services in villages, (4) strengthen village participation and democracy, (5) provide allowances for village officials, (6) support village government operations, and it (8) shall not be used for political activities or activities against the law. Furthermore, Kusmana and Ismail (2018) explain that various activities financed from village fund allocation are very open to improving service facilities and infrastructure in the community to support the operations of village institutions and other activities needed by the community in general. Based on this description, this study proposes the following hypothesis.

H1: Village fund allocation has a positive effect on community welfare

Village Fund Allocation, Village Potential, and Community Welfare

Government actions to meet the community's interests are in line with the theory of stewardship (Bawono, Dwi, & Kinasih, 2020). In that theory, the village government tries to maximize the role of the community in fulfilling the interests of the village. This implies that the community gives a mandate to the village government to manage village finances to improve the community's welfare. Wekan, Madris, and Haryanto (2019) describe community welfare as a condition of the community's life that can be captured from the human development index. One way to improve community welfare is through village fund allocation.

Hasirimi, Erlina, and Tarmizi (2017) explain that the objectives of village fund allocation are (1) poverty alleviation and inequality reduction, (2) improving village development planning and budgeting along with commu-

nity empowerment, (3) increasing rural infrastructure development, (4) increasing the application of religious values, social and cultural aspects in the context of achieving social improvement, (5) increasing public order and peace, (6) improving services to rural communities in the context of developing community social and economic activities, (7) encouraging self-help and community cooperation, and (8) increasing village income through BUMDes. This goal will be achieved when common interests are aligned between the village government and the village community. Syafingi *et al.* (2020) explained that the village fund allocation for capital participation in BUMDes could be used as the right solution without violating existing regulations. The goal is to improve the welfare of the community.

The village government is also expected to utilize the village's potential to improve the village community's welfare in supporting the achievement of the goal of village fund allocation. The village government can utilize village potential through a focus strategy due to limited village resources focused on main agricultural products, marine products, mining products, people's handicrafts, or other main sources of village communities. Such focus aims to optimize the utilization of village potential. With the support of the utilization of village fund allocation and village potential, it is to be expected that an increase in community welfare can be attained. Based on this description, this study proposes the following hypothesis.

H2: Village potential improves the influence of village fund allocation on community welfare.

RESEARCH METHOD

This study employs all provincial governments in Indonesia as the population during 2017-2019. The sample of this study used a

purposive sampling method with several criteria. The data of this study relates to the allocation of village funds and village potentials obtained from village government financial statistics. Table 1 describes the sampling selection. There are 34 provinces in Indonesia taken as samples from 2017 to 2019. However, the Special Capital Region of Jakarta does not have available village financial data. As a result, there are only 33 provinces that have complete data for the entire three years. Finally, there are 99 observations in this study that will be used to test the hypothesis.

Table 1. Sampling Selection

Criteria	Total
Provincial government in Indonesia from 2017 to 2019	34
Provincial governments that do not have available village financial data	(1)
Number of years of conducting analysis, from 2017 to 2019	3 years
Number of observations	99

This study uses several variables: village fund allocation, village potential, community welfare, village income effectiveness ratio, and village expenditure efficiency ratio. Operational definitions and measurements of the variables are shown in Table 2.

The hypothesis is tested using the panel data approach. Therefore, before testing the hypothesis, it is necessary to conduct a paired test to determine a suitable model. The paired tests are the Chow, Lagrange multiplier, and Hausman. Chow test is used to determine the best common effect model or fixed-effect model. The Lagrange multiplier test determines the best common effect model or random-effect model. Hausman test is used to determine the best-fixed effect model or random-effect model. This study uses an alpha level of 5% in determining the panel data model accompanied by hypothesis testing. Therefore, the suitable model when the significance value of the Chow test result < 0.05 is the fixed-effect model and

Table 2. Operational Definition and Measurement of Variables

Variable Definition	Measurement	Scale
Community Welfare (IPM): The achievement of the average welfare of a region in three key dimensions namely, health, education, and expenditure.	$\sqrt[3]{\text{Health Index} \times \text{Education Index} \times \text{Expenditure Index} \times 100\%}$ Adapted from BPS (2017)	Ratio
Village Fund Allocation (ADD): The dependence of the village government on the allocation of village fund.	$ADD = \frac{\text{Actual Village Fund Allocation}}{\text{Actual Revenue}} \times 100\%$ Adapted from Mahmudi (2019) related to regional financial dependence and modified by researcher based on this research context)	Ratio
Village Potential (PDS): Contribution of village potential to total village income.	$PDS = \frac{\text{Village Original Revenue Budget}}{\text{Budget Revenue}} \times 100\%$ Adapted from Mahmudi (2019) related to the degree of decentralization and modified by researcher based on this research context)	Ratio
Village Revenue Effectivity Ratio (PERP): The ability of the village government to mobilize village income as targeted.	$PERP = \frac{\text{Actual Revenue}}{\text{Budget Revenue}} \times 100\%$ Adapted from Mahmudi (2019) and Mahsun (2013)	Ratio
Village Expenditure Efficiency Ratio (PERB): The village government's ability to establish budget savings.	$PERB = \frac{\text{Actual Expenditure}}{\text{Budget Expenditure}} \times 100\%$ Adapted from Mahmudi (2019)	Ratio

vice versa. For the Lagrange multiplier test, if the significance value of the test results is < 0.05 , the model suitable for testing the hypothesis is the random effect model and vice versa. Finally, if the results of the Hausman test < 0.05 , the model suitable for testing the hypothesis is the fixed effect model. The selection of panel data regression models to determine hypothesis testing using common effects, fixed effects, or random effects is seen in Figure 1.

This study tested the classical assumptions, notably multicollinearity, heteroscedasticity, and autocorrelation. The normality test was not used in this study because the number of samples considered to have met the criteria of the central limit theorem (Cooper & Schindler, 2013). The multicollinearity test uses a correlation standard of > 0.9 (Ekananda, 2015). If the correlation value > 0.9 indicates multicollinearity in the model. However, Gujarati and Porter (2009) and Widarjono (2016) explain that the model is still the best linear unbiased estimator but has a large variance and covariance. Thus, the violation of the multicollinearity assumption has no significant implications for the model. The heteroscedasticity test uses white's heteroscedasticity-consistent variance and standard error to correct heteroscedasticity. Therefore the results of this test are one unit with the results of hypothesis testing (Ghozali & Ratmono, 2017). The autocor-

relation test uses the Durbin-Watson standard of 1.54-2.46 (Winarno, 2015). If the calculated Durbin-Watson value is in that range, then the model does not experience autocorrelation.

RESULT AND DISCUSSION

This study describes descriptive statistics containing minimum, maximum, mean, and standard deviation values. Table 3 shows descriptive statistics of the study variables. The table demonstrates that there are 99 observations in this study. Based on these 99 observations, the lowest rural welfare was found in Papua Province in 2017, and the highest was in the Special Region of Yogyakarta Province in 2019. On average, the welfare of people in all provinces reached 70%. This condition depicts that, on average, all provinces have high social welfare. In terms of the allocation of village funds, apparently, in 2017, West Java Province had the lowest allocation of village funds, while in 2019, East Kalimantan Province received the highest allocation of village funds. On average, the allocation of village funds for all provinces reached 34%. In the context of village potential, it becomes apparent that in 2017 West Sulawesi Province had the lowest village original income, while in 2017, Central Java Province had the highest village original income. On average, the village potential of

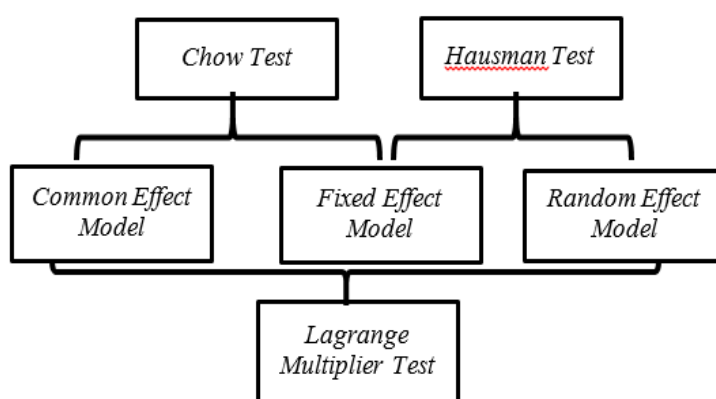


Figure 1. Panel Data Regression Model

Table 3. Descriptive statistics

Variables	Obs.	Min.	Max.	Mean	Std. Dev
Community Welfare	99	59.090	79.990	70.088	3.636
Village Fund Allocation	99	18.488	59.302	34.210	8.096
Village Potential	99	0.001	10.392	1.631	2.578
Village Revenue Effectivity Ratio	99	73.210	156.331	102.037	8.890
Village Expenditure Efficiency Ratio	99	77.434	151.982	99.750	8.527

each province reached 1.6%. This condition reveals that the village potential of all the provinces is still relatively low.

In order to improve the welfare of rural communities, it is necessary to exercise effectiveness in attaining village income and exercise efficiency in village expenditures. In terms of the effectiveness of income achievement, it comes to light that in 2018 Maluku province had the lowest level of village income effectiveness, while West Papua province had the highest in 2017. On average, all provinces have a village income effectiveness level of 102%. In the context of village expenditure efficiency, in 2018, Papua province had the highest efficiency level, while West Papua had the lowest in 2017. The minimum value of the level of spending efficiency indicates the higher the efficiency level, while the maximum value indicates the lower the level of efficiency. The standard deviation of this study shows that the fluctuations in the data are in the average range. This study uses paired test to determine the best model for testing the hypothesis. Pairwise tests were carried out

Table 4. Main Effect Paired Test Results

Effect Test	Sig.	Conclusion
Chow test		
Cross-section F	0.000	Fixed Effect
Lagrange Multiplier Test		
Cross-section Breush Pagan	0.000	Random Effect
Hausman test		
Cross-section random	0.036	Fixed Effect

separately for the main and moderating effects. The two main and moderating effect paired test tables are shown in Table 4 and Table 5.

Both Table 4 and Table 5 show the determination test results. The results revealed that the Chow test produces a fixed-effect model for the main and moderating effects. The Lagrange multiplier test produces a random effect model, and the Hausman test produces a fixed-effect model. Therefore, the hypothesis testing for the main effect test and the moderating effect test use the fixed effect model.

Table 5. Paired Test Results Moderating Effect

Effect Test	Sig.	Conclusion
Chow test		
Cross-section F	0.000	Fixed Effect
Lagrange Multiplier Test		
Cross-section Breush Pagan	0.000	Random Effect
Hausman test		
Cross-section random	0.001	Fixed Effect

The results of the multicollinearity test using the correlation between variables are shown in the Appendix. The results of the main effect test indicate that the most significant correlation value occurs at the level of efficiency of village expenditure and the level of effectiveness of village income ($0.888 < 0.90$). This condition indicates that there is no multicollinearity in the main effects model. For the moderating effect model, the results show that the most significant correlation value occurs in village potential with the

interaction between village potential and village fund allocation ($0.945 > 0.90$). This condition suggests that there is multicollinearity between the two variables. However, the model is still BLUE (Gujarati & Porter, 2009; Widarjono, 2016).

The results of the heteroscedasticity test of this study are integrated with the results of the hypothesis test because it uses white's heteroscedasticity-consistent variance and standard error to correct for heteroscedasticity (Ghozali & Ratmono, 2017). For the autocorrelation test, Table 8 shows that the Durbin-Watson values for the main effect and moderating effects are still in the range of 1.54-2.46, therefore the two models do not experience autocorrelation problems.

There are two hypotheses proposed in this study. H1 is that the allocation of village funds has a positive effect on the community's welfare. Based on the table, it can be seen that the effect of village fund allocation on community welfare has a coefficient of 0.018, a t-statistic of 71.445 and a significance of $0.000 < 0.050$. Therefore, the H1 test result

discovered that the allocation of village funds had a positive and significant effect on the community's welfare. Thereby, H1 was supported.

Donaldson and Davis (1991) explain that the theory of stewardship assumes actions taken by individuals to fulfill common interests. The village government acts as a steward and the village community as the principal in this context. The village government is assumed to act to meet the community's interests. This action puts forward the principles of village financial management, namely, transparency, accountability, participation, and budget order and discipline. The goal is to achieve a better standard of living for the community. The achievement of this common goal is supported by the utilization of village fund allocation for strategic fields of the village. The village strategic sector considers the economic empowerment of rural communities to galvanize the economic capacity of rural communities. People who have economic capacity have the potential to meet their health and education needs. This

Table 6. Hypothesis Testing Results

Independent Variables	Main Effect Fixed Effect Model Dependent Variable: Community Welfare			Moderating Effect Fixed Effect Model Dependent Variable: Community Welfare		
	β	t-stat.	Sig.	β	t-stat.	Sig.
Const.	71.439	71.445	0.000	72.744	66.577	0.000
Village Fund Allocation	0.018	2.462	0.016	0.024	3.684	0.000
Village Potential				-0.578	-1.890	0.063
Village Potential * Village Fund Allocation				0.009	1.713	0.091
Village Revenue Effectivity Ratio	0.039	2.540	0.013	-0.003	-0.305	0.761
Village Expenditure Efficiency Ratio	-0.060	-2.474	0.016	-0.027	-1.396	0.167
R ²		97.8%			98.1%	
Adjusted R ²		96.6%			96.9%	
F-Stat.		81.284			86.407	
Sig.		0.000			0.000	
Durbin-Watson Stat.		1.695			1.862	
Obs.		99			99	

condition is a matter of great concern for the government.

Hoesada (2019) affirms that village strategic planning comes from hamlet planning. District/city governments use village strategic planning for district/city planning. This condition demonstrates that strategic planning between village and district/city governments is an integrated unit. Furthermore, Hoesada (2019) explains that the district government's program for rural area development within a district is through a regulation of the regent/mayor integrated with a cross-district rural area development program at the provincial level characterized by top-down and bottom-up planning. This unit corresponds to the utilization of village fund allocation derived from the district/city government in improving the community's welfare.

Village governments that are more open to community feedback and suggestions will improve the community's welfare. This condition leads to transparency and, therefore, will increase public trust in the village government (Wardani & Utami, 2020). The community who can access information to planning, implementation, monitoring, and accountability for the village fund's financial management demonstrates that the village government has implemented transparency satisfactorily. Thus, the allocation of village funds to improve community welfare needs to be supported by transparency to provide the community with access. Permatasari *et al.* (2021) explain that the village government's installation and display of banners is a form of financial transparency in village management. In doing so, the community will not question the village government's activities within one year. The installation and display of banners made it easier for the community to oversee the implementation of village development.

H2 of this study is the potential of villages to strengthen the influence of village fund allocation on community welfare. Based on the table, it can be seen that the interaction effect of village fund allocation and village potential on community welfare has a coefficient of 0.009, a t-statistic of 1.713, and a significance of $0.091 > 0.050$. Therefore, the results of the H2 test found that village potential could not strengthen the influence of village fund allocation on community welfare; hence H2 was not supported.

This study discovered that village potential in all villages had not been fully utilized to the extent of its abilities. This condition is proven by the average level of village potential achievement reaching only about 1.6%. Such circumstance shows that the village government has not utilized the village's potential derived from business activities, village assets, self-help results, community participation, and another village's original income in supporting community welfare. Village governments in all provinces are still dependent on village fund allocation, which accounts for 34% of the composition of village income. Optimal utilization of village potential can allow villages to absorb labor, increase community income, reduce poverty levels, and even reduce disparities between rural communities. This finding is consistent with the findings of Khamdun, Sukomo, and Akbar (2019), upon which utilization of village potential through the use of village assets has not been executed optimally due to the absence of specific guidance to the village government, whose task is to assist the village communities.

This study examines the differences in the effectiveness of village income and efficiency of village expenditures related to community welfare to provide a more comprehensive study. Mahmudi (2019) explained that the results of the calculation of the level of effectiveness were classified into five categories,

namely, very effective (>100%), effective (100%), moderately effective (90%-99%), less effective (75-89%), and not effective (< 75%), while the level of efficiency of spending for spending <100% indicates the existence of spending efficiency. The test results of differences in the effectiveness of village income and efficiency of village expenditures related to community welfare are shown in Table 7.

Table 7. Results of Different Tests of the Effectiveness of Village Income on Community Welfare

Source	df	Mean Square	F
Corrected Model	4	36.591	2.992 (0.023)
Intercept	1	53,869.470	4,404.555 (0.000)
Village Revenue Effectivity	4	36.591	2.992 (0.023)
Error	94	12.230	
Total	99		
Corrected Total	98		
R ²		11.3%	
Adjusted R ²		7.5%	

Notes: Levene's test of equity of error variances is 0.732 > 5% indicating that the homogeneity assumption is met.

The results found differences in the category of the effectiveness of village income on the community's welfare as indicated by the significance value of the test results was 0.023 < 0.05. This study finds that, on average, the village government manages the budget effectively, as shown in Table 8, and the community welfare is high (72.10). Village income managed effectively by the village government shows that the results of village income management have met the expected

Table 8. Mean Community Welfare Value by Category Village Revenue Effectiveness

Village Revenue Effectivity Category	Mean of Community Welfare
Ineffective	68.87
Less effective	60.06
Effective enough	70.41
Effective	72.10
Very effective	69.80

goals. Mahmudi (2015) explains that effectiveness is related to the relationship between the expected results and the actual results. The implication of the effectiveness of village income management is to increase the community's welfare. Thus, the village government is capable of mobilizing the realization of village income against the village income budget to improve community welfare.

Table 9 shows the test results of differences in the efficiency of village spending on community welfare. The results found no difference in the category of village expenditure efficiency on the welfare of the community as indicated by the significance value of the test results was 0.194 > 0.05. This study found that the average value of the village government in managing spending did not differ in influencing the welfare of the community, as shown in Table 10. The average values were 69.58 and 70.54. Mahmudi (2015) explains that an organization, program, or activity is said to be efficient if it can produce specific outputs with the lowest possible input. In this study, the village government has not

Table 9. The Result of the Difference of Spending Efficiency on Public Welfare

Source	df	Mean Square	F
Corrected Model	1	22.500	1.714 (0.194)
Intercept	1	484,755.8	36,922.328 (0.000)
Village Expenditure Efficiency	1	22.500	1.714 (0.194)
Error	97	13.129	
Total	99		
Corrected Total	98		
R ²		1.7%	
Adjusted R ²		0.7%	

Notes: Levene's test of equity of error variances is 0.604 > 5% indicating that the homogeneity assumption is met.

Table 10. Mean Community Welfare Value based on Village Expenditure Efficiency Category

Village Expenditure Efficiency Category	Mean of Community Welfare
Inefficient	69.58
Efficient	70.54

been able to produce expenditure efficiency in meeting the community's welfare, thus indicating a waste of the budget. The inefficiency of village government expenditure shows that expenditure planning and control is not well planned and controlled so that it can harm the welfare of the community. For this reason, the village government needs to have a comprehensive understanding of the concept of expenditure as a village government strategy for managing the budget better.

CONCLUSION

This study found that the allocation of village funds had a positive and significant effect on community welfare. The allocation of village funds that are used optimally by the village government with various strategic programs will positively impact the development of a prosperous community. However, this study did not find the potential of villages in strengthening the effect of village fund allocation on community welfare. This condition occurs because the potential contribution of the village in supporting village income has not been appropriately managed. The description is expected to contribute to theory, policy, and methodology.

This study contributes to the development of stewardship theory in village organizations. Referring to this theory, the village government acts honestly, responsibly, transparently, and has the integrity to meet the community's interests. This condition is evidenced by the use of village fund allocations to support the village community's welfare. However, the village government cannot take advantage of the village's potential. This condition needs to be a concern of the local government to improve the quality of human resources in formulating various strategic programs that can provide important benefits for the village government in managing the potential of their village.

The village government needs to carry out various evaluations related to managing village potential specifically. This needs to be considered because, on average, for all provinces in Indonesia, the village's potential can only contribute 1,6% of the village income budget during 2017-2019. The government needs to evaluate the village's vision and mission to describe the village in the future. Hoesada (2019) explains that the description of the ideal village is (1) a description of the industry portfolio owned by a village government, (2) the backbone industry of the village, a competitive industry, (3) the pattern of using village natural resources or the participation of the whole community. In village economic activities, the total wealth of village natural resources and the status of damage/sustainability of village natural resources, (4) the composition of the educated and uneducated workforce in the village, (5) accumulation of village capital, accumulation of foreign investment outside the village into the village, (6) accumulation of knowledge and village social relations, as well as (7) vision of the ideals of village spatial planning, ecosystems, democratic climate, and peace, ideals of health and lifestyle of rural communities, village per capita income, village job opportunities, a gross domestic product of the village, etc. Thus, the village government needs to implement a village utilization pattern to improve the community welfare.

This study contributes to the methodology to address the gaps in the previous literature by formulating a measurement of the variable allocation of village funds and village potential. The measurement of these two variables refers to Mahmudi (2019), specifically for local government organizations. Furthermore, this study adapts to the context of village organizations. Thus, the measurement of these two variables is expected to bridge the gaps in the previous literature. The limitations of this study are related to the unavailability of village government financial data, not specifical-

ly for each village but in general for all village finances at the provincial level. Access to data for all village governments in Indonesia was minimal.

The implementation of this study was deemed important to address the gaps in previous studies that still use secondary data. For that reason, further studies need to consider the ease of obtaining data. This study provides conclusions that are only limited to proxy measurements in explaining variables. Future studies can use other proxies to explain variables to improve the results of data analysis.

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APPENDICES

Appendix 1. Result of Multicollinearity Test (Correlation) Main Effect

Variables	Community Welfare	Village Fund Allocation	Village Revenue Effectivity Ratio	Village Expenditure Efficiency Ratio
Community Welfare	1.000			
Village Fund Allocation	0.358	1.000		
Village Revenue Effectivity Ratio	-0.127	-0.069	1.000	
Village Expenditure Efficiency Ratio	-0.253	-0.152	0.888	1.000

Appendix 2. Result of Multicollinearity Test (Correlation) Moderating Effect

Variables	Community Welfare	Village Fund Allocation	Village Potential	Village Potential* Village Fund Allocation	Village Revenue Effectivity Ratio	Village Expenditure Efficiency Ratio
Community Welfare	1.000					
Village Fund Allocation	0.358	1.000				
Village Potential	0.313	-0.067	1.000			
Village Potential * Village Fund Allocation	0.355	0.113	0.945	1.000		
Village Revenue Effectivity Ratio	-0.127	-0.069	-0.165	-0.222	1.000	
Village Expenditure Efficiency Ratio	-0.253	-0.152	-0.137	-0.201	0.888	1.000



Factors Determining Low Regional Financial Independence: Financial Autonomy and Degree of Decentralization

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ABSTRACT

This study aims to assess the Tulang Bawang Regency's fiscal independence and determine the factors that affect it. This study used the data of the 2015-2019 Statement of Budget Realization of Tulang Bawang Barat Regency and primary data from interviews. The research method applies a qualitative approach with an inductive methodology using several financial ratios such as the effectiveness of Local Own-source Revenue management, the ratio of the degree of decentralization, the ratio of regional financial dependence, and the ratio of regional financial independence. Based on the results, the ratio of regional financial independence shows an average of 1.54%, within the 0-25% interval, and classified under the shallow criteria. It may be inferred that regional financial independence in meeting its funding needs for the administration of government affairs is still very low. The regional financial dependence ratio shows an average of 85.99%, categorized as a very high dependency. The calculation of the ratio results proves that the local own-source revenue of Tulang Bawang Barat Regency is still low. Furthermore, a large number of mandatory spending from the central government and national budgeting politics causes the regional financial independence of Tulang Bawang Barat Regency to become low.

KEYWORDS:

Financial autonomy; local government; mandatory spending

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INTRODUCTION

A just and prosperous Indonesian society can be achieved through local governments. Under article 18 paragraph (1) of the 1945 Constitution, the Unitary State of the Republic of Indonesia is divided into provincial areas. The province is divided into districts and cities, where each province, district, and the city has a local government regulated by law. Local governments can run their affairs based on autonomy and co-administration tasks. In paragraph (5), it is explained that local governments exercise autonomy to the fullest extent, except for government affairs determined by law to be the affairs of the Central Government. Law Number 23 of 2014 concerning Local Government and Law Number 33 of 2004 concerning Financial Balance between the Central Government and Local Governments in lieu of Law Number 25 of 1999 regarding Financial Balance between Central and Local Governments are legal products that strengthen the role of Local Governments as the organizer of regional autonomy.

In implementing regional autonomy, funding is needed to run the government so that fiscal decentralization transpires. Fiscal decentralization in Indonesia is accomplished through Transfers to Regions and Village Funds provided by applicable regulations (Arif & Maksum, 2017). In addition, autonomous regions are also entitled to maximize their respective regional original revenues to reduce the ratio of regional financial dependence on central government finances (Babczuk & Więznowski, 2008; Scutariu & Scutariu, 2015). In exercising regional autonomy, adequate funding is needed for the local governments to have the right to optimally manage the potential that exists in their respective regions according to the needs to achieve development and community welfare. Local governments could also provide funding sources based on the authority of the

Central Government, decentralization, de-concentration, and co-administration. As a result of implementing regional autonomy, fiscal decentralization arises, which aims to increase the region's potential from a fiscal perspective. Fiscal decentralization plays a very important role in implementing regional autonomy to improve community welfare independently of the potential of each region.

The State Budget (Anggaran Pendapatan dan Belanja Negara, APBN) in 2020 had funds transferred to regions amounting to Rp770 trillion and allocated village funds in 2020 amounting to Rp70 trillion, which were distributed to all regions and villages in Indonesia. These amounts were larger than the previous year, where in 2019, the transfer of funds to the regions reached Rp703 trillion, and village funds amounted to Rp60 trillion. The funds are distributed to all regions in Indonesia with an amount adjusted to each region's conditions. These funds are utilized to achieve equitable development throughout Indonesia. The transfer funds also include special autonomy funds granted to several regions that hold special autonomy status and regions designated as special regions.

Lampung Province is an autonomous region at the provincial level, granting the right to carry out its government affairs. The implementation of government affairs is carried out according to the conditions of each region by using the existing budget in the local government budget (Regional Revenue and Expenditure Budget, APBD), both from Local Own-source Revenue (Pendapatan Asli Daerah, PAD) and transfer funds from the central government. However, Lampung Province still relies much on transferring funds from the central government. Tulang Bawang Barat Regency is one of the autonomous regions in Lampung Province. The District of Tulang Bawang Barat was formed by

Law number 50 of 2008 and had the mandatory authority to carry out regional development and manage budget policies by the region's needs in regional fiscal independence. The initial consideration of its formation was to accelerate regional development, streamline public services, shorten the span of government control, and accelerate people's welfare.

Public services and development aimed at improving the welfare of local communities require funding to support the smooth implementation of government affairs. Tulang Bawang Barat Regency has three sources of income, namely PAD, transfer funds, and other legitimate revenue (Ngadisah & Alma'arif, 2019). However, until this research was carried out, the financial independence of Tulang Bawang Barat Regency was not better than that of Tanggamus Regency, which was an autonomous region formed in the same period (Afif & Ciptawaty, 2020). Tulang Bawang Barat Regency still relies on transfers from the central government to meet its regional expenditures. It can be seen from the percentage value of transfer funds to the regions compared to regional revenues that are still prominent in funding government affairs. The percentage of transfer funds contribution is 70%, and other legitimate revenue is around 15% to 21% of the total regional income.

Regional financial performance can be measured by regional financial performance, which can be seen from regional independence and the degree of fiscal decentralization. Regional financial independence characterizes local governments in terms of regional dependency on central and provincial government funding sources (Karenina, Andayani, Aditya, & Wasil, 2021; Suci & Asmara, 2014). The higher the regional financial independence, the lower the regional dependency on government and provincial assistance. Regional financial independence

also illustrates community participation in regional development (Kamaroellah, 2017; Rante, Mire, & Paminto, 2018), where the higher regional financial independence illustrates the higher public participation in paying taxes and regional retributions.

Studies related to regional financial independence have revealed that regional financial independence is different from one to another, depending on the geographical conditions of the region (Camagni, 2002; Psycharis, Zoi, & Iliopoulou, 2016), the structure and form of state government (Babczuk & Więznowski, 2008; Mitsopoulos & Pelagidis, 2008), and effectiveness of government organs in their ability to provide public services (Barbieri, Galli, Fedele, & Ongaro, 2013). Regional financial independence shows the ability of the Local Government to finance government affairs, development activities, and service delivery to the community who have paid taxes and levies as a source needed by the region (Halim, 2004). Several factors affect regional financial independence, including Regional economic potential and the ability of the Regional Revenue Agency (Dinas Pendapatan Daerah, Dispenda). Indicators that are widely used as a benchmark for regional economic potential are Gross Regional Domestic Product (GRDP). The regional financial independence can be improved in a planned manner through the ability or performance of innovative institutions or organizations and the use of the Dispenda to increase regional revenues (Oulasvirta & Turala, 2009; Saunders, 2018; Tarmizi, 2010).

These studies can take several considerations to determine regional financial dependence, namely the ratio of the effectiveness of PAD management, the ratio of the degree of decentralization (Olson, 2012), and the ratio of regional financial dependence (Cigu, 2014; Jemna, Onofrei, & Cigu, 2013), and the ratio of regional independence (Cigu, 2014;

Halim, 2004). Financial independence can be caused by the capabilities and capacities of local governments supported by the role of universities (Waluyo, 2018), improvement of the investment climate (Herianti, 2019), and the role of internal audit in supervising regional spending (Zarista & Ichsan, 2020).

Increasing regional independence is closely related to the ability of the region to manage local revenue. The government is expected to be able to increase PAD to reduce financial dependency on the central government, thereby increasing regional autonomy and flexibility. Based on the previous description, the author needs to assess the fiscal independence of the Tulang Bawang Regency and find out the factors that affect it.

RESEARCH METHOD

This study took place at the Regional Financial and Asset Management Agency (Badan Pengelolaan Keuangan dan Aset Daerah, BPKAD) of Tulang Bawang Barat Regency and used a constructivist paradigm with a qualitative approach. Such an approach explains that this study departs from the phenomenon of Tulang Bawang Barat Regency's high level of regional financial dependency on central government finances. Given the preceding, the theory in this study serves as a guide for analysis and interview. For this purpose, this study uses exploratory research. Data was collected qualitatively by conducting interviews with local government officials such as regional heads, heads of development planning agencies, members of regional revenue agencies, and local assembly members. Meanwhile, interviews with academics were also conducted with people responsible for drafting local government laws in Indonesia.

This study uses two types of triangulation for data validation: methodological triangulation

and data source triangulation. Methodological triangulation compares interview results and documents collected from financial reports of the Ministry of Finance and the local revenue agency of Tulang Bawang Barat regency. In contrast, data source triangulation compares the information from several interviews developed hierarchically. The data analysis technique uses several methods carried out in stages, such as data coding, data presentation, and concluding. Data coding is implemented through several stages, starting with open, axial, and selective coding (Saldaña, 2009), finding common factors that lead to the region's high financial dependency on central government finances. This study used the NVIVO version 12 plus application to analyze the data (Bazeley & Richards, 2011).

RESULT AND DISCUSSION

Financial independence aims to solve problems and address obstacles related to financing development and services to the community without any assistance from external parties. This financing can be done by increasing community participation in utilizing regional resources and potential also making appropriate financial decisions from the local government. An important step that the local government must take is calculating the actual potential PAD owned by the region. One of the objectives of implementing regional autonomy and fiscal decentralization is to increase regional independence and reduce fiscal dependence on the central government. The principle of independence leads to budget management done by reducing dependency on financial sources that are pragmatic, originating from the central government, by trying to innovate and discover new sources of revenue, optimize existing resources, and enhance the quality of existing resources. Therefore, it will improve productivity and increase the community's

prosperity and welfare (Oulasvirta & Turala, 2009; Tarmizi, 2010).

Factors Causing the High Dependence of Regional Finances: Local Own-source Revenue

PAD is one source of regional income, which usually consists of regional taxes and levies as its components. Law Number 33 of 2004 concerning Financial Balance between the Central Government and Local Governments specifies that PAD includes regional income originating from regional tax results, regional levies, results of separated regional wealth management, etc. Another legitimate PAD, which aims to provide flexibility to regions in exploring funding sources to implement regional autonomy, is seen as a manifestation of the principle of decentralization.

Regional financial independence can be demonstrated by comparing PAD with revenues from the central government. PAD in Tulang Bawang Barat Regency is different every year. According to Kamaroellah (2017), the low regional financial capacity is caused by the relatively small PAD compared to the total regional income. This can be seen from the development of PAD receipts in the last five fiscal years, especially from the 2015 to the 2019 of APBD, as illustrated in Table 1. Table 1 is sourced from the Statement of Budget Realization (Laporan Realisasi Anggaran, LRA) and shows that PAD targets and realizations have increased in each fiscal year. However, despite an increase yearly,

the budget realization in the 2015-2019 fiscal year has not yet reached its target. In the 2019 fiscal year, the realization percentage was the highest compared to the previous four years, which was 92.65%. Overall, the realization of the APBD revenue of Tulang Bawang Barat Regency has not been going well. The Head of BPKAD Planning Subdivision of Tulang Bawang Barat Regency said that regional revenue targets must be adjusted to regional conditions. The adjustment is mainly carried out on PAD, the main component in seeing financial independence. Therefore, the determination of the target is left to the local government and adjusted to the condition of PAD sources owned by the Tulang Bawang Barat Regency government in the relevant fiscal year.

In addition, the comparison between the realization of PAD with the target set shows the ability of local governments to realize local revenue or commonly referred to as the PAD Effectiveness Ratio (Halim, 2004). The higher the effectiveness ratio, the better the regional ability to manage finances. According to Mardiasmo (2006), the value of the effectiveness ratio is < 75, the local government PAD management is declared as ineffective, 75-89 is less effective, 90-99 is quite effective, and 100 is effective.

From Table 1, it can be seen that, in general, the level of effectiveness of PAD management is less effective because the average percentage is 82.41, which is in the range of 75-89. Although it is stated that it is still not

Table 1. Target and Realization of Local Own-source Revenue (PAD) Tulang Bawang Barat Regency in 2015-2019

Year	Target	Realization	Percentage (%)
2015	22,208,000,000	16,452,748,570	74.08%
2016	29,235,329,180	20,882,974,136	71.43%
2017	27,039,304,221	23,142,474,247	85.58%
2018	32,359,786,824	27,611,116,135	85.32%
2019	33,883,490,825	32,410,517,401	92.65%

Source: Government of Tulang Bawang Barat Regency (2015, 2016, 2017, 2018, 2019).

effective, the effectiveness of PAD management increases in each fiscal year. The Head of the BPKAD of Tulang Bawang Barat Regency explained that the management of PAD continued to be improved each fiscal year. However, the realization has not yet reached the target. The local government of Tulang Bawang Barat Regency has the authority and regional opportunities to obtain profitable regional income by increasing income sources and through good revenue management. Meanwhile, income other than PAD, especially transfer funds from the central government, has fixed provisions. There is a fixed pattern that local governments only receive funds according to a predetermined amount.

The most significant contributor to the income of the Tulang Bawang Barat Regency is the transfer of the central government, especially the balance fund. Balance Funds originate from the APBN, which aim to fund regional needs in implementing decentralization. The funds consist of the Tax Revenue Sharing Fund, the Non-Tax Revenue Sharing Fund/Natural Resources, the General Allocation Fund (Dana Alokasi Umum, DAU), and the Special Allocation Fund (Dana Alokasi Khusus, DAK). There are two objectives of the existence of a balancing fund. The first is to reduce the fiscal gap between the central and local governments also between other local governments.

Second is the achievement of financial equity between the central and local governments and other local governments.

The degree of fiscal decentralization illustrates the ability of regions to increase local revenue to finance regional autonomy (Oulasvirta & Turala, 2009). This ratio is calculated by comparing the amount of PAD with the Total Regional Income. Based on Table 2, it can be seen that the average degree of decentralization of Tulang Bawang Barat Regency for five fiscal years is 2.69%. According to Mardiasmo (2006), the ratio of the degree of decentralization of Tulang Bawang Barat Regency for the 2015-2019 fiscal year still falls under the very poor criteria (0.00-10.00).

In addition, the degree of decentralization also can be calculated using the regional financial dependence ratio to show how much regional financial depend on transfer funds from balance fund. The ratio is obtained by comparing the transfer funds with the total regional income. The higher this ratio, the greater the level of dependence of local governments on the central and/or provincial governments and vice versa (Kamaroellah, 2017; Psycharis et al., 2016). The high level of fiscal decentralization shows that local governments have been able to increase PAD compared to other revenues in regional revenues. If the PAD ratio is high, it will reduce the dependence of local governments on the

Table 2. The degree of fiscal decentralization, Regional Financial Dependence and Independence Ratio

Year	Total Regional Revenue (Rp)	Transfer Funds (Rp)	PAD (Rp)	Degree of Decentralization Ratio (%)	Regional Financial Dependence Ratio (%)	Regional Financial Independence Ratio (%)
2015	804,443,705,056	706,298,417,218	16,452,748,570	2.04	87.79	1.10
2016	865,796,622,415	720,823,633,663	20,882,974,136	2.41	83.55	1.33
2017	865,130,634,078	801,318,569,071	23,142,474,247	2.67	92.62	1.58
2018	943,924,559,731	879,890,258,775	27,611,116,135	2.92	93.21	1.70
2019	946,904,183,516	689,236,141,842	32,410,517,401	3.42	72.78	2.02

use of funds. Furthermore, regional financial independence shows the ability of local governments to finance government activities, development, and services to people who have paid taxes and levies as a source needed by the region (Halim, 2004).

Table 2 also shows the calculation results of the degree of regional financial dependence of Tulang Bawang Barat Regency with an average of 85.99%. The value falls in the category of very high dependence (>50%), according to Mardiasmo (2006). The level of dependence is determined by the size of the local government's financial independence ratio. This is in accordance with the explanation of The Head of BPKAD Planning Subdivision of Tulang Bawang Barat Regency.

"The regional revenue of Tulang Bawang Barat Regency is still low; therefore still relies on transfer funds to meet its spending. This is because the regional revenue source of Tulang Bawang Barat is still not collected optimally, therefore, causing the contribution of original regional revenue to remain low, resulting in high regional financial dependence."

The average regional financial independence of Tulang Bawang Barat Regency is 1.54%. It still lies within the interval of 0.00 – 25.00 and can be interpreted that the ratio of regional financial independence of Tulang Bawang Barat Regency is low (Mardiasmo, 2006). Calculating the regional financial independence ratio is the opposite of the regional financial dependence ratio method. There are slight differences in terms of the components being measured. This measurement can strengthen the results of calculating regional financial independence.

Based on the calculation results of the various ratios above, it shows that PAD has a significant influence on the financial independence of a region, both in terms of the effectiveness of PAD management, the degree of decentralization, regional financial depend-

ence, and regional financial independence. The low PAD causes the regional dependence to become high, and regional financial independence becomes low. The regional dependence ratio shows how much regional finance is dependent on transfer funds from the central and/or provincial governments. The higher this ratio, the greater the level of local government dependence on the central and/or provincial governments and vice versa. The regional financial independence ratio can describe the region's dependency on sources of funds originating from external parties of the local government. The level of dependency is determined by the size of the ratio of local government financial independence. On the one hand, a high financial independence ratio indicates that local government dependence on funds from external parties is low. However, the lower the level of the financial independence ratio of a local government, the higher the dependence of the local government on funds sourced from external local governments.

In this ratio, it can be seen that PAD is the primary indicator that is used as a benchmark. However, the ability of regions to increase PAD in financing government administration should also be a focus. The low amount of PAD indicates that the region's ability to achieve targeted PAD is low. Various other reasons cause this. The Head of the Budget Division of the BPKAD of Tulang Bawang Barat Regency explains that the weakness of the local government of Tulang Bawang Barat Regency so far lies in the ability to realize PAD. These weaknesses include finding sources of PAD, utilizing existing sources of PAD (as evidenced by the presence of unfulfilled targets), and managing PAD. There are still taxpayers who do not pay taxes due to the absence of strict sanctions and more accessible tax payment systems such as online tax payments and other conveniences.

Based on the description above, it can be concluded that all the problems that cause low PAD cannot be separated from the regional conditions at that time. PAD collection can be carried out properly if a sound management system is available. Although the source of PAD is still relatively small, the collection can be optimized with a robust management system in place. Moreover, the problem in the Tulang Bawang Barat Regency area is the lack of PAD sources and coupled with the lack of a sound collection management system. Therefore the collection is not optimal, especially on regional taxes and levies. This greatly affects the region's financial condition, making PAD influential in regional financial independence.

Factors Causing the High Dependence of Regional Finances: Mandatory Spending

Mandatory spending is state expenditure or expenditure that has been regulated by law (Bowen, Chen, & Eraslan, 2014; Grechyna, 2021). The contribution of funds originating from the central government (transfer funds) dominates the regional income and affects regional financial independence. The amount of transfer funds is caused by the large number of mandatory spending given by the central government to local governments and must be fulfilled.

The Head of BPKAD Planning Subdivision Tulang Bawang Barat Regency explained that in the administration of the local government, a budget was needed to carry out the programs set by the local government and the central government. One of the expenditures set by the central government for local governments is Mandatory Expenditure. In meeting these expenditures, the District Government of Tulang Bawang Barat still relies on transfer funds from the central government.

Mandatory expenditures in managing local government finances in Indonesia include an education budget allocation of 20% of the APBD following the mandate of the 1945 Constitution Article 31 Paragraph 4 and Law Number 20 of 2003 concerning the National Education System Article 49 Paragraph 1. The health budget allocation of 10% of the APBD excludes salary expenditures as mandated in the Law Number 36 of 2009 concerning Health Article 171. General Transfer Funds of at least 25% are directed to be absorbed for regional infrastructure spending directly related to the acceleration of the development of public and economical service facilities to increase job opportunities, reduce poverty, and reduce supply gaps. It is regulated in the Law concerning State Budget. Meanwhile, according Law Number 2014 concerning Villages, Village Fund Allocation (Alokasi Dana Desa, ADD) is at least 10% of the balance fund received by the regency/city in the APBD after deducting DAK.

The regional revenue of Tulang Bawang Barat Regency has not been able to meet regional expenditures and still relies on transfer funds from the central government to meet its needs. Moreover, a large number of mandatory spending from the central government leads to greater regional financial dependence of the Tulang Bawang Barat Regency. On the other hand, mandatory spending is a policy that helps regions with poor financial capacity prioritize and meet the primary needs of the community (Phaup, 2019). The average contribution of PAD to regional expenditures in Tulang Bawang Barat Regency in the 2015-2019 period was 2.704.

Factors Causing the High Dependence of Regional Finances: Political Budget Policy

The central government provides a regional autonomy policy for all regions in Indonesia to achieve equitable development following

Law Number 23 of 2014 concerning Local Government. The central government provides balance funds to prevent inequality between regions with low income and regions with high income to support the implementation of regional autonomy. The authority of local governments has changed in Law Number 32 of 2004 and most recently Law Number 23 of 2014. Table 3 presents these differences.

These differences lead to changes that have impacts on local governments. One of the impacts is the central government's control over large regional potentials. Because of this, the central government's concerns regarding large regional revenues can result in emerging 'small kings' in the regions; hence some authorities are withdrawn (Saunders, 2018). This shows that regardless of the central government's goal of carrying out budgetary politics, one of the causes of regional financial dependence in Tulang Bawang Barat Regency is a large amount of potential income managed by the central government (Zarista & Ichsan, 2020). Thus, it will affect the financial independence of the region.

Increasing regional financial independence of Tulang Bawang Barat Regency is carried out

through efforts undertaken by local governments to overcome the factors causing low autonomy. Such efforts to increase PAD and regional financial independence are, first, data collection on potential sources of PAD. This activity is carried out to improve the source of local revenue. This includes monitoring restaurant/restaurant taxes and fixing parking lots in markets that have not been coordinated by the local government (Maličká, 2019). Second, renewal of taxpayer data, including data collection for new taxpayers and re-stipulation of the amount of tax that must be paid. Third, increasing supervision of tax revenues in the regional treasury (de Sousa, Pinhanez, do Monte, & Diniz, 2020). Fourth, growing and increasing public awareness, especially taxpayers, of their obligations through outreach activities on regional regulations on regional taxes and levies (da Cruz, Tavares, Marques, Jorge, & de Sousa, 2016; de Sousa Santos, 1998); lastly, coordinating with the provincial government and related regional offices.

Furthermore, policies have also been set to increase the PAD of Tulang Bawang Barat Regency. The first policy is the distribution Notice of Tax Land and Building Assessment (Surat Ketetapan Pajak Bumi dan

Table 3. Comparison of Regency/City Authorities Based on Law Number 32/2004 and Law Number 23/2014

Criteria	Law Number 32 Year 2004	Law Number 23 Year 2014
Administration of Affairs	Divided based on the criteria of externality, accountability, and efficiency by taking into account the compatibility of the relationship between government structures (article 11, paragraph 1)	Implemented based on the principles of Decentralization, Deconcentration, and Co-Administration (article 5, paragraph 4)
Classification of Government Affairs	It consists of mandatory and optional affairs (article 11, paragraph 3)	It consists of absolute government affairs, concurrent government affairs, and general government affairs (article 9, paragraph 1)
Energy and Mineral Resources	It only refers to "natural resources," but the relationship between the central government and local governments includes authority, responsibility, utilization, maintenance, impact control, cultivation, conservation, profit sharing on the use of natural resources and other resources, and harmonization.	The administration of government affairs in forestry, marine affairs, and energy and mineral resources is divided between the Central Government and the Provinces. (Article 14, Paragraph 1) Government affairs in the field of energy and mineral resources related to the management of oil and gas are under the authority of the Central Government

Bangunan) to people whose assets have not been subject to PBB. Second is conducting a monthly meeting to evaluate the achievement of PBB acceptance with the Head of local agencies, the sub-district Head, and the Head of the village (Lurah). Next policy is providing information on the Village Head/Lurah and the sub-district head with the highest percentage of PBB payments in their area. The fourth is conducting socialization with taxpayers to build awareness of paying taxes and developing online tax payments.

In addition to increasing local revenue through the complete collection of taxes and levies, the local government of Tulang Bawang Barat Regency also seeks to increase PAD through Local-owned Enterprises. There are three Local-owned Enterprises (Badan Usaha Milik Daerah, BUMD) namely Tulang Bawang Barat Regional General Hospital, Islamic Rural Bank Tani (PT BPRS), and Ragem Sai Mangi Wawai Limited Company (PT RSMW). BUMD that has a fairly good contribution to the regional income of Tulang Bawang Barat, is PT RSMW Tulang Bawang Barat. The other two BUMDs still have no significant contribution as they face obstacles in their operations. Therefore, the government must always seek and develop other innovations to increase PAD and regional financial independence.

Measures have been undertaken to overcome the dependence of regional finance on transfer funds from the central government by improving regional financial management. The local government must have good budget priorities to reduce the burden of spending on regional finances. Efforts to overcome the politics of national budgeting must also be carried out in routine coordination with the central government. Good planning needs to be done in determining budget allocation priorities to meet regional development needs and reduce regional dependence on transfer funds from the central government.

Local Government Efforts to Increase Regional Independence

BPKAD has the authority to collect PAD and determine the amount received through the target setting. The efforts made by BPKAD also influence this. Such effort is to find out how these sources of PAD can be increased in terms of capacity or the amount of potential that can become a source of PAD. This can also increase the collection of PAD from existing potential sources. The Head of BPKAD of Tulang Bawang Barat Regency described that the local government simplifies the system and procedures for collecting regional taxes and levies, including strengthening regulations that govern the collection of regional taxes and levies to increase the financial independence of the region.

In addition, the local government also made efforts to increase the obedience of taxpayers and regional retribution payers, followed by increased control and supervision over the collection of PAD which was realized by improving the quality, convenience, accuracy, and speed of service. According to The Head of BPKAD Planning Subdivision, a lack of public awareness causes the lack of PAD in Tulang Bawang Barat Regency in terms of compliance with payment obligations, either in the form of local taxes or levies. It is necessary to increase taxpayer compliance through increased control and supervision of the collection of taxes or levies and strengthen regulations related to regional taxes and levies.

Moreover, the dependence of regional finance on transfer funds from the center to meet mandatory spending provided by the central government must be reduced. Efforts made by local governments in overcoming the dependence of regional finance on transfer funds from the center are by improving planning. Budget planning in one fiscal year should be focused on the priority needs of

the region. Mandatory spending is one of the priorities of the regional budget that must be fulfilled. The Head of BPKAD of Tulang Bawang Barat Regency describes:

"One of the priorities for budget spending is the mandatory expenditure given by the central government. This mandatory expenditure is what local governments must carry out each fiscal year. Good regional financial management must be carried out in such a way to reduce the burden of regional spending, that spending becomes a priority and benefits the region, no less profitable for the region so that no budget is considered useless in Tulang Bawang Barat."

The Head of the Planning Subdivision also supported the statement that setting good budget priorities can reduce the burden of regional financial expenditures, thereby reducing regional dependence on the central government. Budget politics needs to be done to overcome this, among others, by coordinating with local government associations. The politics of government is designed so that the central government's authority remains dominant. Normatively, the solution for local governments, both executive and legislative, is to urge the central government to give a larger portion to the regions to implement autonomy in their respective regions.

CONCLUSION

The regional financial independence of Tulang Bawang Barat Regency remains low due to several factors, such as low PAD. Those are a result of a lack of complete tax collection and the lack of awareness of taxpayers to pay their obligations, the amount of mandatory spending that local governments must meet, and the occurrence of budget politics which leads to a reduction in the potential for regional revenues. The unitary form of government and the government system be-

come the main considerations to increase regional financial independence.

Several efforts and measures are necessary to increase the capacity of the source of PAD of Tulang Bawang Barat Regency. These efforts include simplifying the system and procedures for collecting regional taxes and levies, including strengthening regulations on collecting regional taxes and levies. Also, making efforts to increase the obedience of taxpayers and regional retribution payers followed by increased control and supervision of the collection of PAD can be achieved by improving the quality, convenience, accuracy, and speed of service. Good budget planning management is adjusted to the priority of regional needs and budget allocation in a good APBD structure, which is the main prerequisite for realizing regional financial independence.

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AUTHOR GUIDELINES

General Requirements

This journal's broad scope provides a platform to publish primary and secondary research (review articles) related to state finance in accounting (public sector accounting), auditing, governance and accountability of state finances, public administration policy, and state finance law. The article should be free from plagiarism and written accordingly to the guidelines from JTAKEN. The article has never been published in any other publication media or publishing houses, either in printed or electronic form. The article shall be written in English.

Submission

1. The paper used by the author should be prepared in A4 paper.
2. The article published in JTAKEN should be accompanied by Curriculum Vitae (CV) & Statement of Authenticity and Copyright Release. The template is available online at jurnal.bpk.go.id.
3. The article should be submitted online via the journal website (jurnal.bpk.go.id).
4. The article's length around 18-20 pages, including figure, graphic, or table.

The Article Guidelines

1. Research Article Structure

a. Article Title

- Briefly describe the substance of the article, no more than 15 words, 18 point Calibri, UPPERCASE, bold, centered, exactly 16 point line spacing, 0 point spacing before and after.

b. Authors

- This line consists of the author's name (full name with no abbreviations) and the author's affiliation along with the address and email address.
- Authors' name is written using 11 point

Calibri and centered below the title.

- If the author is more than one person, they should be separated with a comma (,).
- If the address more than one, it should be marked with an asterisk (*) and followed by the current address.
- Author's address and email using 10 point Calibri, exactly 15 point spacing, 0 point spacing before and after.

c. Abstract and keywords

- The abstract should concisely inform the reader about the research purpose, its background, methods, findings, and value, or conclusion.
- An abstract consists of no more than 200 words in English.
- Abstract using 10 point Georgia and single line spacing.
- Keywords in abstract consist of 3-6 words, separate with a semicolon (;).

d. Article's Body

The body of the article consists of an introduction, research method, result and discussion, and a conclusion. The body of the article is written as follows:

- Using 11 point Georgia, exactly 15 point line spacing, before 8 point and after 8 point, 2 cm for top and inside margin and 2.5 cm for the bottom left margin.
- Abbreviations should be followed with an explanation when the first time mentioned except for the unit of measurement.

e. Introduction

The introduction must contain (shortly and consecutively) a general background, objective, literature review (state of the art) as the basis of the brand new research question, statements of the brand new scientific article, main research problems,

and the hypothesis (optional). The introduction contains previous similar research and the differences with the present research and the contributions given.

f. Research Method

In general, research methods include framework, data collection method, data analysis method, location, and research time. The research method describes the type, data source, and variable definition. The method also provides detailed descriptions so that other authors can assess and duplicate the procedure.

g. Result and Discussion

This part consists of the research results and how they are discussed. Research results can be presented in a table or figure followed with information that easy to understand. The discussion section states that there is a relation between results and basic concepts or the research hypothesis so that it can be seen in its suitability and contradiction with other research. The discussion also explains the limitation of the research and its implications both theoretically and by the application.

h. Conclusion

This is the final part containing conclusions and advice. The conclusions will be the answers to the hypothesis, the research purpose, and the research findings. The suggestion is based on the result of the analysis and conclusion made and also associated with further ideas from the research.

i. References

- The author must cite the publications on which the article work is based. Cite only items that the author has read.
- Primary references should be $\pm 40\%$ -80% of all references cited.
- References should be taken from the last ten years.

- The references use Georgia 11 point in indentation special hanging paragraph format, exactly 15 point line spacing, 8 point before and after, the upper and right borders are 2 cm each, while the left and bottom borders are 2,5 cm each.
- All references must be written in American Psychological Association (APA) style and listed in alphabetical order. The references should use reference management software such as Mendeley, End Note, Zotero, etc.

j. Appendices/Acknowledgements

Appendix(es) can be included if necessary. The author can only write essential acknowledgments for those who have contributed to the research.

2. Non-research (review) article structure consists of article title, authors, abstract and keywords, introduction, result and discussion, conclusion, references, appendices/acknowledgments.

3. Heading

Heading should be made on three levels. Level four cannot be accepted.

- Heading level 1: UPPERCASE, left-aligned, bold, 18 point Calibri, exactly 15 point line spacing, 8 point spacing before and after.
- Heading level 2: *Capitalize Each Word*, left-aligned, bold, 11 point Georgia, exactly 15 point line spacing, 8 point spacing before and after.
- Heading level 3: *Sentence Case*, left-aligned, bold, italic, 11 point Georgia, exactly 15 point line spacing, 8 point spacing before and after.
- Heading level 4 is not recommended.

4. Table

- The table placed left-aligned.
 - Table title placed above the table, left-aligned, 10 point Calibri, exactly 15 point line spacing.
 - Table content using 9-10 point Calibri, exactly 12 point line spacing, 0 point
-

spacing before and after.

- The number of table is identified using Arabic numerals (1, 2, 3,...).
- “Table” and “Number” written in bold, while table title is written in normal format.
- Source and information placed below the table, left-aligned, italic, 9 point Calibri.

5. Figure

- The figure can be a graphic, matrix, picture, diagram, and others placed centered on the page.
- Figure title is written below the figure, using 10-11 point Calibri, exactly 15 point line spacing, left-aligned. “Figure” and “Number” written in bold, while the content written in normal format.
- Number of figure is identified using Arabic numerals (1, 2, 3,...).
- Source and information placed below the figure title, left aligned, italic, 9 point Calibri.
- The figure should be in black and white with extension .jpg or .tif. If it is made in color to explain the meaning, it must provide the respective high-resolution figure minimum 300dpi.

6. Citation Format

The authors should ensure that every reference cited in the text appears in references and vice versa. All references cited should follow APA referencing style and the formatting guide as follows:

- References to previous research must be made in text with a year-old system on one of two forms, for example, Andrianto (2007) or (Andrianto, 2007).
- If the reference used is more than one, it should be mentioned together with the arrangement in the order of date, for example: (Mardisar & Sari 2007; Solomon, 2010; Muljono, 2012).
- If there are 3-5 authors, cite all authors the first time the reference occurs, for example: (Guerin, Labor, Morgan, and Reesman, 2005).

In subsequent citations, include only surname of the first author followed by “et al.” and the year. For example: (Guerin et al., 2005)

There are two types of references, those are electronics and non-electronic sources. The reference examples are as follows:

a. Book

1) Without the author’s name

Employment the professional way: A guide to understanding the Australian job search process for professionally qualified migrants. (2000). Carlton, Australia: Australian Multicultural Foundation.

2) One author

Saidi, M. D. (2011). *Hukum keuangan negara*. Jakarta: Raja Grafindo Persada.

3) Two authors

Hendriksen E. S., & Van Breda, M. F. (2002). *Accounting theory*. New York, NY: McGraw-Hill.

4) Three to five authors

List the first four authors,... and ended the last author with “&”.

Albrecht, W. S., Albrecht, C. O., Albrecht, C. C., & Zimbelman, M. F. (2014). *Fraud examination* (5th ed.). Boston: Cengage Learning.

5) Six or more authors

List the first six authors,... and ended the last author **without** “&”.

Siregar, B., Suropto, B., Hapsoro, D., Widodo, E., Herowati, E., Kusumasari, L., Nurofik. (2013). *Akuntansi biaya*. Jakarta: Salemba Empat.

b. E-book

Jonick, C. (2017). Principles of financial accounting. Retrieved from <https://www.e-booksdirectory.com/details.php?ebook=12161>.

c. Books published by organizations or institutions

Ikatan Akuntan Indonesia. (2011). *Standar profesional akuntan publik*. Jakarta: Salemba Empat.

d. Journal Article

1) Printed Edition

Journal with volume and number

Gumanti, T.A. (2001). Earnings management dalam penawaran saham perdana di Bursa Efek Jakarta. *Jurnal Riset Akuntansi Indonesia*, 4(2), 165-183.

Journal with volume

Elliston, F.A. (1982). Anonymity and whistleblowing. *Journal of Business Ethics*, 1, 167-177.

2) Online Edition

Lowe, D. J., Pope, K. R., & Samuels, J. A. (2015). An examination of financial sub-certification and timing of fraud discovery on employee whistleblowing reporting intentions. *Journal of Business Ethics*, 131(4), 757-772. DOI: 10.1007/s10551-013-2020-8.

e. Thesis/Dissertation

1) Unpublished thesis/dissertation

Ramadhany, A. (2004). *Analisis faktor-faktor yang mempengaruhi penerimaan opini going concern: Studi empiris pada perusahaan manufaktur yang mengalami financial distress di Bursa Efek Jakarta*. (Unpublished master's thesis). Universitas Diponegoro, Semarang.

2) Thesis/dissertation from online database

Burger, M. A. (2012). *Accounting measurement and beta risk measures*. Retrieved from ProQuest Digital Dissertations. (UMI No. 3522298).

f. Magazine

For magazines that are published monthly, the date of publication consists only of year and month. However for magazines that are published weekly, the exact date of publication is provided.

Sianturi, H. R. (2019, Januari). Memanggul beban utang atik harga BBM. *Gatra*, XXV(9), 92-95.

Hamel, G., & Zanini, M. (2018, November-December). The end of bureaucracy: How a Chinese appliance maker is reinventing management for the digital age. *Harvard Business Review*, 96(6), 51-59.

g. Newspaper

1) Printed Edition

Sutaryono, P. (2019, Januari 3). Tantangan perbankan 2019. *Kompas*, p.6.

2) Online Edition

Zain, W. (2018, June 8). Behind the rise of income inequality in Indonesia. *The Jakarta Post*. Retrieved from <http://www.thejakartapost.com/academia/2016/06/08/behind-the-rise-of-income-inequality-in-indonesia.html>.

h. Internet Documents

Dawson, J., Smith, L., Deubert, K., & Grey-Smith, S. (2002). *Trek 6: Referencing, not plagiarism*. Retrieved from <http://www.academicworld.com/referencing-not-plagiarism.html>.

7. The Editorial Board and Managing Editor reserve the right to amend, refine the article as long as it does not alter the substance of the article. The article inappropriate with the JTAKEN writing guidelines will be returned to the author before the reviewing process.

PUBLISHING WITH JTAKEN: STEP BY STEP

The author submits the article via Open Journal Systems (OJS) on the jurnal.bpk.go.id page. To submit an article, the author must have a user account and registered as a user.

User Registration

- a. The registration process is started by clicking the "Register With This Site" button on the register page.

Figure 1. JTAKEN Home Page for Registration

- b. Authors are required to fill out a form that includes profile and login information. Click "Register" to complete registration.

Figure 2. Author Registration Form Page

Article Submission

These are the following steps to make an online submission for the article:

- a. After login, you will be directed to your Author's Dashboard. Start a new submission by clicking the "New Submission" button on the right side of the screen. You will be taken to Step 1 of a 5-Step process to upload and describe your submission.

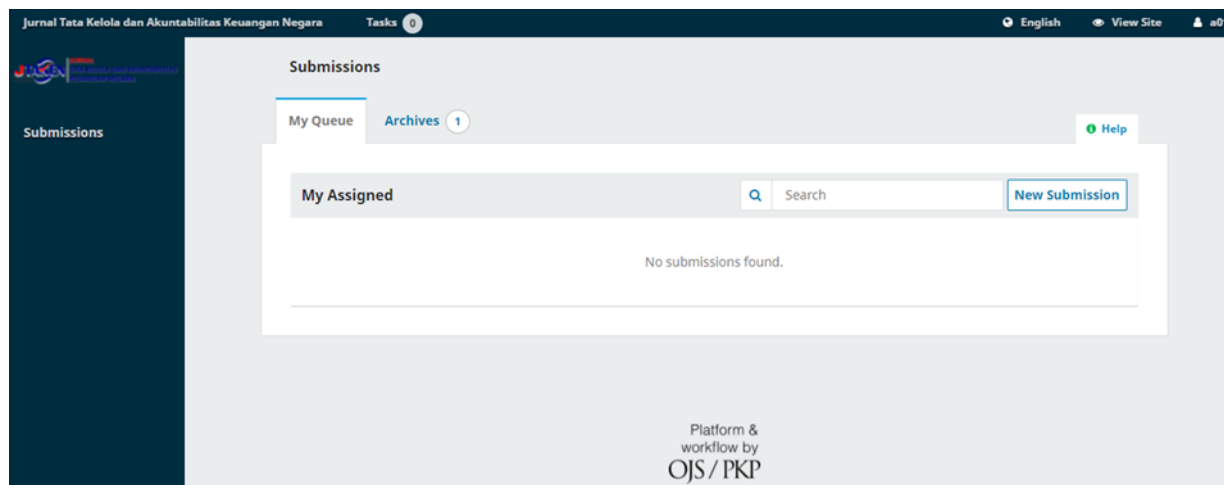


Figure 1. Create New Submission

- b. In Step 1 you will provide preliminary information about your submission. To begin select the appropriate section for your submission (e.g., article, review, etc.). Read and agree to the statements in the submission checklist by checking each box. Include any comments for the editor, read the journal's privacy statement, and then click the Save and Continue button to move to Step 2.

Figure 2. Step 1 Submit an Article

- c. On Step 2, a window will open allowing you to upload your submission file. First, you MUST select an Article Component. This lets the system know whether the file is the body of the article, an image, a data set, etc. This must be selected before your file will upload. Once you've made that selection, you can then upload your first file.

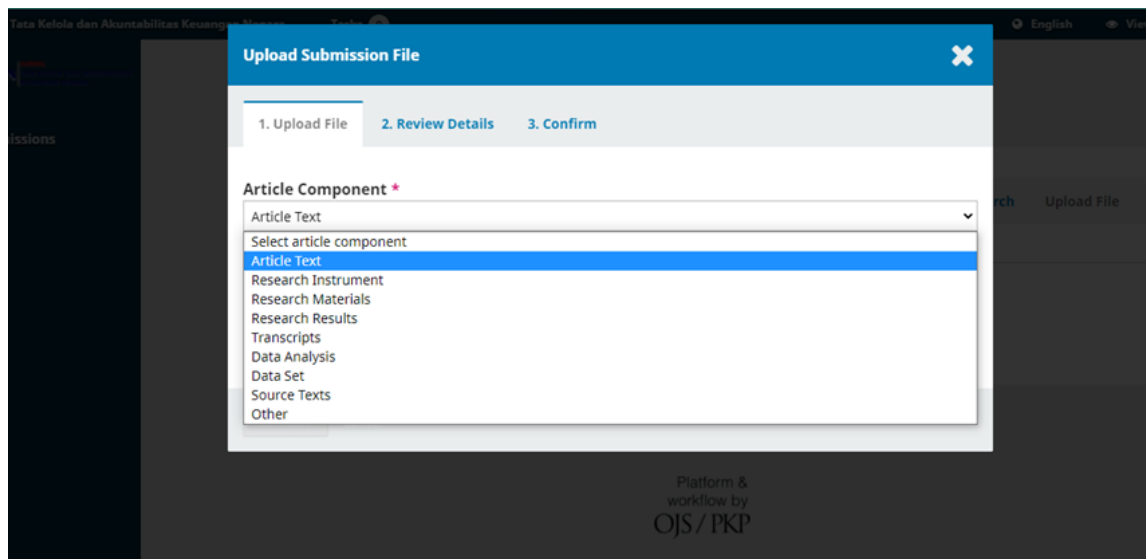


Figure 3. “Uploading the Submission” Page (1)

- d. It is important to note that you can only upload one file at a time. Additional files can be uploaded later in the process. Typically, this first file will be the body of your article. Hit the Continue button once the file uploads.

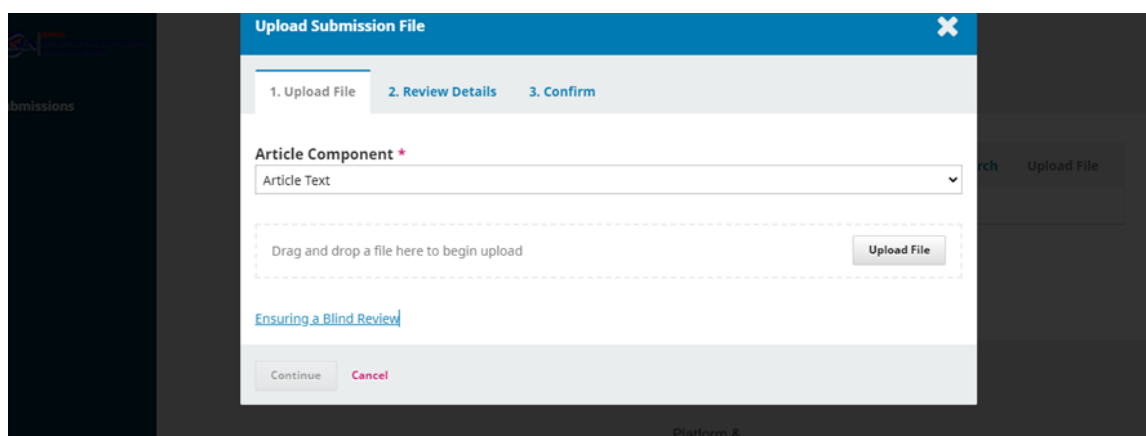


Figure 4. “Uploading the Submission” Page (2)

- e. After uploading the file, you will be asked to review the name of the file. Use the Edit link to make any changes. Click the Continue button. Next, you have the option to repeat the process to upload additional files (e.g., a data set or an image). Once you have finished uploading all of your files, click Complete; this will close the upload window.

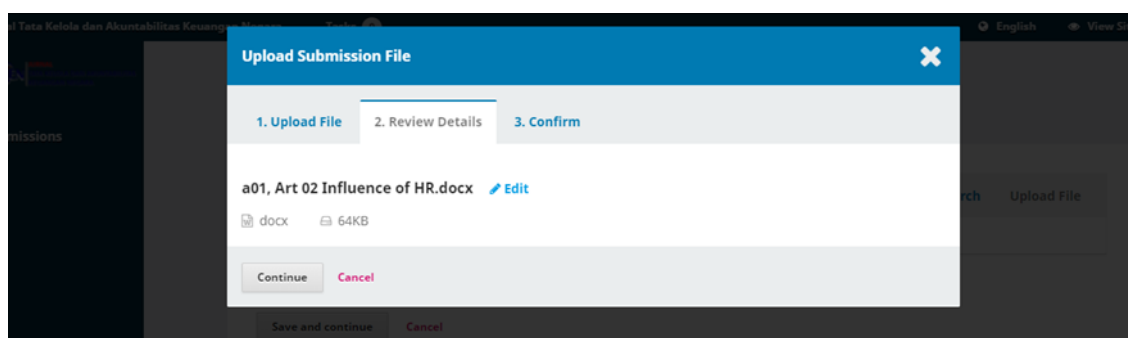


Figure 5. “Starting the Submission” page (3)

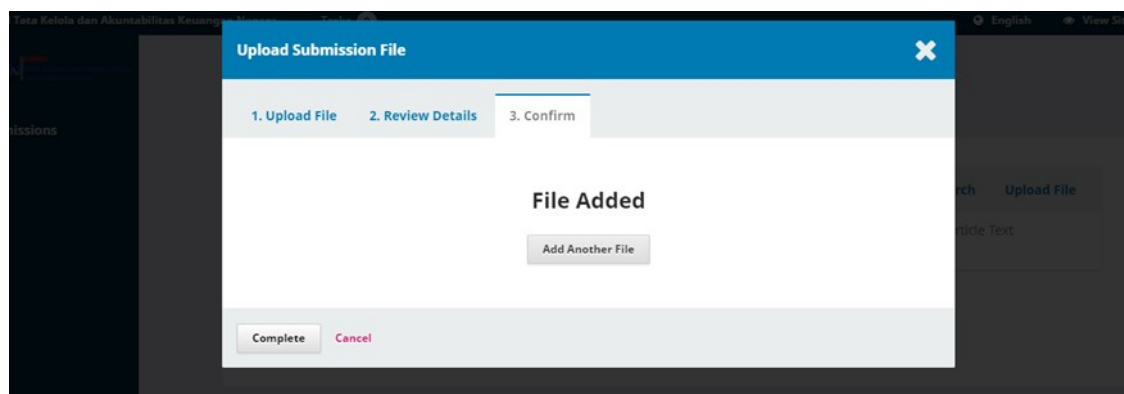


Figure 6. Uploading the Submission (4)

- f. You will be brought back to the Submit an Article screen where you will see the files you've uploaded. If you need to make changes, expand the blue arrow to the left of your file and make any changes using the Edit link. Click 'Save and Continue' to move to Step 3.

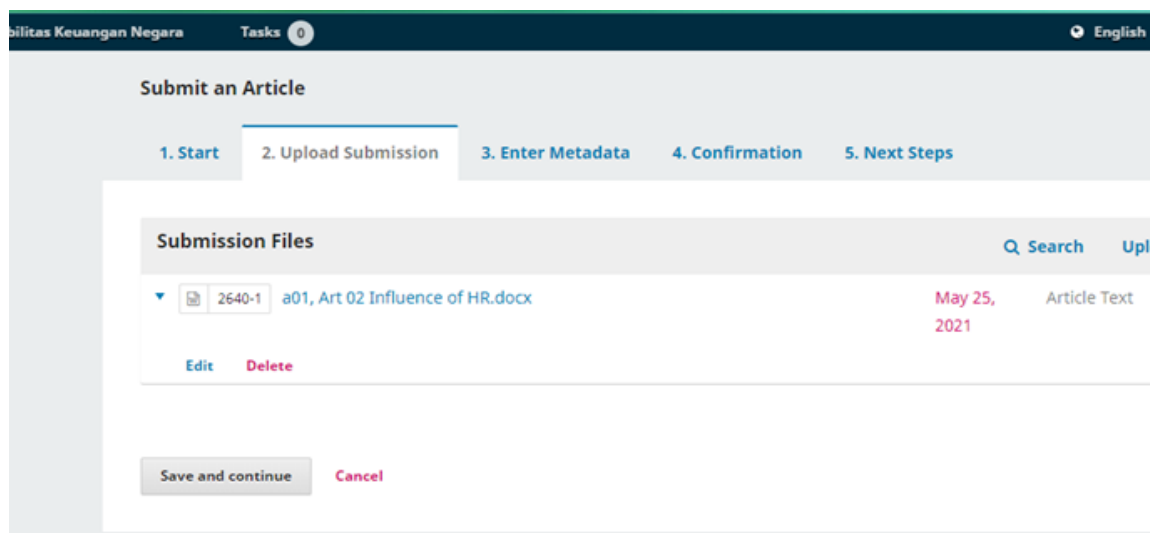


Figure 7. Uploading the submission (5)

- g. On Step 3, you will be asked to add more information about the submission, including the title of the submission (broken down into prefix, title, and subtitle), the abstract, additional contributors, keywords and references. You can add more contributors (e.g., co-authors), by clicking the Add Contributors link. This will open a new window with fields to enter their information. Click Save and Continue to move forward.

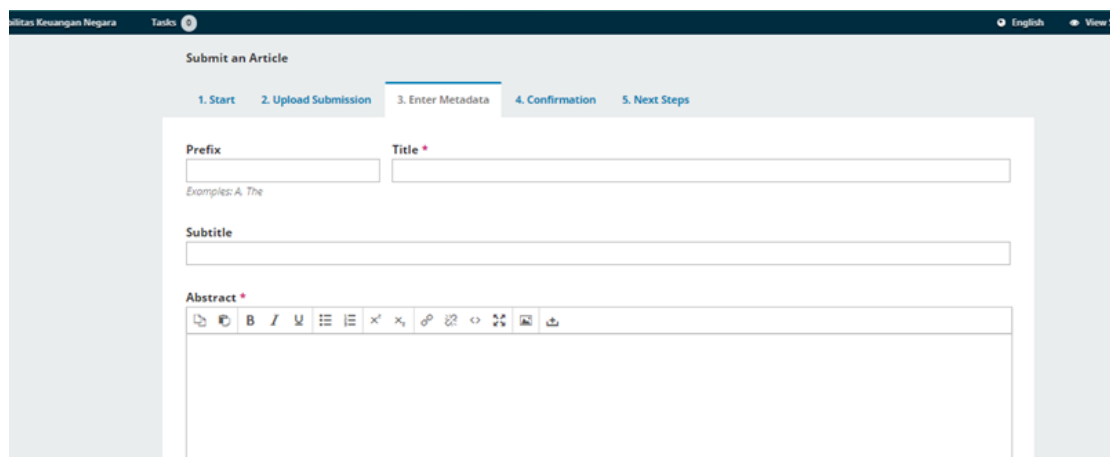


Figure 8. Enter Metadata

- h. On Step 4, you will be asked to confirm that you are happy with your submission. Click Finish Submission. A box will pop up asking you to confirm you are finished. Click OK.

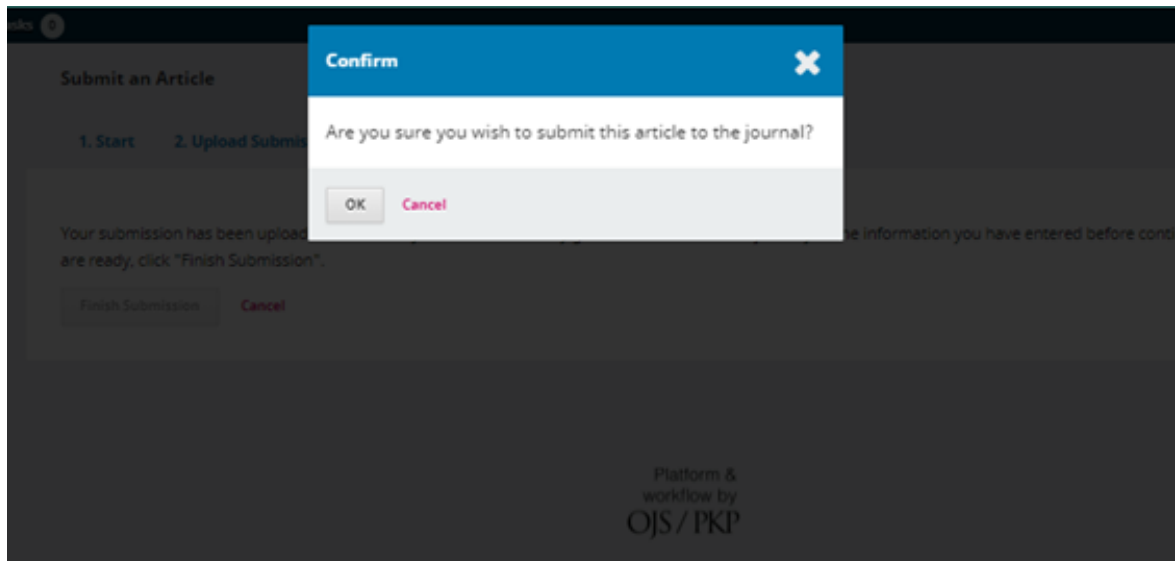


Figure 9. Finish Submission

- i. Step 5—Your submission is now complete! The editor has been notified of your submission. At this point, you can follow the links to Review this submission, Create a new submission, or Return to your dashboard.

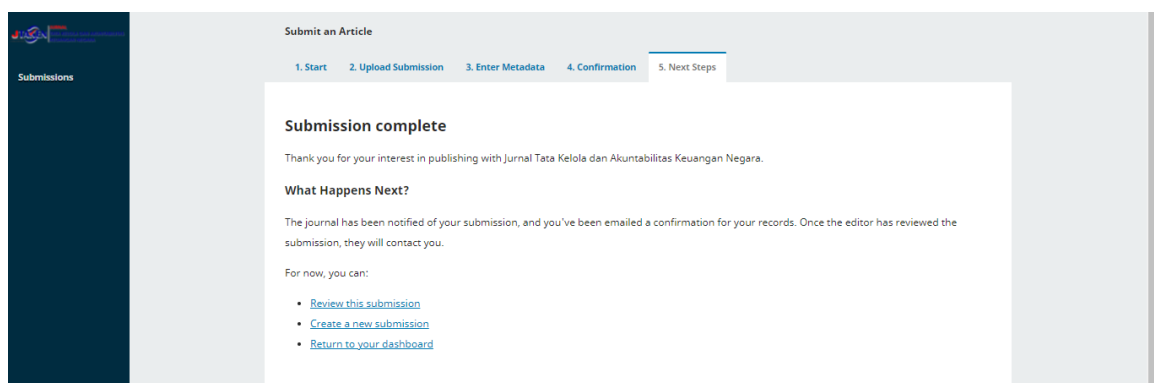


Figure 10. Submission Complete

- j. Here is your submission in your Dashboard. You can see that it is currently in the Submission stage. Over the coming days, it will move into the Review stage, and if accepted, into the Copyediting and Production stages before being published.

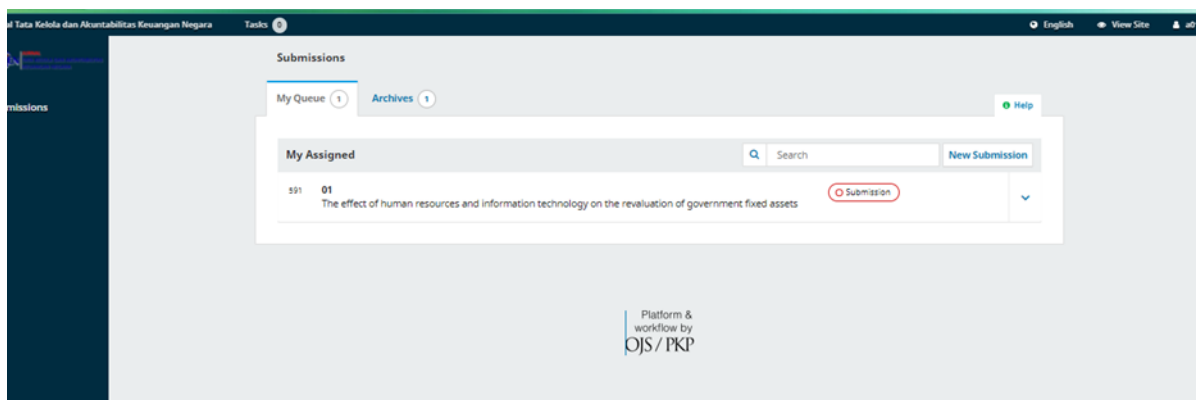


Figure 11. Monitoring Submission

Review Stage

- a. Once the review process has completed, you will be notified via email by the editor of their decision. After receiving the email, login to your dashboard. Select the Review link next to your submission to view the decision so that you can see the decision (revisions requested) and a link to the editor's notification.

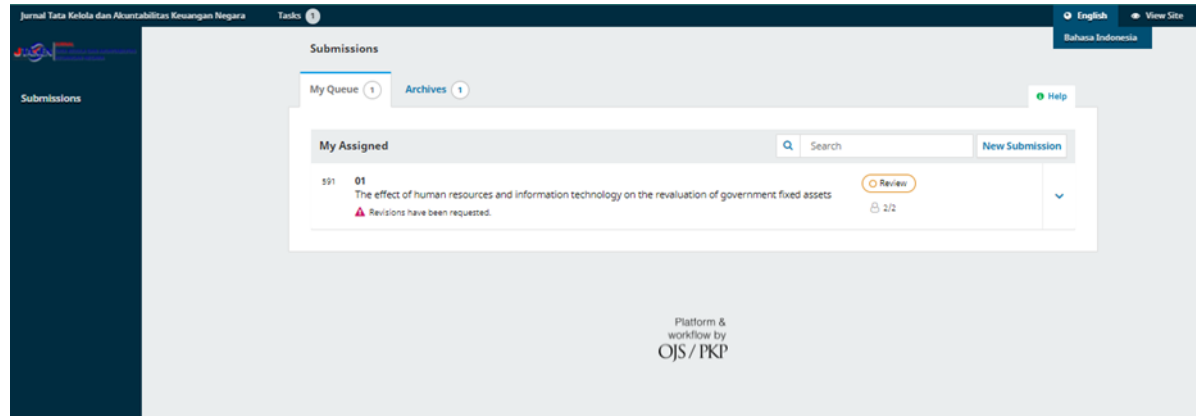


Figure 12. Responding to a Review

- b. Click on the “Editor Decision”. The review results will be displayed at the bottom of the editor's notification, whether in the form of notes or attached files. Based on the information in the editor's message, you must now prepare your revisions.

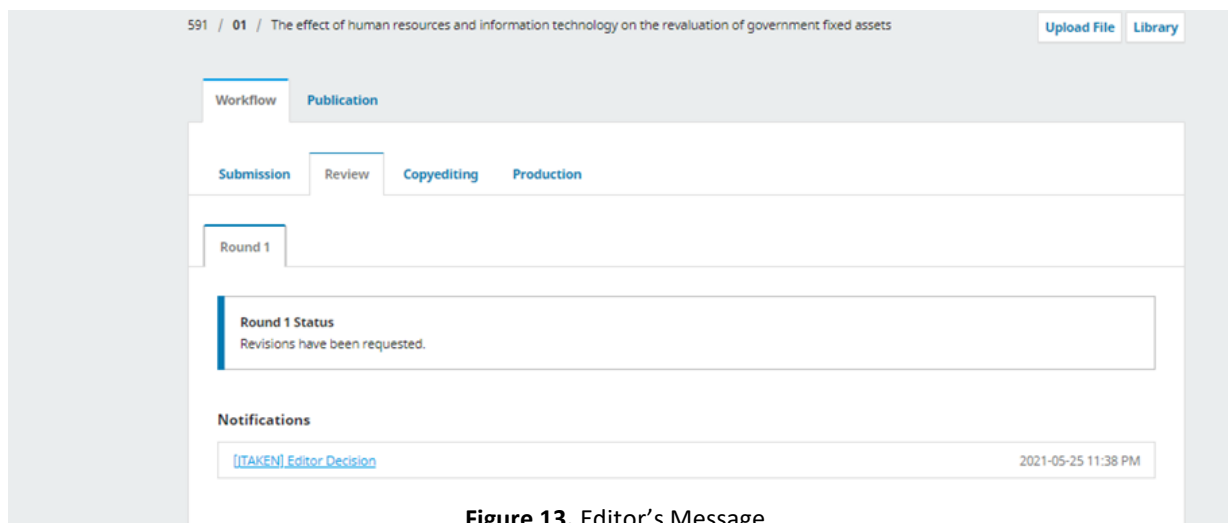


Figure 13. Editor's Message

- c. By scrolling down the page, you will find a panel for **Revisions**. Use the “Upload a File” link to upload your revised article. Use the dropdown menu to choose that you are uploading a revision of an existing file. Then upload the revised file and hit Continue. Check the file details and hit Continue again. If you have any additional files to upload, do so now. Otherwise, hit Complete. Your revised file is now visible in the Revisions panel.

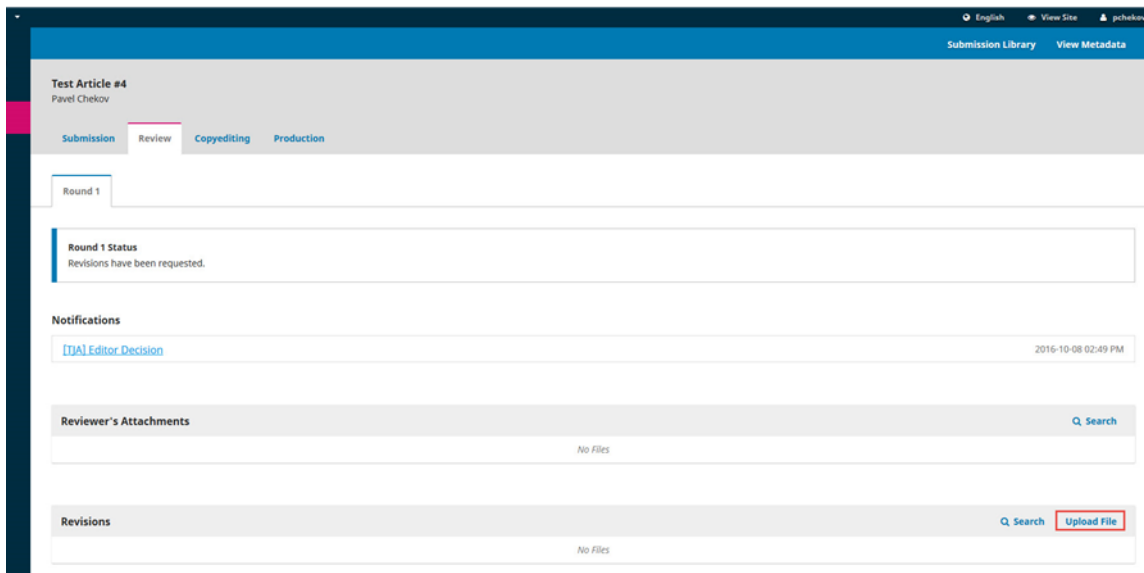


Figure 14. Upload Revision

d. To inform the editor that the revised file go to the Review Discussion panel, select the Add Discussion link. Use the Add User link to add the editor. Add a subject line and a message. Hit OK to send the message. An email has now been sent to the editor. The author and the editor can see the message in the Review Discussions panel. At this point, the author needs to wait to hear back from the editor as to whether the revisions are acceptable.

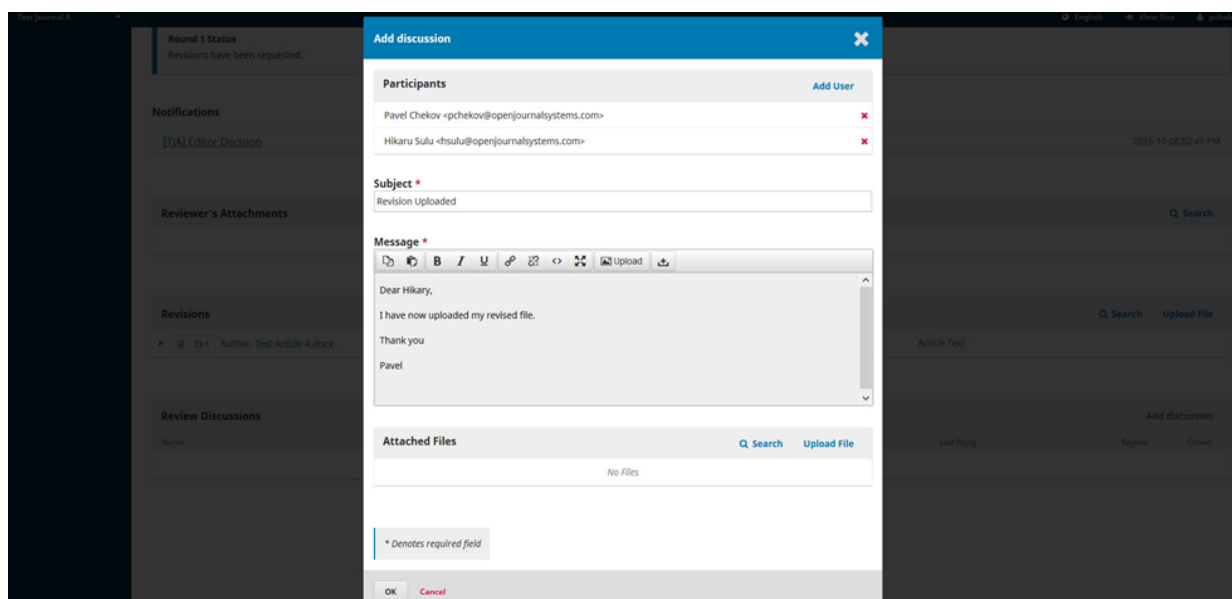


Figure 15. Add Discussion

Copyediting Stage

After an article has been “Accepted,” the next step in the workflow is to inspect the submission files that have been copyedited. The author will receive an email indicating that files are available. To see them:

1. Log in to the journal and go to the dashboard.
2. Select the Copyediting link to go to the full submission record, including the notification in the Copyediting Discussions panel.
3. Click on the linked discussion to open it, read the message, and open the attached file. Once read the attached file, the author can respond to the copyeditor indicating the required changes or approval.

If needed, the author could attach a revision, but we will simply approve the changes and hit OK for this example. On the dashboard, the last person to reply to the message was the author. The author’s role in the copyediting process is now complete, and can wait for the request to proofread the final galleys (e.g., PDFs, HTML, etc.) before publication.

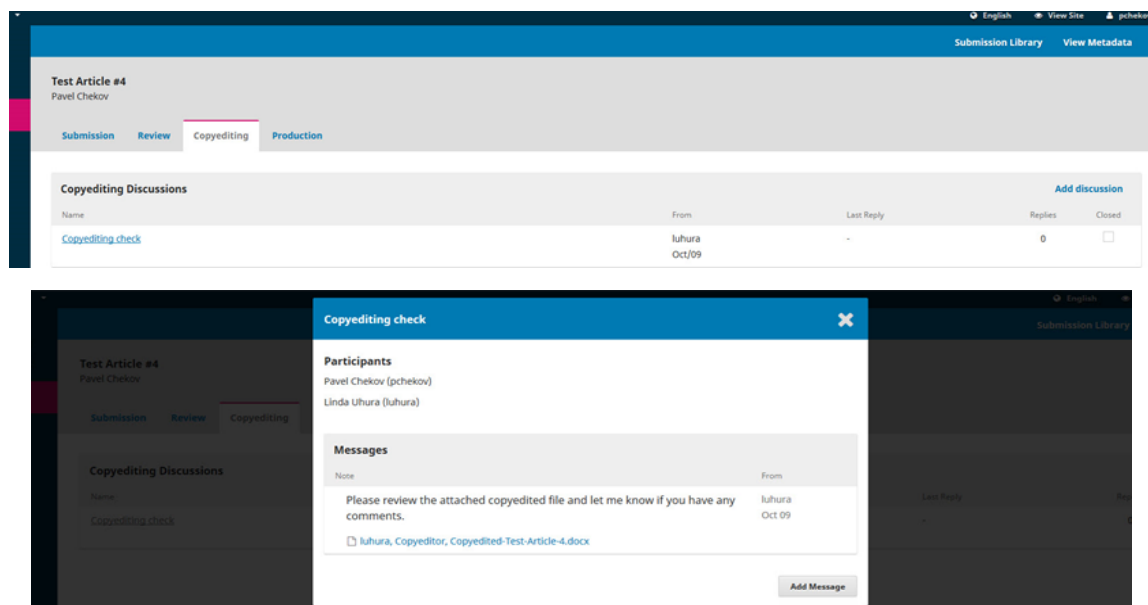


Figure 16. Copyediting stage

Proofreading Stage

The next step in the workflow is to inspect the submission files that have been converted into galleys (e.g., PDF, HTML, etc.). The author will receive an email indicating that files are available. To see them, log in to the journal and go to the dashboard. Select the Production link to go to the full submission record, including the notification in the Production Discussions panel.

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